

Napa County

1195 THIRD STREET
SUITE 310
NAPA, CA 94559



Agenda

Wednesday, September 17, 2025

9:00 AM

**Board of Supervisors Chambers
1195 Third Street, Third Floor
Napa, CA 94559**

Planning Commission

District 1, Kara Brunzell (Vice-Chair)

District 2, Walter Brooks

District 3, Molly Moran Williams

District 4, Pete Richmond

District 5, Megan Dameron (Chair)

Brian D. Bordona, Director

Laura Anderson, County Counsel

Michael Parker, Planning Manager

Alexandria Quackenbush, Meeting Clerk

Angie Ramirez Vega, Meeting Clerk

Aime Ramos, Meeting Clerk

How to Watch or Listen to the Napa County Planning Commission Meetings

The Napa County Planning Commission will continue to meet pursuant to the annually adopted meeting calendar available at the following link:

<https://www.countyofnapa.org/DocumentCenter/View/35930/2025-Planning-Commission-Meeting-Calendar?bidId=>

The Napa County Planning Commission meets as specified in its adopted annual calendar on the first and third Wednesdays of the month at 9:00 A.M. at 1195 Third Street, Suite 310, Napa, California 94559. The meeting room is wheelchair accessible. Assistive listening devices and interpreters are available through the Clerk of the Planning Commission. Requests for disability related modifications or accommodations, aids or services may be made to the Clerk of the Planning Commission's office no less than 72 hours prior to the meeting date by contacting (707) 253-4417 or meetingclerk@countyofnapa.org.

The Napa County Planning Commission realizes that not all County residents have the same ways to stay engaged, so several alternatives are offered. Remote Zoom participation for members of the public is provided for convenience only. In the event that the Zoom connection malfunctions for any reason, the Planning Commission reserves the right to conduct the meeting without remote access.

Please watch or listen to the Planning Commission meeting in one of the following ways:

1. Attend in-person at the Board of Supervisors Chambers, 1195 Third Street, Napa, Third Floor.
2. Watch online at <https://napa.legistar.com/calendar.aspx> (click the "In Progress" link in the "Video" column).
3. Watch on Zoom using the attendee link: <https://countyofnapa.zoom.us/j/87621457786>. Make sure the browser is up-to-date.
4. Listen on Zoom by calling 1-669-900-6833 (Meeting ID: 876-2145-7786).
5. Watch on your TV - Napa Valley TV Channel 28.

If you are unable to attend the meeting in person and wish to submit a general public comment or a comment on a specific agenda item, please do the following:

1. Email your comment to meetingclerk@countyofnapa.org. Emails will not be read aloud but will still become part of the public record and shared with the Planning Commission.
2. Use the Zoom attendee link: <https://Countyofnapa.zoom.us/j/87621457786>. Make sure the browser is up-to-date. When the Chair calls for the item on which you wish to speak, click "raise hand". Please limit your remarks to three minutes.

3. Call the Zoom phone number: 1-669-900-6833. (Meeting ID: 876-2145-7786). When the Chair calls for the item on which you wish to speak, press *9 to raise hand. Please limit your remarks to three minutes.

****Please note that phone numbers in their entirety will be visible online while speakers are speaking****

For more information, please contact us via telephone at (707) 253-4417 or send an email to meetingclerk@countyofnapa.org

ANY MEMBER OF THE AUDIENCE DESIRING TO ADDRESS THE COMMISSION:

ON A MATTER ON THE AGENDA

Please proceed to the podium when the matter is called and, after receiving recognition from the Chair, give your name and your comments or questions. In order that all interested parties have an opportunity to speak, please be brief and limit your comments to the specific subject under discussion. Time limitations shall be at the discretion of the Chair or Commission, but is generally limited to three minutes.

ON A MATTER NOT ON THE AGENDA

Public comment is an opportunity for members of the public to speak on items that are not on the agenda but are within the subject matter jurisdiction of the Commission. Public comment is limited to three minutes per speaker, subject to the discretion of the Chair. Comments should be brief and focused, and speakers should be respectful of one another who may have different opinions. Please remember this meeting is being recorded and broadcast on live television. The County will not tolerate profanity, hate speech, abusive language, or threats. Also, while public input is appreciated, the Brown Act prohibits the Commission from taking any action on matters raised during public comment that are not on the agenda.

1. **CALL TO ORDER; ROLL CALL**
2. **PLEDGE OF ALLEGIANCE**
3. **CITIZEN COMMENTS AND RECOMMENDATIONS**

The Commission invites Citizen comments and recommendations concerning current issues and future prospects of a planning nature which are within the jurisdiction of the Planning Commission. Anyone who wishes to speak to the Commission on such a matter, if it is not on the agenda, may do so at this time.

4. **APPROVAL OF MINUTES**

The Clerk of the Commission request approval of Minutes for the meeting held on: September 3, 2025 (Commissioner Kara Brunzell was excused)

5. **AGENDA REVIEW**
6. **DISCLOSURES**
7. **PUBLIC HEARING ITEMS**

A. STEVEN CONTURSI / ARROW AND BRANCH WINERY / USE
PERMIT MAJOR MODIFICATION P23-00057-MOD

[25-1606](#)

CEQA Status: Consideration and possible adoption of a Mitigated Negative Declaration. According to the proposed Mitigated Negative Declaration, the proposed project would not have any potentially significant environmental impacts after implementation of mitigation measures. Mitigation measures are proposed for the following areas: Biological and Noise Resources. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Request: Approval of a Use Permit Major Modification to include the following: an increase wine production from 30,000 gallons per year to 45,000 gallons per year, increase employment, increase daily tours and tasting by appointment only, increase marketing events, expansion of an existing winery building to create additional production and accessory space, construction of a covered terrace with outdoor tasting, installation of an approximately 81,000 gallon process water storage tank, and reconfigure existing parking.

The project is located on an approximately 10.09-acre site within the Agricultural Preserve (AP) zoning district with a General Plan land use designation of Agricultural Resource (AR) at 5215 Solano Ave, Napa, CA 94558; APN: 034-190-040-000.

Staff Recommendation: Adopt the Initial Study/Mitigated Negative Declaration prepared for the project and approve Use Permit Major Modification No. P23-00057-MOD, as conditioned.

Staff Contact: Matt Ringel, Planner III,
Matthew.ringel@countyofnapa.org, (707) 299-1351

Applicant Contact: Steven Contursi, 1042 North Pacific Coast Hwy,
Laguna Beach, CA 92651

Applicant Representative Contact: Donna Oldford, Plans 4 Wine, 2620
Pinot Way, St. Helena, CA 94558; dboldford@aol.com; (707) 204-5794

Attachments: [Attachment A - Initial Study/Mitigated Negative Declaration and MMRP](#)
[Attachment B - Recommended Findings](#)
[Attachment C - Recommended Conditions of Approval](#)
[Attachment D - 45000g Winery Comparison Table](#)
[Attachment E - Application and Project Narratives](#)
[Attachment F - Water Availability Analysis Tier I & III](#)
[Attachment G - Biological Reports](#)
[Attachment H - Environmental Noise Assessment](#)
[Attachment I - Onsite Wastewater Disposal Feasibility Study](#)
[Attachment J - Transient Non-Community Water System Information](#)
[Attachment K - Stormwater Control Plan](#)
[Attachment L - Graphics](#)

8. ADMINISTRATIVE ITEMS

9. DIRECTOR OR DIRECTOR'S DESIGNEE REPORT

- DISCUSSION OF ITEMS FOR THE OCTOBER 1, 2025 REGULAR MEETING
- BOARD OF SUPERVISORS ACTIONS
- OTHER DEPARTMENT ACTIVITIES
- CODE COMPLIANCE REPORT
- ZONING ADMINISTRATOR ACTIONS
- OTHER PENDING PROJECTS' STATUS

10. COMMISSIONER COMMENTS/COMMITTEE REPORTS

11. ADJOURNMENT

I HEREBY CERTIFY THAT THE AGENDA FOR THE ABOVE STATED MEETING WAS POSTED AT A LOCATION FREELY ACCESSIBLE TO MEMBERS OF THE PUBLIC AT THE NAPA COUNTY ADMINISTRATIVE BUILDING, 1195 THIRD STREET, NAPA, CALIFORNIA ON 9/5/25 BY 12 P.M. A HARDCOPY SIGNED VERSION OF THE CERTIFICATE IS ON FILE WITH THE CLERK OF THE COMMISSION AND AVAILABLE FOR PUBLIC INSPECTION.

ANGIE RAMIREZ VEGA (By e-signature)

Angie Ramirez Vega, Clerk of the Commission



Napa County

Board Agenda Letter

1195 THIRD STREET
SUITE 310
NAPA, CA 94559
www.countyofnapa.org
Main: (707) 253-4580

Planning Commission

Agenda Date: 9/17/2025

File ID #: 25-1606

TO: Napa County Planning Commission
FROM: Brian D. Bordona, Director Planning, Building and Environmental Services
REPORT BY: Matt Ringel, Planner III
SUBJECT: Arrow and Branch Winery Use Permit Major Modification (P23-00057-MOD)

RECOMMENDATION

STEVEN CONTURSI / ARROW AND BRANCH WINERY / USE PERMIT MAJOR MODIFICATION P23-00057-MOD

CEQA Status: Consideration and possible adoption of a Mitigated Negative Declaration. According to the proposed Mitigated Negative Declaration, the proposed project would not have any potentially significant environmental impacts after implementation of mitigation measures. Mitigation measures are proposed for the following areas: Biological and Noise Resources. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Request: Approval of a Use Permit Major Modification to include the following: an increase wine production from 30,000 gallons per year to 45,000 gallons per year, increase employment, increase daily tours and tasting by appointment only, increase marketing events, expansion of an existing winery building to create additional production and accessory space, construction of a covered terrace with outdoor tasting, installation of an approximately 81,000 gallon process water storage tank, and reconfigure existing parking.

The project is located on an approximately 10.09-acre site within the Agricultural Preserve (AP) zoning district with a General Plan land use designation of Agricultural Resource (AR) at 5215 Solano Ave, Napa, CA 94558; APN: 034-190-040-000.

Staff Recommendation: Adopt the Initial Study/Mitigated Negative Declaration prepared for the project and approve Use Permit Major Modification No. P23-00057-MOD, as conditioned.

Staff Contact: Matt Ringel, Planner III, Matthew.ringel@countyofnapa.org, (707) 299-1351

Applicant Contact: Steven Contursi, 1042 North Pacific Coast Hwy, Laguna Beach, CA 92651

Applicant Representative Contact: Donna Oldford, Plans 4 Wine, 2620 Pinot Way, St. Helena, CA 94558; dboldford@aol.com; (707) 204-5794

EXECUTIVE SUMMARY

Proposed Actions:

That the Planning Commission:

1. Adopt the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (MMRP) based on recommended Findings 1-7 in Attachment B;
2. Approve the Use Permit Major Modification (P23-00057-MOD) based on recommended Findings 8-12 in Attachment B, and subject to the recommended Conditions of Approval in Attachment C.

Discussion:

The proposed project includes the increase of wine production from 30,000 gallons to 45,000 gallons per year, an expansion of production space, an expansion of space for accessory uses (wine tasting and offices), an increase of one full time employee from four (4) to five (5) full-time employees, and an increase to the winery's existing by appointment visitation and marketing programs. Additionally, the proposal includes the construction of an outdoor terrace for wine tasting (Business & Professions Code §23358, 23390 and 23396.5), with a second floor outdoor patio above the terrace, landscaping improvements, relocation and reconfiguration of onsite parking, and the construction of a 81,000 gallon process water storage tank. The project includes approximately 1,500 cubic yards of earthwork for structural pads and exterior improvements., Staff has reviewed the proposed project and supports granting approval, subject to the attached recommended Findings and recommended Conditions of Approval included in Attachments B and C, respectively. Wineries are conditionally permitted uses within the Agricultural Preserve (AP) zoning district. The project is located within one (1) mile of seven (7) existing wineries and is surrounded with residential homes. The majority of the project's proposed disturbance area has previously been disturbed and includes the existing winery. With the implementation of a process wastewater system that uses treated water to offset an existing water use for approximately four (4) acres of on-site vineyards, the proposed project would not increase groundwater demand. The winery will maintain a water use of 3.97 acre-feet per year (AFY).

Based on the reasons stated above, staff recommends approval of the project, subject to the recommended Conditions of Approval.

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: Consideration and possible adoption of a Mitigated Negative Declaration. According to the proposed Mitigated Negative Declaration, the proposed project would not have any potentially significant environmental impacts after implementation of mitigation measures. Mitigation measures are proposed for the following areas: Biological and Noise Resources. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

BACKGROUND AND DISCUSSION

Owner/Applicant: Steven Contursi, 1042 North Pacific Coast Hwy, Laguna Beach, CA 92651

Representative: Donna Oldford, Plans 4 Wine, 2620 Pinot Way, St. Helena, CA 94558; dboldford@aol.com; (707) 204-5794

Zoning: Agricultural Preserve (AP)

General Plan Designation: Agricultural Resource (AR)

Parcel size: 10.09-acres

Application Filed: March 14, 2023

Application Deemed Complete: November 19, 2024

State Clearinghouse Number: 2025080635

Existing Development: Access to the project site is located off of Solano Avenue, approximately 0.2 miles south of the intersection of Solano Avenue and Darms Lane. The project includes one (1) parcel approximately 10.09 acres in size and includes an existing winery and vineyards. The parcel has one ingress/egress point Solano Avenue. The project site is at approximately 115 feet above mean sea level (amsl). The proposed winery

expansions are located within an developed and recently disturbed portions of the parcel with slopes between zero (0) and six (6) percent slopes. The property is adjacent to a blue line stream and contains Valley Oak (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest. Land uses in the area are dominated by large lot residential properties, wineries, and vineyards. There are several nearby off-site residences, with the closest measuring approximately 195feet to the northwest from the proposed winery.

Request: The proposal is to modify a Use Permit for an existing winery to allow the following:

1) Increase annual production capacity from 30,000 gallons to 45,000 gallons; 2)Expansion of an existing winery building by adding approximately 3,529 square feet of additional production space and conversion of approximately 1,721 square feet of space for accessory uses to production space, totaling 13,797 square feet of production space, and construction of approximately 4,308 square feet for additional accessory uses, totaling 4,687 square feet for accessory uses;; 3) Excavation of approximately 1,500 cubic yards of spoils associated with the construction of proposed structural pads and exterior improvements; 4) Increase employment from four (4) full-time employees to five (5) full-time employees; 5) Increase tours and tastings by appointment only from 15 visitors per day (up to 105 visitors per week) to 34 visitors per day (up to 238 visitors per week); 6) Increase a marketing program, which may include catered events, as follows; i. Increase from six (6) Small Events annually to twelve (12) for up to 30 guests; ii. increase from one (1) Large Event annually to two (2) for up to 125 guests (including bus/shuttle transportation for guests); 7) On-premises consumption of wines produced on-site within the outdoor hospitality areas identified on Sheet A1.01 of the Site Plans, prepared by Taylor Lombardo Architects, dated August 3, 2023, in accordance with Business and Professions Code Sections 23358, 23390 and 23396.5 (AB 2004); 8) Hours of operation seven days a week: production 6:00 a.m. to 6:00 p.m., visitation 10:00 a.m. to 6:00 p.m. and marketing events 10:00 a.m. to 10:00 p.m. (including cleanup); 9) Relocation of onsite parking (no change in number of parking spaces); 10) On-site domestic and process wastewater treatment systems, including the installation of an approximately 81,000 gallon process water storage tank; and 11) Landscaping, and other improvements associated with wineries.

Existing Winery Building Size: 10,647 sq. ft.

Proposed Winery Building Size: 18,105 sq. ft.

Existing Winery Outdoor Covered Fermentation Size: 0 sq. ft.

Proposed Winery Outdoor Covered Fermentation Size: 620 sq. ft.

Existing/Proposed Winery Outdoor Covered Crush Pad: 1,206 sq. ft. (No Change)

Existing Winery Development Area: 15,250 sq. ft. or 0.35-acres

Proposed Winery Development Area: 18,988 sq. ft. or 0.43-acres

Existing Winery Coverage Area: 57,700 sq. ft. or 1.32-acres (maximum allowed: 25 percent or approximately

2.52-acres).

Proposed Winery Coverage Area: 61,812 sq. ft. or 1.42-acres (maximum allowed: 25 percent or approximately 2.52-acres).

Existing Accessory/Production Ration: 24.13 percent (maximum allowed: 40 percent)

Proposed Accessory/Production Ration: 33.97 percent (maximum allowed: 40 percent)

Existing Production Capacity: 30,000 gallons

Proposed Production Capacity: 45,000 gallons

Existing Number of Employees: Four (4) full time

Proposed Number of Employees: Five (5) full time

Existing Visitation: Hosted daily tours and tastings by appointment only for a maximum of fifteen visitors per day with a maximum of 105 visitors per week, resulting in 5,475 visitors per year.

Proposed Visitation: Hosted daily tours and tastings by appointment only for a maximum of thirty-four visitors per day with a maximum of 238 visitors per week, resulting in 12,410 visitors per year.

Existing Marketing Program: A total of six (6) marketing events per year allowing a maximum of 30 guests and one (1) marketing event per year allowing a maximum of 125 guests. The total amount of annual marketing guests allowed under the proposed program is 305.

Proposed Marketing Program: A total of twelve (12) marketing events per year allowing a maximum of 30 guests and two (2) marketing event per year allowing a maximum of 125 guests. The total amount of annual marketing guests allowed under the proposed program is 610.

Existing Days and Hours of Winery Production: 6:00 A.M. - 6:00 P.M. Monday through Sunday

Proposed Days and Hours of Visitation: 10:00 A.M. - 6:00 P.M. Monday through Sunday

Proposed Hours of Marketing Events: 11:00 A.M. - 10:00 P.M. (including clean-up)

Proposed Parking: twelve (12) parking stalls, including one (1) ADA compatible

Setbacks:

Required road setbacks: 30 feet from the centerline of Solano Avenue.

Required property line setbacks: 20 feet front, side, and rear yards setbacks.

Existing Setbacks: The existing winery meets all required road, front, side, and rear setbacks.

Adjacent General Plan Designation / Zoning / Land Use:

North: Agricultural Resource (AR) General Plan land use designation / Agricultural Watershed (AW) Zoning District / agriculture and single-family residential land uses

South: Agricultural Resource (AR) General Plan land use designation / Agricultural Watershed (AW) Zoning District / agriculture

East: Agricultural Resource (AR) General Plan land use designation / Agricultural Watershed (AW) Zoning District / agriculture, winery, and single-family residential land uses

West: Agricultural Resource (AR) General Plan land use designation / Agricultural Watershed (AW) Zoning District / agriculture and single-family residential land uses

Wineries in One (1) Mile Vicinity:

Oak Knoll Winery, Hillview Vineyard, Darms Lane Winery, Silenus Vintners, Shifflett Ranch and Vineyard, Trefethen Vineyards, and Laird Family Estates.

Parcel History:

The parcel includes vineyard and a winery, which obtained a use permit in 2013. The Winery just recently obtained final occupancy. The existing vineyard is located on slopes below 5%; therefore, an Agricultural Erosion Control Plan was not applicable.

Active Code Enforcement Cases:

There are no active code violations related to the project site.

Discussion Points:

Setting - Access to the project site is located off of Solano Avenue, approximately 0.2 miles south of the intersection of Solano Avenue and Darms Lane. The project includes one (1) parcel, approximately 10.09 acres in size and includes an existing winery and vineyards. The parcel has one ingress/egress point Solano Avenue. The project site is at approximately 115 feet above mean sea level (amsl). The proposed winery expansions are located within an developed and recently disturbed portions of the parcel with slopes between zero (0) and six (6) percent slopes. The property is adjacent to a blue line stream and contains Valley Oak (California Bay -

Coast Live Oak - Walnut - Ash) Riparian Forest. The proposed project is outside of all Stream Setbacks, as defined by the Napa County Conservation Regulations Chapter 18.108.

Winery Proposal - The Use Permit Major Modification requests the following: increase wine production from 30,000 gallons to 45,000 gallons per year, increase employment, increase daily tours and tasting by appointment only, increase marketing events, expansion of an existing winery building to create additional production and accessory space, construction of a covered terrace with outdoor tasting, installation of an approximately 81,000 gallon process water storage tank, and reconfiguration of existing parking.

The proposed physical expansion to production includes an approximately 1,573 sq. ft. barrel storage room, 1,336 sq. ft. fermentation room, and 620 sq. ft. covered outdoor fermentation pad. The proposed physical expansion to accessory spaces includes a western facing 3,929 sq. ft. two story addition, that includes an indoor tasting area, offices, a catering kitchen, a conference room, restrooms, an outdoor tasting terrace, and second floor balcony.

The proposed operational changes include changes to visitation and marketing (detailed below) and an increase in full-time employees from four (4) to five (5). No part-time employees are currently entitled or within the scope of this request.

Visitation and marketing - Consistent with the definition of “marketing of wine” (County Code Section 18.08.370), the applicant proposes expanding an existing visitation and marketing program. The winery currently has tours and tastings for up to 15 guests per day with a maximum of 105 guests per week. The proposed project requests increasing tours and tastings for up to 34 guests per day with a maximum of 238 guests per week. Visitation would be by appointment only and would occur between the hours of 10:00 a.m. and 6:00 p.m., Monday-Sunday. The winery also currently has six (6) marketing events per year allowing a maximum of 30 guests and one (1) event per year allowing a maximum of 125 guests. The proposed project requests increasing this marketing program to a total of twelve (12) marketing events per year allowing a maximum of 30 guests and two (2) marketing event per year allowing a maximum of 125 guests. Guests for the larger events (e.g., up to 125 guests) will be brought to the site via shuttle/bus. The total amount of annual marketing guests allowed under the proposed program is 610. No visitation will occur on days with marketing events. The marketing events will occur between 10:00 a.m. and 10:00 p.m. (including cleanup).

Water - A Tier I Water Availability Analysis was prepared by Applied Civil Engineering (ACE), dated July 7, 2025, and a Tier III Water Availability Analysis was prepared by Richard C. Slade & Associates LLC (RCS), dated July 8, 2025. As directed by the County’s Water Availability Analysis Guidance Document of May 2015 (WAA) and the Interim Well Standards (January 2024), the reports include Tier 1 calculations for the existing and proposed water uses and a groundwater recharge analysis, a Tier 2 well interference analysis, and a Tier 3 surface water interference analysis.

Tier 1: The Tier 1 analysis considered existing use onsite to include the winery, landscaping irrigation, vineyard irrigation, and the neighbor's well that is located on the parcel. The Arrow and Branch Winery currently uses 3.97 AFY and the Silenus Winery Easement Well uses approximately 8.5 AFY. The existing groundwater usage of the parcel is estimated at 12.47 acre-feet per year (AFY). The proposed project would not increase groundwater use and would maintain no net increase of groundwater usage.

The neighboring Silenus Winery has an easement to use a well located on the Arrow and Branch Winery parcel. On April 17, 2002, Silenus Winery received an entitlement modification (01093-UP/02105-VAR), which referenced an estimated water usage of 12.34 AFY. At that time, the winery's parcel was 14.3 acres, which included 10.3 acres of vines which used 10.5 AFY (1 AFY per acre of vines), and the 72,000 gallon winery used 1.84 AFY, totaling 12.34 AFY. Subsequently, the Silenus Winery completed a Lot Line Adjustment, which reduced the parcel size to 10 acres with approximately 6.3 acres of vines. Applied Civil Engineering's WAA estimates that the Silenus Winery contains landscaping that uses approximately 0.36 AFY. Using the water rates described in the 2001 Silenus Winery entitlement modification, and Applied Civil Engineering's estimated landscaping water usage, the Silenus Easement well is estimated to use 6.3 AFY to irrigate 6.3 acres of vines, use 1.84 AFY to produce 72,000 gallons of wine, and 0.36 AFY for landscape irrigation, totaling 8.5 AFY. The Arrow and Branch project has been conditioned to not use the Silenus Easement Well.

| Source of Demand | Existing (AFY) | Proposed (AFY) | Difference (AFY) |
|---|----------------|----------------|------------------|
| Primary Residence | 0 | 0 | 0 |
| Vineyard Irrigation | 3 | 2.59 | -0.41 |
| Landscaping Irrigation | 0.2 | 0.2 | 0 |
| Winery (Vastation, Marketing, And Employees) | 0.77 | 1.18 | +0.41 |
| Silenus Easement Well, located on project parcel. Usage is via easement | 8.5 | 8.5 | 0 |
| Total | 12.47 | 12.47 | 0 |

Tier 2: Pursuant to County's WAA, a Tier 2 analysis is required when a neighboring off-site well is located within 500 feet of the project well, the well is located within 1,500 feet from a spring, or the proposed project requests an increase in groundwater usage. The project would not increase groundwater usage; therefore, a Tier 2 analysis is not required.

Tier 3: A Tier 3 review is the County's adopted method for complying with its duties under the Public Trust Doctrine. As discussed herein, the existing project will comply with the WAA guidance document. Per the

County's WAA, a Tier 3 analysis was performed to evaluate potential groundwater to surface water interaction.

The project well (Well 1) is approximately 40-70 feet from the nearest portion of Dry Creek (located north of the project parcel) and the Silenus Easement Well is approximately 50-80 feet from the nearest portion of Dry Creek. Dry Creek is a County designated Significant Stream. RCS's Tier III WAA concludes that the project well and Silenus Easement well are not in direct hydraulic connection with any defined significant streams because:

a. Available groundwater depth measurements in the Well 1 have been at least 72 feet lower in elevation than the bed elevation of Dry Creek, as measured along Cross Section A-A'. In March 2024, despite flows in the Creek being present in the proximal portion of Dry Creek, the water level in the Project Well was 89 ft below the bed of Dry Creek. In July 2025, the water level in Well 1 was more than 168 ft lower in elevation than the bed of Dry Creek, and ponded water was present in the nearby portion of the creek.

b. Available groundwater depth measurements in the Silenus Easement Well have been at least 7 ft lower in elevation than the bed of Dry Creek, as measured along Cross Section A-A, and more recent water levels have been much deeper. In March 2024, despite flows being present in the proximal portion of Dry Creek, the water level in the Easement Well was 153 ft below the bed of Dry Creek, and ponded water was present in the nearby portion of the creek.

c. Well 1 is constructed with a 50-foot-deep surface seal and a screen depth that begins below the bottom of the alluvial aquifer system. Between the bed of Dry Creek and the deeper aquifer materials accessible to Well 1 & the Silenus Easement Well (primarily Tsvr), low permeability strata have been documented in, and inferred from, various data sources. Therefore, Dry Creek is not connected to groundwater accessible to Well 1 & the Silenus Easement Well. Pumping of Well 1 for the proposed project will not impact surface water flow in the proximal portions of Dry Creek because surface water in Dry Creek is hydrogeologically disconnected from groundwater accessible to Well 1 in the vicinity of the subject property. Similarly, pumping of the Silenus Easement Well to meet its existing demands will not impact surface water flow in the proximal portions of Dry Creek because surface water in the creek is hydrogeologically disconnected from groundwater accessible to the Silenus Easement Well in the vicinity of the subject property.

d. Pumping of Well 1 & the Silenus Easement Well will not directly influence flows in the proximal portion of Dry Creek because: 1) surface and subsurface data collected by others (LSCE, 2016 & 2022) demonstrate that groundwater in the deeper portion of the alluvial aquifer system (and therefore also the underlying earth materials) is not directly connected to overlying surface water flows in Dry Creek; 2) additional low-permeability strata exist between the screened sections of a neighboring monitoring well, and above the screened sections of Well 1 and Silenus Easement Well; and 3) Well 1 & the Silenus Easement Well, as constructed, can only extract groundwater from earth materials beneath those additional low permeability strata.

The Project Well and the Silenus Easement Well were constructed with the depth of uppermost perforations at 95 ft and 140 ft, respectively. The County's WAA requires that if a well is pumping at a rate of 30 gpm or more and has a depth of uppermost perforations less than 150 feet, the Tier III analysis shall demonstrate that low permeability deposits overly the zone from which extraction is proposed to occur. RCS's report reviews this feature, analyzes nearby monitoring wells, and concludes that These fine-grained materials likely act as aquitards, significantly reducing the potential for connectivity and vertical flow between surface water and Dry Creek and groundwater in the aquifer systems beneath the subject property. Monitoring data for the "Site 2 at Dry Creek" well competitions in LSCE (2016 & 2022) demonstrates that Dry Creek is predominantly a losing stream, and those data demonstrate clear evidence of a disconnection between groundwater. In particular, temperature data on Figure 6-112 of the Napa County Groundwater Sustainability Plan (Page 188) show that the temperature of deeper alluvial groundwater does not apparently fluctuate, whereas the temperature of shallow alluvial groundwater appears to fluctuate slightly in response to the influence of surface water. Similarly, specific conductance data on Figure 4.6 of LSCE (2016) show likely influence of shallow alluvial groundwater by surface water, but little to no direct influence on deeper alluvial groundwater due to the effects of surface water.

This information indicates that the aquifers of Well 1 and Silenus Easement Well are not directly connected to Dry Creek. The proposed project conforms to Napa County's WAA Tier 3 guidelines. Due to these factors, the project well presumptively meets Napa County's Tier 3 WAA guidelines for groundwater-surface water interaction. The County has satisfied its duty to consider impacts to trust resources and no further analysis is required. Impacts would be less than significant.

Sanitary Waste Disposal - An Onsite Wastewater Feasibility Study, dated September 9, 2023, was prepared by Applied Civil Engineering which outlines the required wastewater system to meet the needs of the proposed increases in winery production, employees, visitation, and marketing programs. The Onsite Wastewater Feasibility Study proposes and recommends that the disposal of the treated winery process wastewater be via irrigation of the onsite vineyard. The study analyzed the potential of using approximately 4 acres vineyard that is located to the west of the new winery structure and outside of the well setbacks. In order to accommodate differences in the timing of wastewater generation, irrigation demand, and limitations of wet weather application of treated wastewater, a storage tank will be required. The proposed project includes an 81,000-gallon process wastewater storage tank. The analysis assumes that during the summer, the treated water will be used to offset the irrigation needs of the vineyard, and in the winter application of treated winery process wastewater will not occur to prevent runoff.

Greenhouse Gas Reduction Strategies - The applicant intends to implement voluntary best management practices to reduce GHG emissions resulting from implementation of the project. These practices include installation of solar panels; the preparation of a Vehicle Miles Traveled (VMT) reduction plan to reduce annual VMT by at least 15% by providing employee incentives, priority parking for efficient transportation, bike riding incentives, and bus transportation for large marketing events; installation of solar hot water heating; energy conserving lighting; installation of an energy star roof; installation of water efficient fixtures; low-impact development to manage stormwater as close to its source as possible; install a water efficient landscape design; implementation of a sustainable purchasing and shipping program; installation of electrical vehicle

charging station(s); public transportation will be available; the structure design will be oriented to maximize passive cooling, heating, and lighting; use of recycled materials for construction and operation; education to staff and visitors on sustainable practices; use of 70-80% cover crop; retention of biomass via pruning and thinning by chipping the materials and reusing it rather than burning on-site; and water conservation by use of processed wastewater for re-use as irrigation.

Grape Sourcing - The proposed winery will have a maximum production of 45,000 gallons of wine. The on-site vineyards will provide a source for grapes for wine production and the applicant will contract with offsite growers to obtain additional grapes for wine production. The applicant has signed the County's 75 Percent Grape Source Agreement, to produce wine with a minimum of 75% grapes grown in Napa County.

Noise - Illingworth & Rodkin prepared an October 18, 2023, Noise Assessment for the proposed project. The study reviewed the proposed project's potential impacts to noise resources and concluded as follows:

- **Mechanical Equipment:** The winery operations currently, and will continue to, use noise-generating mechanical equipment such as air-cooled condensing units, pumps, and compressors as well as less significant sources of noise, such as air-conditioning systems and exhaust fans. The proposed project includes the use of mechanical equipment, to be located in a mechanical yard at the northern boundary of the parcel. This equipment may be as close as approximately 310, 230, 110, 130, and 200 feet from the property lines of adjacent Residences 1, 2, 3, 4, and 6. Under worst-case condition with the equipment located outside in the mechanical yard, constant noise levels could be 39, 42, 50, 49, and 44 dBA at adjacent Residences 1, 2, 3, 4, and 6. Noise levels associated with worst-case conditions would not exceed the 50 dBA L50 daytime noise limit. Other receptors in the project vicinity would be further from the mechanical equipment, and therefore, exposed to lower levels of noise.
- **Maintenance and Forklift Operations:** Forklift and maintenance operations are expected to take place in the covered crush/receiving areas and within the winery and production/barrel buildings. Such activities within buildings would receive significant noise shielding from the building and are not analyzed within the Noise Study. Outdoor forklift and maintenance operations are considered worst-case condition and are analyzed within the report. Such outdoor operations could occur as close as approximately, 300, 225, 175, 200, and 280 feet from the property lines of Residences 1, 2, 3, 4, and 6. It is anticipated that during high activity periods, these activities would be expected to occur for more than 15 but less than 30 minutes out of an hour and fall in the Project Specific Noise Criteria of 55 dBA L25. Noise levels associated with Forklift and Maintenance Activities are estimated to have noise levels of 45, 48, 47, 46, and 42 dBA from Residences 1, 2, 3, 4, and 5, which does not exceed the project specific noise standards and the closest noise sensitive uses.
- **Bottling Activities:** Bottling would occur over a period of a few weeks per year during the daytime. The analysis conservatively assumes that bottling will be done with a mobile bottling truck at the covered outdoor work area approximately 320, 240, 175, 200, and 265 feet from the property lines of Residences 1, 2, 3, 4, and 6. Noise levels associated with mobile bottling are estimated to have noise levels of 38, 41, 44, 43, and 40 dBA

from Residences 1, 2, 3, 4, and 6, which does not exceed the 50 dBA L50 noise limit.

- **Seasonal Crush Activities:** Under the modified use permit, annual crush related activities would continue to take place in the covered crush pad of the winery building. Crush activities occurring in these areas will receive some noise shielding from building structures. These activities could occur as close as approximately 320, 240, 180, 200, and 270 feet from the property lines of adjacent Residences 1, 2, 3, 4, and 6. Crush activities are made up of relatively constant noise, with occasional discrete maximum noise events, such as the setting of empty bins. When seasonal crush activities are occurring, the relatively constant noise is estimated to produce 30, 33, 36, 35, and 32 dBA from Residences 1, 2, 3, 4, and 6 respectively, which fall below the Napa County noise criteria of 50 dBA noise limit. An occasional discrete noise event (such as the setting of an empty bin) is estimated to produce 48, 51, 54, 53, and 50 dBA from Residences 1, 2, 3, 4, and 6 respectively, which fall below the Napa County's 70 dBA discrete noise event limit. Noise from crush activities would therefore fall below the Napa County noise criteria of 50 dBA L50 and 70 dBA Lmax daytime criteria and 65 dBA nighttime noise limit.

- **Tasting and Marketing Activities:** Marketing events would occur on a western outdoor patio and inside the winery structure. Outdoor amplified music is prohibited, so the primary noise source associated with the event would be raised conversations and acoustic instruments. Napa County's noise threshold is 45 dBA L50 . Outdoor events held in the covered patio area could be as close as approximately 460, 380, 200, 175, and 190 feet from the property lines of adjacent property lines of residences 1, 2, 3, 4, and 6. Visitation and marketing events with 30 and 125 guests are estimated to meet Napa County's 45 dBA threshold , with estimated noise levels of 29, 31, 37, 37, and 36 dBA from Residences 1, 2, 3, 4, and 6. Visitation and marketing events with acoustic, non-amplified music, are estimated to produce 40, 42, 49, 50, and 50 dBA from Residences 1, 2, 3, 4, and 6. As the noise threshold is 45 dBA, the estimated noise for acoustic music will be greater than allowed by Napa County's noise criteria. In order to mitigate any potential impacts to noise, mitigation measure NOISE-1 has been implemented to restrict outdoor music performances.

Indoor amplified music is included within the scope of the proposed project. Illingworth & Rodkin's noise analysis estimated that noise from amplified music within the winery structure with open windows and doors would reach levels of 39, 41, 47, 47, 46 dBA from Residences 1, 2, 3, 4, and 6. As the noise threshold is 45 dBA, the estimated noise from indoor amplified music will be greater than allowed by Napa County's noise criteria. Illingworth & Rodkin's noise analysis also estimated that noise from amplified music within the winery structure with closed windows and doors would be reduced to levels of 31, 33, 39, 39, and 38 dBA from Residences 1, 2, 3, 4, and 6. With all windows and doors closed, amplified music from winery events held within winery structures would be below Napa County's noise criteria of 45 dBA. In order to mitigate any potential impacts to noise, mitigation measure NOISE-2 has been incorporated to require that the winery close all doors and windows if indoor amplified music is to occur. Illingworth and Rodkin's analysis estimates that all other winery operations will meet Napa County's noise criteria. With the implementation of mitigation measure NOISE-1 and NOISE-2, the project will have a less than significant impact.

Biology - According to the Napa County GIS Sensitivity Maps (Natural Diversity Data Base and US Fish and

Wildlife Critical Habitat) no known candidate, sensitive, or special status species have been identified as occurring within the proposed development area. The project would not have a substantial adverse effect on any special status species, or species of particular concern, as there are none identified within the project area. The project site is disturbed and developed with an existing winery, vineyards, an access drive, and associated improvements. No trees, native vegetation, or structures are proposed to be removed to accommodate the proposed project. The development area is not located adjacent to Dry Creek, a known riparian area, but located outside of all defined stream setbacks. The site has not been identified in any local/regional or State plans as being a sensitive community. The applicant has consulted with Forest Ecosystem Management in partnership with Salix Natural Resource Management and a Biological Report was prepared on August 11, 2021, an addendum to the report was prepared on November 5, 2023, and a Northern Spotted Owl Assessment was completed on July 28, 2021. The biologists conducted site visits and reviewed the CNDDDB database for potential impacts to sensitive flora and fauna. The report highlighted four species:

Western Pond Turtle (*Emys marmorata*) - California Species of Special Concern. There are no known detections of western pond turtles in Dry Creek; however, there habitat is suitable, during normal climatic years. No western pond turtles were identified during a field visit to the Project Area. There was no water within this stretch of Dry Creek during the biologist's site visit.

Foothill Yellow-Legged Frog (*Rana boylei*) - California Species of Special Concern. There are no known detections of foothill yellow-legged frogs in the segment of Dry Creek within five (5) miles of the Project Area. No foothill yellow-legged frogs were identified during the biologist's site visit.

Crotch Bumble Bees and Western Bumble Bees -The open areas on the project parcel are primarily vineyards and structures which do not possess the necessary habitat for bumble bees. The area proposed for the project scope has recently been graded when the winery was originally constructed or is within footprint of existing vineyards; therefore, it is not considered bumble bee habitat due to a lack of floral resources.

The proposed project does not request the removal of any native vegetation, including trees. While no tree removal is proposed, the proposed project is within close proximity of dense native vegetation and riparian habitat. Due to the project's proximity to dense vegetation and riparian habitat, and in the abundance of caution, implementation of Mitigation measure BIO-1 will require preconstruction surveys for nesting birds to reduce this impact to less than significant level.

The GIS CNDDDB Owl Habitat layer, shows the potential for owl habitat to occur on the subject parcel. The Forest Ecosystem Management assessment concluded that the project area does not have suitable Northern Spotted Owl habitat due to absence of associated vegetation communities. In the abundance of caution in the event of tree trimming or inadvertent tree removal and in order to mitigate any potentially significant impacts to owls, Mitigation Measure BIO-2 requires Northern Spotted Owl surveys prior to any on site vegetation removal.

The CDFW CNNDDB database depicts that the proposed project is within close proximity of potential Pallid Bat predicted habitat. For this reason, and in the abundance of caution, in order to mitigate any potentially significant impacts to bats, Mitigation Measure BIO-3 requires a bat habitat assessment and surveys prior to any on site tree trimming.

In the event that trees need to be trimmed, Mitigation Measure BIO-4 implements tree trimming requirements.

With the incorporation of Mitigation Measures BIO-1 through BIO-4, the potential for this project to have an impact on special status species is less than significant.

According to the Napa County Environmental Resource Maps (based on the following layers - water bodies, vernal pools & vernal pool species), vernal pools and wetlands are not present. Dry Creek runs along the north property line. The proposed additions would be located outside the stream setbacks established in the Napa County's Conservation Regulations (NCC 18.108) and would not interfere or be located within a wildlife corridor. To prevent inadvertent encroachment into specified stream setbacks during construction, Mitigation Measure BIO-5 requires temporary construction fencing. Due to these factors, 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. With the incorporation of Mitigation Measure BIO-5, impacts would be less than significant.

Cultural - On June 2, 2025, County Staff sent invitations to consult on the proposed project to Native American tribes who had a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. The Yocha Dehe Wintun Nation responded by mail to Staff on July 1, 2025, and declined comment as the project site is not located within their aboriginal territories. No other comments were received and the consultation period closed on July 2, 2025.

Transportation - Based on maximum winery employee and visitor/guest data for the harvest/crush season, the proposed project would be expected to generate 20 new daily trips on a weekday and 18 new daily trips on a Saturday. This count includes vehicle trips required for 281.3 tons of grape haul. Since operational and visitor trips associated with the project is below the 110-trip threshold in the Office of Land Use and Climate Innovation guidelines and the County's TIS Guidelines and VMT screening criteria the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b). Impacts would be less than significant.

The winery project was analyzed to determine whether the proposed parking supply would be sufficient for the anticipated daily demand during harvest conditions. The project would continue to have a total of twelve (12) parking spaces (with one designated for ADA drivers). Visitors to the Winery will be by appointment only. On a busy day, the 34 visitors (14 daily vehicles) will arrive in a staggered arrangement so that there should never be more than six or seven guest vehicles on site at any time. Occasionally, visitors will arrive in a higher-occupancy vehicle such as an SUV, minivan or smaller shuttle bus. The five (5) employees per day would then

occupy the remaining spaces. The project is designed to meet the Napa County Road and Street standards, to conform to the latest emergency access requirements, and the existing road system would continue to provide adequate emergency access to the project site. When larger marketing events are held, guests will be brought to the site via bus and daily visitation will not occur on days where a marketing event will be held; further reducing the proposed project's need for additional parking.

Public Comments - At the time of staff report preparation no public comments have been received.

Decision Making Options:

As noted in the Executive Summary Section above, staff recommends that the Planning Commission approve the project as proposed, subject to the Findings and Conditions of Approval in Attachment B and C, respectively. However, staff has provided the following options for consideration by the Planning Commission.

Option 1 - Approve Applicant's Proposal (Staff Recommendation)

Disposition - This action would approve the project as proposed, allowing the winery expansion and increased operation of a 45,000-gallon per year winery with related tours and tastings and marketing program that would allow up to 34 guests per day, seven days per week. The requested Use Permit would increase vehicle trips and miles, and wastewater generation at the property, in addition to adding winery development area. New construction would be compliant with Napa County zoning code regulations for winery developments, including minimum setbacks from property lines and public roads, maximum lot coverage, and maximum building height. With implementation of mitigation measures pertaining to biological and noise resources, potential environmental impacts of the project would be less than significant, and additional Conditions of Approval would be enforced with the intention of preserving public health, safety, welfare and convenience.

Staff recommend this option as the request is consistent with the Zoning Ordinance and applicable General Plan policies.

Action Required - Follow the proposed action listed in Executive Summary. If conditions of approval are to be amended, specify conditions to be amended at the time the motion is made.

Option 2 - Modify the Applicant's Proposal and Reduce Visitation

Disposition - Should the Planning Commission determine that the intensity of the visitation and marketing plan should be reduced, the Commission may take action to reduce the number of daily, weekly, or yearly visitors and/or reduce the number of proposed marketing events and/or reduce the hours of visitation.

Action Required - Follow proposed actions listed in the Executive Summary and amend scope and project

specific conditions of approval to reduce the maximum daily visitation and/or number of marketing events. If significant revisions to the Conditions of Approval are required, the item may need to be continued to allow staff adequate time to prepare the revised conditions.

Option 3 - Deny Applicant's Proposal

Disposition - In the event the Commission determines that the project does not or cannot meet the required findings for the granting of a Use Permit Major Modification, Commissioners should identify what aspect or aspects of the project are in conflict with the required findings. State Law requires the Commission to adopt findings, based on the General Plan and County Code, setting forth why the proposed Use Permit Major Modification is not being approved.

Action Required - Commission would move to deny the project.

Option 4 - Continuance Option

The Commission may continue an item to a future hearing date at its own discretion.

Attachments:

- A - Initial Study/Mitigated Negative Declaration and MMRP
- B - Recommended Findings
- C - Recommended Conditions of Approval and Agency Memos
- D - 45000 Gallon Winery Comparison Table
- E - Application and Project Descriptions
- F - Water Availability Analysis Tier I and III
- G - Biological Reports
- H - Environmental Noise Assessment
- I - Onsite Wastewater Disposal Feasibility Study
- J - Transient Non-Community Water System Information
- K - Stormwater Control Plan
- L - Graphics

“A”

Initial Study/Mitigated Negative
Declaration

SCH: 2025080635

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

Initial Study Checklist
(form updated January 2019)

1. **Project Title:** Arrow and Branch Winery, Use Permit Major Modification (P23-00057-MOD)
2. **Property Owner:** Steven Contursi, 1042 North Pacific Coast Hwy, Laguna Beach, CA 92651; (949) 679-1222
3. **County Contact Person, Phone Number and email:** Matt Ringel, Planner III, Matthew.ringel@countyofnapa.org, (707) 299-1351
4. **Project Location and Assessor's Parcel Number (APN):** The 10.09 acre project site is located on the west side of Solano Avenue, approximately 0.2 miles south of the intersection of Solano Avenue and Darms Lane. APN: 034-190-040-000; 5215 Solano Ave, Napa, CA 94558
5. **Project sponsor's name and address:** Donna Oldford, Plans 4 Wine, 2620 Pinot Way, St. Helena, CA 94558; dboldford@aol.com; (707) 204-5794
6. **General Plan description:** Agricultural Resource
7. **Zoning:** Agricultural Preserve (AP) Zoning District
8. **Background/Project History:**

Arrow and Branch Winery was approved by the Napa County Planning Commission on November 6, 2013. Use Permit No. P12-00440-UP approved a new winery that includes the following: 1) Annual wine production of 30,000 gallons per year; 2) Construction of a winery building with approximately 3,191 square feet of barrel storage, 3,748 square feet of covered crush pad, and 1,584 square feet of accessory space; 3) An approximately 2,962 square feet second-story single-family dwelling with a 635 square feet entry area and an 844 square feet garage below (for residential purposes only); 4) Daily, appointment-only tours and tastings with 15-people/day; 5) A winery marketing plan with six annual 30-person events and one annual 60-person event; 6) Installation of a new process wastewater treatment system; 7) Seven days of operation from 6:00 AM-6:00 PM, daily, excluding marketing events; 8) Four employees; 9) 12 on-site parking spaces; 10) Installation of an automatic gate with a winery identification and "Tours and Tasting by Prior Appointment Only" signs at the Solano Avenue entrance; and 11) On-site sale and consumption of wine next to the winery entrance and pursuant to Business & Professions Code Sections 23358, 23390 and 23396.5. A modification (Permit No. P13-00435-VMM) was approved on August 25, 2015, to add 3 feet to the north side of the crush pad, add 3 feet to the south side of the tasting room and offices, relocate the project outside of the flood zone, and remove the residence from the winery footprint. A modification (Permit No. P16-00382-VMM) was approved on October 14, 2016, to relocate of the project to the southeastern portion of the project parcel. A modification (Permit No. P21-00087-MM) was approved by the Napa County Zoning Administrator on March 29, 2022, to relocate the project to the northeastern portion of the project parcel and increase the total square footage of the production facility from 6,975 square feet to 8,566 square feet and the total square footage of the accessory use space from 1,584 square feet to 2,067 square feet.
9. **Description of Project:** The proposal is to modify a Use Permit for an existing winery to allow the following:
 - a. Increase annual production capacity from 30,000 gallons per year to 45,000 gallons per year;
 - b. Expansion of an existing winery building by adding approximately 3,529 square feet of additional production space and conversion of approximately 1,721 square feet of space for accessory uses to production space, totaling 13,797 square feet of production space, and construction of approximately 4,308 square feet for additional accessory uses, totaling 4,687 square feet for accessory uses;
 - c. Excavation of approximately 1,500 cubic yards of spoils associated with the construction of proposed structural pads and exterior improvements;
 - d. Increase employment from four (4) full-time employees to five (5) full-time employees;
 - e. Increase tours and tastings by appointment only from 15 visitors per day (up to 105 visitors per week) to 34 visitors per day (up

- to 238 visitors per week);
- f. Increase a marketing program, which may include catered events, as follows;
 - i. From six (6) Small Events annually to twelve (12) for up to 30 guests;
 - ii. From one (1) Large Event annually to two (2) for up to 125 guests (including bus/shuttle transportation for guests);
- g. On-premises consumption of wines produced on-site within the outdoor hospitality areas identified on Sheet A1.01 of the Site Plans, prepared by Taylor Lombardo Architects, dated August 3, 2023, in accordance with Business and Professions Code Sections 23358, 23390 and 23396.5 (AB 2004);
- h. Hours of operation seven days a week: production 6:00 a.m. to 6:00 p.m., visitation 10:00 a.m. to 6:00 p.m. and marketing events 10:00 a.m. to 10:00 p.m. (including cleanup);
- i. Relocation of onsite parking (no change in number of parking spaces);
- j. On-site domestic and process wastewater treatment systems, including the installation of an approximately 81,000 gallon process water storage tank; and
- k. Landscaping, and other improvements associated with wineries.

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

The 10.09 acre project site is located approximately 0.2 miles south of Darms Lane, at 034-190-040-000. The site is located on the valley floor and is generally flat and planted in six (6) acres of vines as are most of the surrounding properties, includes the existing Arrow and Branch winery, and two existing wells. Surrounding land uses include open space, agriculture/vineyard, winery and rural residential uses. Access to the property is provided via an access drive off Solano Avenue adjacent to Highway 29. The nearest residence to the proposed new winery building is approximately 195 feet to the northwest. Adjoining the project site to the east is a 10 acre lot with a shared access drive leading to Silenus Winery. Immediately to the south of the project site is approximately 90 acres of existing vineyard.

To the north of the project site is Dry Creek, a County designated Significant Stream, which runs from the west to the east. To the north of Dry Creek is Darms Lane, located within the Agricultural Watershed zoning district. Darms Lane is predominately composed of single-family homes and associated uses.

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

Discretionary approval required by Napa County consists of a use permit modification. The proposed project would also require various ministerial approvals by the County including, but not limited to a building permit. A Storm Water Pollution Prevention Plan (SWPPP) is required to meet San Francisco Regional Water Quality Control Board standards and is administered by the Engineering Services Division.

Responsible (R) and Trustee (T) Agencies

California Department of Fish and Wildlife (T)

Other Agencies Contacted

None

12. **Tribal Cultural Resources.** Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resource, procedures regarding confidentiality, etc.?

On June 2, 2025, County Staff sent invitations to consult on the proposed project to Native American tribes who had a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. The Yocha Dehe Wintun Nation responded by mail to Staff on July 1, 2025, and declined comment as the project site is not located within their aboriginal territories. No other comments were received and the consultation period closed on July 2, 2025.

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 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL IMPACTS AND BASIS OF CONCLUSIONS:

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of the Napa County Environmental Resource Maps, the other sources of information

listed in the file, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and visit(s) to the project site and proposed development area

Other sources of information used in the preparation of this Initial Study include site-specific studies conducted and filed by the applicant in conjunction with Use Permit #P23-00057 as listed below, and the environmental background information contained in the permanent file on this project. These documents and information sources are incorporated herein by reference and available for review at the Napa County Department of Planning, Building and Environmental Services located at 1195 Third Street, Suite 210, Napa, CA 94559, or Current Projects Explorer | Napa County, CA (countyofnapa.org)

- Forest Ecosystem Management, August 11, 2021, Biological Assessment, Arrow and Branch Winery (Exhibit A)
- Forest Ecosystem Management, November 5, 2023, Biological Assessment Addendum, Arrow and Branch Winery (Exhibit B)
- Forest Ecosystem Management, July 28, 2021, Northern Spotted Owl Assessment, Arrow and Branch Winery (Exhibit C)
- Illingworth & Rodkin, Inc., October 18, 2023, Environmental Noise Assessment (Exhibit D)
- Applied Civil Engineering, July 7, 2025, Tier I Water Availability Analysis (Exhibit E)
- Richard C. Slade & Associates, July 8, 2025, Tier III Water Availability Analysis (Exhibit F)
- Applied Civil Engineering, September 9, 2024, Onsite Wastewater Disposal Feasibility Study (Exhibit G)
- Applied Civil Engineering, September 19, 2024, Transient Non-Community Water System Information (Exhibit H)
- Graphics (Exhibit I)

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.

Matthew Ringel

Signature

August 9, 2025

Date

Name: Matt Ringel, Planner III, Napa County Planning, Building and Environmental Services Department

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

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. The project would not result in substantial damage to scenic resources, including trees and rock outcroppings, or substantially degrade the visual character or quality of the site and its surroundings. The project site is currently undeveloped and possesses vineyards, and associated infrastructure. External changes to the previously approved winery are square footage additions to the winery building and a new 81,000 gallon irrigation tank located on the western corner of the parcel, within a previously disturbed area. The proposed project would not be located in an area which would damage any known scenic vista, or damage scenic resources, trees, rock outcroppings, or historic buildings. Dry Creek, located north of the proposed winery, has mature riparian vegetation, including full-canopy trees, and intervening vineyards that separate the proposed winery from Darms Lane residences. Additional landscape screening will be installed between the new winery/single-family dwelling and property frontage.

This project would not substantially alter a scenic vista or substantially degrade the existing visual character of the site or its immediate surroundings. Impacts related to scenic resources will be less than significant.

d. The proposed improvements may result in the installation of additional lighting that may have the potential to impact nighttime views. Although the project is in an area that has a certain amount of existing nighttime lighting, the installation of new sources of nighttime lights may affect nighttime views. Pursuant to standard Napa County conditions of approval for wineries, outdoor lighting would be required to be shielded and directed downwards, with only low level lighting allowed in parking areas. As subject to the standard conditions of approval, below, the project will not have a significant impact resulting from new sources of outside lighting.

6.3 LIGHTING – PLAN SUBMITTAL

- a. Two (2) copies of a detailed lighting plan showing the location and specifications for all lighting fixtures to be installed on the property shall be submitted for Planning Division review and approval. All lighting shall comply with the CBC.
- b. All exterior lighting, including landscape lighting, shall be shielded and directed downward, shall be located as low to the ground as possible, shall be the minimum necessary for security, safety, or operations; on timers; and shall incorporate the use of motion detection sensors to the greatest extent practical. All lighting shall be shielded or placed such that it does not shine directly on adjacent properties or impact vehicles on adjacent streets. No flood-lighting or sodium lighting of the building is permitted, including architectural highlighting and spotting. Low-level lighting shall be utilized in parking areas as opposed to elevated high-intensity light standards.

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

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

Pursuant to standard Conditions of approval for wineries, the winery will be prohibited from installing highly reflective surfaces. As designed, the operation is subject to the County's project specific condition of approval noted below, the project would not have a significant impact resulting from new sources of glare.

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

- c. The colors used for the roof, exterior walls and built landscaping features of the winery shall be limited to earth tones that will blend the facility into the colors of the surrounding site specific vegetation. The permittee shall obtain the written approval of the Planning Division prior to any change in paint colors that differs from the approved building permit. Highly reflective surfaces are prohibited.

Mitigation Measures: None required

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

Discussion:

- a. The California Department of Conservation District map currently designates the site as "Prime Farmland." The proposed project would not conflict with existing zoning for agricultural uses. 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. Thus, the proposed project would not result in a significant impact with respect to conversion of farmland. The proposed project does not include the removal of vineyard. There are no agricultural contracts on the property. There are no other changes included in this proposal that would result in the conversion of Farmland. 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. Impacts

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.

would be less than significant.

- b. The County's zoning of the property is Agricultural Preserve (AP) and the General Plan land use designation of the property is Agricultural Resource. The winery and proposed modifications are consistent with the property's zoning, as Napa County Code Section 18.16.030 lists wineries and related, accessory uses as conditionally permitted in the AP District. General Plan Policies AG/LU-20 and AG/LU-21 also identifies processing of agricultural products (grape crushing/winemaking) as a use that is consistent with the Agricultural Resource land use designation. There is not a Williamson Act contract that is applicable to this property.
- c/d. The project site is zoned Agricultural Preserve (AP), which allows wineries upon grant of a use permit. The existing winery and associated improvements are located in an area of the site that is also developed with vineyards and other improvements. No vineyards would be required to be removed to accommodate the proposed building and covered crush pad additions. According to the Napa County Environmental Resource Maps (based on the following layers – Sensitive Biotic Oak woodlands, Riparian Woodland forest, and Coniferous forest) the parcel does contain lands classified as containing sensitive biotic communities. However, the project location will not require the removal of any trees or sensitive biotic communities. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.
- e. As discussed in item "a.", above, the winery and winery accessory uses are defined as agriculture by the Napa County General Plan and are allowed under the parcels' AP (Agricultural Preserve) zoning. Neither this project, nor any foreseeable consequence thereof, would result in changes to the existing environment which would result in the conversion of special status farmland to a non-agricultural use.

Mitigation Measures: None required

| 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: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|------|--|--------------------------------|---|-------------------------------------|--------------------------|
| | | | | | |
| a) | Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) | Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) | Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

On June 2, 2010, the Bay Area Air Quality Management District's (now known as the Bay Area Air District) (BAAD) 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 BAAD believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on BAAD's website and included in BAAD'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 BAAD to any specific course of regulatory action.

BAAD 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/b. 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 (BAAD, *In Your Community: Napa County*, April 2016).

The potential impacts associated with implementation of the project were evaluated consistent with guidance provided by BAAD. 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.

BAAD 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. BAAD 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 BAAD provides as a reference for determining appropriate thresholds is the *California Environmental Quality Act Air Quality Guidelines* developed by its staff in 2010 and as updated through May 2017. These guidelines outline substantial evidence supporting a variety of thresholds of significance.

As mentioned above, in 2010, the BAAD adopted and later incorporated into its 2011 CEQA Guidelines project screening criteria (Table 3-1 – Operational-Related Criteria Air Pollutant and Precursors Screening Level Sizes) and thresholds of significance for air pollutants, which have now been updated by BAAD through May 2017. Given the size of the entire project (existing and proposed), which is approximately 13,797 square feet of floor area dedicated to production uses with 4,308 square feet of space dedicated to tasting/hospitality uses compared to the BAAD's screening criterion of 47,000 square feet (high quality restaurant) and 541,000 square feet (general light industry) for NOX (oxides of nitrogen), the project would contribute an insignificant amount of air pollution and would not result in a conflict or obstruction of an air quality plan. (Please note: a high-quality restaurant is considered comparable to a winery tasting room for purposes of evaluating air pollutant emissions, but grossly overstates emissions associated with other portions of a winery, such as office, barrel storage and production, which generate fewer vehicle trips. Therefore, a general light industry comparison has also been used for other such uses.) The project falls 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.

- c/d. Land uses such as schools, playgrounds, childcare centers, hospitals and convalescent homes are considered sensitive to poor air quality, because infants and children, the elderly, and people with health afflictions, especially respiratory ailments, are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential areas are also considered to

be sensitive to air pollution because residents, which include children and the elderly, tend to be in close proximity of home for extended periods of time.

Land uses in the vicinity of project parcel include rural residential, agriculture (primarily vineyard), and wineries. The closest school (Unidos Middle School) is located approximately 1.8 linear miles to the southeast of the project site in Napa (Google Earth). The closest residence is located approximately 195 feet to the northwest of the project area. The closest residential area (the City of Napa) is over 0.95 miles southeast of the project area.

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. These sources would generally be temporary and/or seasonal in nature and would occur at least 1.8 miles from the closest school and 0.95 miles from the nearest residential community, providing dilution of pollutants and odors. The Air District recommends incorporating feasible control measures as a means of addressing construction impacts. If the proposed project adheres 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. Additionally, for the reasons identified above, the proposed project will not expose sensitive receptors or a substantial number of people to pollutants or objectionable odors, resulting in a less than significant impact.

7.1 SITE IMPROVEMENTS

c. AIR QUALITY

During all construction activities the permittee shall comply with the most current version of BAAD 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 BAAD'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 BAAD's jurisdiction shall have either a California Air Resources Board (ARB) registration Portable Equipment Registration Program (PERP) or a BAAD 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 would generate dust particulates in the short-term, the impact would be less than significant with dust control measures as specified in Napa County's standard condition of approval relating to dust:

7.1 SITE IMPROVEMENTS

b. DUST CONTROL

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

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 nearest residence to the proposed new winery building is approximately 195 feet to the northwest. 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

| IV. BIOLOGICAL RESOURCES. Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, Coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

- a/b. According to the Napa County GIS Sensitivity Maps (Natural Diversity Data Base and US Fish and Wildlife Critical Habitat) no known candidate, sensitive, or special status species have been identified as occurring within the proposed development area. The project would not have a substantial adverse effect on any special status species, or species of particular concern, as there are none identified within the project area. The project site is disturbed and developed with several agricultural use buildings, vineyards, an access drive, and associated improvements. No trees, native vegetation, or structures are proposed to be removed to accommodate the proposed project. The development area is located adjacent to Dry Creek, a known riparian area, but located outside of all defined stream setbacks. The site has not been identified in any local/regional or State plans as being a sensitive community. The applicant has consulted with Forest Ecosystem Management in partnership with Salix Natural Resource Management and a Biological Report was prepared on August 11, 2021, an addendum to the report was prepared on November 5, 2023, and a Northern Spotted Owl Assessment was completed on July 28, 2021. The biologists conducted site visits and reviewed the CNDDDB database for potential impacts to sensitive flora and fauna. The report highlighted four species:
- Western Pond Turtle (*Emys marmorata*) – California Species of Special Concern. There are known western pond turtles approximately 1.7 air-miles to the south of the Project located within private agricultural ponds. Western pond turtles are aquatic turtles of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Basking sites and sandy banks or grassy open fields within 2,000' from water is needed for egg-laying. There are no known detections of western pond turtles in Dry Creek; however, there is suitable habitat during normal climatic years. No western pond turtles were identified during a field visit to the

Project Area. There was no water within this stretch of Dry Creek during the biologist's site visit.

- Foothill Yellow-Legged Frog (*Rana boylei*) – California Species of Special Concern. There are known foothill yellow-legged frogs approximately 1.6 air-miles to the north of this project located within Hopper Creek, a downstream tributary to Dry Creek. Foothill yellow-legged frogs are frogs that are rarely far from permanent rocky streams. Tadpoles need water for at least 3 to 4 months for development. There are no known detections of foothill yellow-legged frogs in the segment of Dry Creek within 5 miles of the Project Area. No foothill yellow-legged frogs were identified during the biologist's site visit.
- Crotch Bumble Bees and Western Bumble Bees – Potential threats: pesticide use, fire, agricultural intensification, urban development, and climate change. The project parcel possesses snowberry (*Symphoricarpos albus*), a floral preference for Western Bumble bees. The open areas on the project parcel are primarily vineyards and structures which do not possess the necessary habitat for bumble bees. The area proposed for the project scope has recently been graded when the winery was originally constructed or; therefore, it is not considered bumble bee habitat due to a lack of floral resources.

The proposed project does not request the removal of any native vegetation, including trees. While no tree removal is proposed, the proposed project is within close proximity of dense native vegetation and riparian habitat. Due to the project's proximity to dense vegetation and riparian habitat, and in the abundance of caution, implementation of Mitigation Measure **BIO-1** will require preconstruction surveys for nesting birds to reduce this potential impact to less than significant level.

The GIS CNDDDB Owl Habitat layer, shows the potential for owl habitat to occur on the subject parcel. The general attributes of Northern Spotted Owl (NSO) habitat include dense, multi-layered canopy of several tree species of varying size and ages with open spaces among the lower branches to allow flight under the canopy. NSO habitat also tends to include abundant logs, snags/cavity trees with broken tops or platform-like substrates. The Forest Ecosystem Management assessment concluded that the project area does not have suitable Northern Spotted Owl habitat due to absence of associated vegetation communities. In the abundance of caution and in order to mitigate any potentially significant impacts to owls, Mitigation Measure **BIO-2** requires Northern Spotted Owl surveys prior to any on site vegetation removal.

The CDFW CNNDDB database depicts that the proposed project is within close proximity of potential Pallid Bat predicted habitat. For this reason, and in the abundance of caution, in order to mitigate any potentially significant impacts to bats, Mitigation Measure **BIO-3** requires a bat habitat assessment and surveys prior to any on site tree trimming.

In the event that trees need to be trimmed, Mitigation Measure **BIO-4** implements tree trimming requirements. With the incorporation of Mitigation Measures **BIO-1 through BIO-4**, the potential for this project to have an impact on special status bird and raptor species is less than significant.

- c/d. According to the Napa County Environmental Resource Maps (based on the following layers – water bodies, vernal pools & vernal pool species), vernal pools and wetlands are not present. Dry Creek runs along the north property line. The proposed additions would be located outside the stream setbacks established in Napa County's Conservation Regulations (NCC 18.108) and would not interfere or be located within a wildlife corridor. To prevent inadvertent encroachment into specified stream setbacks during construction, Mitigation Measure **BIO-5** requires temporary construction fencing. Due to these factors, 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. With the incorporation of Mitigation Measure **BIO-5**, impacts would be less than significant.
- e/f. This project would not interfere with any ordinances protecting biological resources. The proposed project does not propose the removal of any trees; therefore, there are no applicable tree preservation ordinances in effect in the County. 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:

Mitigation measure **BIO-1**: The owner/permittee shall implement the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:

- a. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through October 15 – NCC Section 18.108.070.L, and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct a preconstruction surveys for nesting birds within all suitable habitat on the project site, and where there is potential for impacts adjacent to the project areas (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than seven (7) days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence

later than seven (7) days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Planning Division and the CDFW prior to commencement of work.

- b. After commencement of work if there is a period of no work activity of seven (7) days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity.
- c. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with the County Conservation Division and the USFWS and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with the County's Planning Division and/or the USFWS or CDFW.
- d. Exclusion buffers shall be fenced with temporary construction fencing (or the like), the installation of which shall be verified by Napa County prior to the commencement of any earthmoving and/or development activities. Exclusion buffers shall remain in effect until the young have fledged or nest(s) are otherwise determined inactive by a qualified biologist.

Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) would be considered an impact to nesting birds and is prohibited. Any act associated with flushing birds from project areas should undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities.

Mitigation measure **BIO-2:** Minimize potential indirect impacts to Northern Spotted Owls

- a. For project activities occurring between March 15 and July 31, prior to any vegetation removal or construction activities, a qualified biologist shall perform a NSO habitat assessment to determine the potential for this species to be present within the disturbance area as well as within a 0.25-mile buffer surrounding each disturbance area. The assessment shall include both a review of recent aerial photography and a field visit to review conditions directly. Additionally, the qualified biologist shall perform an on-site nocturnal calling survey for NSO from at least mid-March onward and prior to initiation of construction activities. Survey stations for the calling survey shall be sited to cover post-fire forest stands that are most suitable for NSO occupation. The results of the updated habitat assessment and survey shall be provided to the County for review prior to project initiation. If NSO is observed or otherwise believed to be present within the focal area described above, measures shall be implemented in consultation with CDFW to ensure that project activities would not result in a take of the species and that any potential impacts are otherwise minimized to the extent feasible.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities.

Mitigation Measure **BIO-3:** Bat Tree Habitat Assessment and Surveys.

Prior to the commencement of Project Construction activities, a qualified biologist shall conduct a habitat assessment for bats, unless otherwise approved in writing by CDFW. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to tree trimming shall include a visual inspection of potential roosting features of trees to be removed (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming shall not proceed without approval in writing from CDFW. If the presence of bats is presumed or documented, trees may be trimmed only: a) using the two-step trimming process detailed below during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats. Two-step tree trimming shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree trimming, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the remainder shall be removed.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities.

Mitigation Measure **BIO-4:** Tree Trimming

- a. Prior to any earthmoving activities, the owner/permittee shall place temporary fencing at the edge of the dripline of trees to be retained that are located adjacent to the development area (typically within approximately 50-feet of the development area). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protection areas for the duration of project construction.

- b. The owner/permittee shall refrain from severely trimming the trees (typically no more than 1/3rd of the canopy) and vegetation to be retained adjacent to the winery development and water tank.
- c. In accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement), trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P23-00057-MOD shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for county review and approval that includes at a minimum, the locations where replacement trees will be planted, success criteria of at least 80%, and monitoring activities for the replacement trees. The replacement plan shall be implemented before improvements obtain final occupancy. Any replaced trees shall be monitored for at least three years to ensure an 80% survival rate. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the associated building permits.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits and shall be implemented in conjunction with all construction activities.

Mitigation Measure BIO-5: Riparian Protection. The Owner/Permittee shall implement the following measures to prevent the inadvertent encroachment into specified stream setbacks during construction:

- a. The location of stream setbacks shall be clearly demarcated in the field with temporary construction fencing, which shall be placed at the outermost edge of required setbacks shown on the project plans. Prior to any earthmoving activities, temporary fencing shall be installed: the precise locations of said fences shall be inspected and approved by the Conservation Division prior to any earthmoving and/or development activities, no disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation. The protection fencing shall remain in place for the duration of project implementation.
- b. All construction and related traffic shall remain outside of the protective fencing to the maximum extent practicable to ensure that the stream, buffer zones, and associated woodland habitat remains undisturbed.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits and shall be implemented in conjunction with all construction activities.

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

Discussion:

- a/b. On June 2, 2025, County Staff sent invitations to consult on the proposed project to Native American tribes who had a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. The Yocha Dehe Wintun Nation responded by mail to Staff on July 1, 2025, and declined comment as the project site is not located within their aboriginal territories. No other comments were received and the consultation period closed on July 2, 2025.

According to Napa County Environmental Sensitivity Maps (Archaeological Resources Layer, historical site, points & lines), no known historically sensitive sites or structures, archaeological or paleontological resources, sites or unique geological features have been identified within the project site. There is no information in the County's files that would indicate that there is a potential for occurrence of these resources. The site has been previously developed with a winery, vineyards, and two wells. It is therefore not anticipated that any cultural resources are present on the site, and the potential for impact is considered less-than-significant. However, if resources are found

during grading of the project, construction of the project is required to cease, and a qualified archaeologist will be retained to investigate the site in accordance with the following standard condition of approval that will be imposed on the project:

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.

- c. No human remains have been encountered on the property and no information has been encountered that would indicate that construction of this project would encounter human remains. 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.

| VI. | ENERGY. Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------|---|-------------------------------------|-------------------------------------|
| | a) Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources during project construction or operation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

- a. During construction of the proposed project, the use of construction equipment, truck trips for hauling materials, and construction workers' commutes to and from the project site would consume fuel. Construction activities and corresponding fuel energy consumption would be temporary and localized. In addition, there are no unusual project characteristics that would cause the use of construction equipment or haul vehicles that would be less energy efficient compared with other similar agricultural construction sites within Napa County.

The proposed project would comply with Title 24 energy use requirements, and once construction is complete, equipment and energy use would be slightly higher than existing levels and the proposed project would not include any unusual maintenance activities that would cause a significant difference in energy efficiency compared to the surrounding developed land uses. Thus, the proposed project would not result in wasteful, inefficient, or unnecessary energy use. This impact would be less than significant

- b. The proposed project would not conflict with the provisions of a state or local plan for renewable energy or energy efficiency because there are no plans applicable to the subject site. No impacts would occur.

Mitigation Measures: None required.

Building Code. Prior to issuance of a building or grading permit the owner shall submit the necessary documents for Erosion Control as determined by the area of disturbance of the proposed development in accordance with the Napa Countywide Stormwater Pollution Prevention Program Erosion and Sediment Control Plan Guidance. Engineering Division Conditions of Approval have been included to ensure compliance with the requirements. Impacts would be less than significant.

- c/d. Based upon the Soil Survey of Napa County, prepared by the United States Department of Agriculture (USDA), the site is composed of Pleasanton Loam, 0 to 2 percent slopes. According to the Napa County GIS Sensitivity Maps (Surficial Deposits layer), the site is underlain by Qhay deposits. Based on the Napa County GIS Sensitivity Maps (liquefaction layer) the property includes areas generally subject to high tendencies to liquefy. All proposed construction will be required to comply with all the latest building standards and codes at the time of construction. Compliance with the latest editions of the California Building Code for seismic stability would reduce any potential impacts to the maximum extent possible, resulting in less than significant impacts.
- e. The Napa County Division of Environmental Health has reviewed this application and recommends approval based on the submitted Onsite Wastewater Disposal Feasibility Study prepared by Applied Civil Engineering, dated September 9, 2024. Soils on the property have been determined to be adequate to support the proposed on-site treatment and dispersal of wastewater generated by existing and proposed wine production as well as sanitary wastewater based on the proposed number of visitors and employees.
- f. No paleontological resources or unique geological features have been identified on the property or were encountered on the property when the existing buildings were constructed or when the vines were planted. However, if resources are found during any earth disturbing activities associated with the project, construction of the project is required to cease, and a qualified archaeologist will be retained to investigate the site in accordance with the standard condition of approval 7.2 identified in **Section V** above.

Mitigation Measures: None required.

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

Discussion:

On April 20, 2022, the BAAD adopted updated thresholds of significance for climate impacts (CEQA Thresholds for Evaluating the Significance of Climate Impacts, BAAD April 2022)². The updated thresholds to evaluate GHG and climate impacts from land use projects are qualitative and geared toward building and transportation projects. Per the BAAD, all other projects should be analyzed against either an adopted local Greenhouse Gas Reduction Strategy (i.e., Climate Action Plan (CAP)) or other threshold determined on a case-by-case basis by the Lead Agency. If a project is consistent with the State's long-term climate goals of being carbon neutral by 2045, then a project would have a less-than-significant impact as endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204). There is no proposed construction-related climate impact threshold at this time. Greenhouse gas (GHG) emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions.

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 greenhouse gas (GHG) emissions associated with project development and operation. At the December 11, 2012, Napa County Board of Supervisors (BOS) hearing, the BOS considered adoption of the proposed CAP. In addition to reducing Napa County's GHG emissions, the proposed plan was intended to address compliance with CEQA for projects reviewed by the County and to lay the foundation for development of a local offset program. While the BOS acknowledged the plan's

² <https://www.BAAD.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>, April 2022

objectives, the BOS requested that the CAP be revised to better address transportation-related greenhouse gas, to acknowledge and credit past accomplishments and voluntary efforts, and to allow more time for establishment of a cost-effective local offset program. The BOS also requested that best management practices be applied and considered when reviewing projects until a revised CAP is adopted to ensure that projects address the County's policy goal related to reducing GHG emissions. In addition, the BOS recommended utilizing the emissions checklist and associated carbon stock and sequestration factors in the Draft CAP to assess and disclose potential GHG emissions associated with project development and operation pursuant to CEQA.

In July 2015, the County re-commenced preparation of the CAP to: i) account for present day conditions and modeling assumptions (such as but not limited to methods, emission factors, and data sources), ii) address the concerns with the previous CAP effort as outlined above, iii) meet applicable State requirements, and iv) result in a functional and legally defensible CAP. On April 13, 2016, the County, as the part of the first phase of development and preparation of the CAP, released Final Technical Memorandum #1: 2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016. This initial phase included: i) updating the unincorporated County's community-wide GHG emissions inventory to 2014, and ii) preparing new GHG emissions forecasts for the 2020, 2030, and 2050 horizons. On July 24, 2018, the County prepared a Notice of Preparation of a Draft Focused EIR for the Climate Action Plan. The review period was from July 24, 2018, through August 22, 2018. The Draft Focused EIR for the CAP was published May 9, 2019. Additional information on the County CAP can be obtained at the Napa County Department of Planning, Building and Environmental Services or online at <https://www.countyofnapa.org/589/Planning-Building-Environmental-Services>. The County's draft CAP was placed on hold, when the Climate Action Committee (CAC) began meeting on regional GHG reduction strategies in 2019. The County is currently preparing an updated CAP to provide a clear framework to determine what land use actions will be necessary to meet the State's adopted GHG reduction goals, including a quantitative and measurable strategy for achieving net zero emissions by 2045.

For the purposes of this assessment the carbon stock and sequestration factors identified within the 2012 Draft CAP are utilized to calculate and disclose potential GHG emissions associated with agricultural "construction" and development and with "ongoing" agricultural maintenance and operation, as further described below. The 2012 Draft CAP carbon stock and sequestration factors are utilized in this assessment because they provide the most generous estimate of potential emissions. As such, the County considers that the anticipated potential emissions resulting from the proposed project that are disclosed in this Initial Study reasonably reflect proposed conditions and therefore are considered appropriate and adequate for project impact assessment.

Regarding operational emissions, as part of the statewide implementation of Senate Bill (SB) 743, the Governor's Office of Planning and Research (OPR) settled upon automobile vehicle miles of travel (VMT) as the preferred metric for assessing passenger vehicle-related impacts under CEQA and issued revised CEQA Guidelines in December 2018, along with a Technical Advisory on Evaluating Transportation Impacts in CEQA to assist practitioners in implementing the CEQA Guidelines revisions. The CEQA Guidelines and the OPR Technical Advisory concluded that, absent substantial evidence otherwise, the addition of 110 or fewer daily trips could be presumed to have a less than significant VMT impact. The County maintains a set of Transportation Impact Study Guidelines (TIS Guidelines) that define situations and project characteristics that trigger the need to prepare a TIS. The purpose of a TIS is to identify whether the project is likely to cause adverse physical or operational changes on a County roadway, bridge, bikeway or other transportation facility, to determine whether the project should be required to implement or contribute to improvement measures to address those changes, and to ensure that the project is developed consistent with the County's transportation plans and policies. Per the County's current TIS Guidelines, a project is required to prepare a TIS if it generates 110 or more net new daily vehicle trips. The TIS Guidelines also include VMT analysis requirements for projects based on trip generation, which includes a screening approach that provides a structure to determine what level of VMT analysis may be required for a given project. For a new project that would generate less than 110 net new daily vehicle and truck trips, not only is the project not required to prepare a TIS, it is also presumed to have a less-than-significant impact for VMT. However, applicants are encouraged to describe the measures they are taking and/or plan to take that would reduce the project's trip generation and/or VMT. Projects that generate more than 110 net new passenger vehicle trips must conduct a VMT analysis and identify feasible strategies to reduce the project's vehicular travel; if the feasible strategies would not reduce the project's VMT by at least 15%, the conclusion would be that the project would cause a significant environmental impact.

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

Consistent with the 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.

The County requires project applicants to consider methods to reduce GHG emissions consistent with Napa County General Plan Policy CON-65(e). Pursuant to State CEQA Guidelines Section 15183, this assessment focuses on impacts that are "peculiar to the project,"

rather than the cumulative impacts previously assessed, because this Initial Study assesses a project that is consistent with an adopted General Plan for which an EIR was prepared. GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including carbon dioxide (CO₂), methane, ozone, and the fluorocarbons, which contribute to climate change. CO₂ is the principal GHG emitted by human activities, and its concentration in the atmosphere is most affected by human activity. It also serves as the reference gas to which to compare other GHGs. For the purposes of this analysis potential GHG emissions associated with winery 'construction' and 'development' and with 'ongoing' winery operations have been discussed.

GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions. The BAAD recommended thresholds do not include a construction-related climate impact threshold at this time. One time "Construction Emissions" associated with the project include: emissions associated with the energy used to develop and prepare the project area, construction, and construction equipment, and worker vehicle trips (hereinafter referred to as Equipment Emissions). The physical improvements associated with this project include the construction of approximately 3,529 sq. ft. winery production space, 3,929 sq. ft. of accessory space, landscaping, and other winery related improvements. As discussed in Section III. Air Quality, construction emissions would have a temporary effect and BAAD recommends incorporating feasible control measures as a means of addressing construction impacts. If the proposed project adheres to relevant best management practices identified by the BAAD and the County's standard conditions of project approval, construction-related impacts are considered less than significant. See Section III. Air Quality for additional information.

The BAAD proposed thresholds for land use projects are designed to address "Operational" GHG emissions which represent the vast majority of project GHG emissions. Operational emissions associated with a winery generally 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).

As noted above, Napa County has not adopted a qualified GHG reduction strategy or an air quality plan, therefore projects will be evaluated per the BAAD recommended minimum design elements.

Specifically for buildings, the project must not:

- Include natural gas appliances or natural gas plumbing (in both residential and nonresidential development); and
- Result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA section 21100(b)(3) and CEQA Guidelines section 15126.2(b).

The project will be required, through conditions of project approval, to prohibit the use of natural gas appliances or plumbing. Additionally, at the time of construction the project will be required to comply with the California Building Code, which is currently being updated to include regulations to assist in the reduction of air quality impacts associated with construction, such as prohibiting natural gas appliance and plumbing. The new construction will be required to install energy efficient fixtures complying with CA Building Code Title 24 standards. See section VI. Energy for additional information on energy usage.

Specifically for transportation, the project must:

- Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2, and
- Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target reflecting the following recommendations:
 - Residential projects: 15 percent below the existing VMT per capita;
 - Office projects: 15 percent below the existing VMT per employee; or
 - Retail projects: no net increase in existing VMT.

The project will be required to comply with the recently adopted version of CALGreen Tier 2. Project approval will include a condition of approval to ensure this is reviewed and implemented at the time of construction through adherence to the California Building Code.

As discussed above and in section XVII. Transportation, the County maintains TIS Guidelines that include VMT analysis requirements for projects based on trip generation. The project trip generation numbers did not require completion of a traffic study or VMT analysis because new trips would be below the 110 daily trip threshold.

The applicant proposes implementing some GHG reduction strategies. These include the installation of solar panels; the preparation of a Vehicle Miles Traveled (VMT) reduction plan to reduce annual VMT by at least 15% by providing employee incentives, priority parking for efficient transportation, bike riding incentives, and bus transportation for large marketing events; installation of solar hot water heating; energy conserving lighting; installation of an energy star roof; installation of water efficient fixtures; low-impact development to manage

stormwater as close to its source as possible; install a water efficient landscape design; implementation of a sustainable purchasing and shipping program; installation of electrical vehicle charging station(s); public transportation will be available; the structure design will be oriented to maximize passive cooling, heating, and lighting; use of recycled materials for construction and operation; education to staff and visitors on sustainable practices; use of 70-80% cover crop; retention of biomass via pruning and thinning by chipping the materials and reusing it rather than burning on-site; and water conservation by use of processed wastewater for re-use as irrigation. A condition of approval will be included to require implementation of the checked Voluntary Best Management Practices Measures submitted with the project application. If the proposed project adheres to these relevant design standards identified by BAAD, the requirements of the California Building Code, and the County's conditions of project approval, impacts are considered less than significant.

Mitigation Measures: None required.

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

Discussion:

- a. The proposed project will not involve the transport of hazardous materials other than those small amounts normally used in winery operations. A Business Plan will be filed with the Environmental Health Division should the amount of hazardous materials reach reportable levels. However, in the event that the proposed use or a future use involves the use, storage or transportation of greater than 55 gallons or 500 pounds of hazardous materials, a use permit and subsequent environmental assessment would be required in accordance with the Napa County Zoning Ordinance prior to the establishment of the use. During construction of the project some hazardous materials, such as building coatings/ adhesives/ etc., will be utilized. However, given the quantities of hazardous materials and the limited duration, they will result in a less than significant impact.
- b. 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 the continued operations of an existing winery that would not be expected to use any substantial quantities of hazardous materials. Therefore, it would not be reasonably foreseeable 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 winery buildings. According to Google Earth, the nearest school to the project site is the Unidos Middle School, located approximately 1.8 linear miles to the southeast of the project site in the City of Napa. No impacts would occur.
- d. Based on a search of the California Department of Toxic Substances Control database, the project site does not contain any known EPA National Priority List sites, State response sites, voluntary cleanup sites, or any school cleanup sites. No impact would occur as the project site is not on any known list of hazardous materials sites.
- e. No impact would occur as the project site is not located within an airport land use plan.
- f. The existing access driveway and on-site circulation configuration meets Napa County Road and Street Standards. The project has been reviewed by the County Fire Department and Engineering Services Division and found acceptable, as conditioned. Therefore, the proposed project would not impair implementation of or physically interfere with any adopted emergency response plan or emergency evacuation plan, or obstruct emergency vehicle access and impacts would be less than significant.
- g. The project would not increase exposure of people and/or structures to a significant loss, injury or death involving wild land fires. The existing driveway would provide adequate access to Solano Avenue. The project would 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.

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

Discussion:

The County requires all discretionary permit applications to complete necessary water analyses in order to document that sufficient water supplies are available for the proposed project and to implement water saving measures to prepare for periods of limited water supply and to conserve limited groundwater resources.

On June 7, 2022, the Napa County Board of Supervisors provided interim procedures to implement provisions of the Napa County Groundwater Sustainability Plan (GSP) for issuance of new, altered or replacement well permits and discretionary projects that would increase groundwater use. The direction limits a parcel's groundwater allocation to 0.3- acre feet per acre per year, or no net increase in groundwater use if that threshold is exceeded already for parcels located in the GSA Subbasin. For parcels not located in the GSA Subbasin (i.e., generally located in the hillsides), a parcel-specific Water Availability Analysis would suffice to assess potential impacts on groundwater supplies. The project well is located within the GSA Subbasin.

To assess potential impacts resulting from project well(s) interference with neighboring wells within 500 feet and/or springs within 1,500 feet, the County's Water Availability Analysis Guidance Document- May 2015 (WAA) requires applicants to perform a Tier 2 analysis where the proposed project would result in an increase in groundwater extraction from project well(s) compared to existing levels.

To assess the potential impacts of groundwater pumping on hydrologically connected navigable waterways and those non-navigable tributaries connected to navigable waters, the WAA guidance requires applicants to perform a Tier 3 or equivalent analysis for new or replacement wells, or discretionary projects that would rely on groundwater from existing or proposed wells that are located within 1,500 feet of designated "Significant Streams."³

Public Trust: The public trust doctrine requires the state and its legal subdivisions to "consider," give "due regard," and "take the public trust into account" when considering actions that may adversely affect a navigable waterway. (Environmental Law Foundation v. State Water Resources Control Bd.; San Francisco Baykeeper, Inc. v. State Lands Com.) There is no "procedural matrix" governing how an agency should consider public trust uses. (Citizens for East Shore Parks v. State Lands Com.) Rather, the level of analysis "begins and ends with whether the challenged activity harms a navigable waterway and thereby violates the public trust." (Environmental Law Foundation, 26 Cal.App.5th at p. 403.). As demonstrated in the Environmental Law Foundation vs State Water Resources Control Board Third District Appellate Court Case, that arose in the context of a lawsuit over Siskiyou County's obligation in administering groundwater well permits and management program with respect to Scott River, a navigable waterway (considered a public trust resource), the court affirmed that the public trust doctrine is relevant to extractions of groundwater that adversely impact a navigable waterway and that Counties are obligated to consider the doctrine, irrespective of the enactment of the Sustainable Groundwater Management Act (SGMA).

On January 10, 2024, Napa County released the Interim Napa County Well Permit Standards and WAA Requirements - January 2024, providing guidance to comply with the Public Trust.

- a. As discussed in Section VII. Geology and Soils a Wastewater Feasibility Study, dated January 6, 2023, was prepared by Applied Civil Engineering, which outlines the required wastewater system to meet the needs of the proposed winery production, employees, visitation, and marketing programs. The Wastewater Feasibility Study analyzes the existing system and reviews changes that are required to meet the winery's proposed new needs. The analysis found that the predicted Peak Winery Process Wastewater Flow exceeds the capacity of the existing system but the predicted Peak Winery Sanitary Wastewater Flow is within the capacity of the existing system. Due to this factor, design adjustments are needed to accommodate the new process wastewater flow increase. Improvements are not needed for the sanitary wastewater system as the existing design is adequate to handle the proposed flows. To accommodate the new process wastewater flow increase, process wastewater would be collected in an 81,000 gallon irrigation storage tank and then be used for vineyard irrigation rather than being disposed of in the in-ground system. No change is needed to the pretreatment system as it can adequately handle the proposed design flows and provide water of the quality needed for surface irrigation. All application of treated winery process wastewater must comply with the requirements of the Napa County Process Wastewater Guidelines for Surface Drip Irrigation. The facility will have to enroll for coverage under the General Waste Discharge Requirements for Winery Process Water and meet discharge standards and monitoring requirements specific to the amount of waste discharged. The Division of Environmental Health reviewed this report and concurred with its findings, conditioned that the plans shall be designed by a licensed Civil Engineer or Registered Environmental Health Specialist and approved by the Division of Environmental Health. Ongoing water quality monitoring will be required. Additionally, water quality would be maintained through standard stormwater quality treatment control measures and compliance with Engineering Division Conditions of Approval. Impacts would be less than significant.
- b. A Tier I Water Availability Analysis was prepared by Applied Civil Engineering (ACE), dated July 7, 2025, and a Tier III Water Availability

³ Refer to Figure 1: Significant Streams for Tier 3, located at www.countyofnapa.org/3074/Groundwater-Sustainability. The "Significant_Streams" and "Significant_Streams_1500ft_buffer" GIS layers are published as publicly-available open data through the County's ArcGIS Online Account.

Analysis was prepared by Richard C. Slade & Associates LLC (RCS), dated July 8, 2025. As directed by the County's Water Availability Analysis Guidance Document of May 2015 (WAA) and the Interim Well Permit Standards (January 2024), the reports includes Tier 1 calculations for the existing and proposed water uses and a groundwater recharge analysis, a Tier 2 well interference analysis, and a Tier 3 surface water interference analysis.

Tier 1: The Tier 1 analysis considered existing uses onsite to include the winery, landscaping irrigation, vineyard irrigation, and the neighbor's well that is located on the parcel. The existing groundwater usage of the project parcel is estimated at 9.33 acre-feet per year (AFY). The proposed project would not increase groundwater use and would maintain no net increase of groundwater usage.

| Source of Demand | Existing (AFY) | Proposed (AFY) | Difference (AFY) |
|---|----------------|----------------|------------------|
| Primary Residence | 0 | 0 | 0 |
| Vineyard Irrigation | 3 | 2.59 | -0.41 |
| Landscape Irrigation | 0.2 | 0.2 | 0 |
| Winery (Visitation, Marketing, and Employees) | 0.77 | 1.18 | +0.41 |
| Silenus Easement Well (Neighboring winery, vineyards, and residential uses) | 5.36 | 5.36 | 0 |
| Total | 9.33 | 9.33 | 0 |

The project parcel currently contains two (2) wells and no new wells are proposed. The parcel contains "Well 1" and "Silenus Easement Well". The proposed winery project will only use Well 1. The next door neighbor (Silenus Winery) has an existing water easement to use the "Silenus Easement Well" and the associated well infrastructure, and no water from this well is used by the Arrow and Branch Winery project parcel. Both wells and all of the approximately 10.09 acres of the project parcel are within the GSA boundary. Napa County's WAA guidelines allot 0.3 AFY of water per acre of land within the GSA; therefore, the 10.09 acres of project parcel within the GSA has an estimated groundwater recharge of 3.027 AFY.

Currently, Well 1 is estimated to draw 3.97 AFY and Silenus Easement Well is estimated to draw 5.36 AFY of water from the GSA, which is higher than the parcel's recharge total of 3.027 AFY, as calculated using the County's Interim Well Standards. The proposed project with the use of reclaimed wastewater for vineyard irrigation would maintain its existing water use. As a whole, the total proposed groundwater demand is 9.33 AFY, equivalent to 308% estimated annual groundwater recharge values for parcel area. Due to this factor, a condition of approval would be imposed to cap Well 1 to the yearly groundwater extraction of 3.97 AFY, to cap the Silenus Easement Well to 5.36 AFY, and an overall cap on the parcel of 9.33 AFY. Additionally, the project would be required to install a well flow meter on Well 1 and the Silenus Easement Well, to verify that no more than the previously existing non-conforming volume of water is pumped from the GSA and that the parcel does not exceed 9.33 AFY of groundwater usage (see COA below).

6.15(d) Groundwater Demand Management Program

1. The permittee shall install a meter on each well serving the parcel (Well 1 and Silenus Easement Well). Each meter shall be placed in a location that will allow for the measurement of all groundwater used on the project parcel. Prior to the issuance of a grading or building permit for the winery the permittee shall submit for review and approval by the PBES Director a groundwater demand management plan which includes a plan for the location and the configuration of the installation of a meter on the two wells serving the parcel.
2. The plan shall identify how best available technology and best management water conservation practices will be applied throughout the parcel.
3. The Plan shall identify how best management water conservation practices will be applied where possible in the structures on site. This includes but is not limited to the installation of low flow fixtures and appliances.
4. As groundwater consuming activity already exists on the property, meter installation and monitoring shall begin immediately and the first monitoring report is due to the County within 120 days of approval of this Use Permit.
5. For the first twelve months of operation under this permit, the permittee shall read the meters of at the beginning of each month and provide the data to the PBES Director monthly. If the water usage on the property exceeds, or is on track to exceed, the maximum groundwater usage values in i through ii below, or if the permittee fails to report, additional reviews and analysis and/or a corrective action program at the permittee's expense shall be required to be submitted to the PBES Director for review and action. In addition to monthly meter readings, Permittee shall also provide well level data to the PBES Director.

- i. Annual cumulative groundwater usage for all wells on the property shall not exceed 9.33 af/yr.
 - ii. Notwithstanding COA No. 6.15.d.5.i, annual groundwater usage for Well 1 shall not exceed 3.97 af/yr.
 - iii. Notwithstanding COA No. 6.15.d.5.i, annual groundwater usage for Silenus Easement Well shall not exceed 5.36 af/yr.
6. The permittee's wells shall be included in the Napa County Groundwater Monitoring program if the County finds the well suitable.
7. At the completion of the reporting period per 6.15(d)(5) above, and so long as the water usage is within the maximum acre-feet per year as specified above, the permittee may begin the following meter reading schedule:
 - i. On or near the first day of each month the permittee shall read the water meter and provide the data to the PBES Director during the first weeks of April and October. The PBES Director, or the Director's designated representative, has the right to access and verify the operation and readings of the meters during regular business hours.

| Portion of property | Assessed Area (acres) | Project Well Located within Region | Average Rainfall (ft) | Rainfall Recharge Percentage (RCS, 2019) | Groundwater Recharge (AFY) | Existing Water use (AFY) | Proposed Water Use (AFY) |
|---------------------|-----------------------|------------------------------------|---|--|----------------------------|--------------------------|--------------------------|
| Inside GSA | 10.09 | Well 1 & Silenus Easement Well | 0.3 AFY/ac (Per Napa County WAA Guidelines) | | 3.027 | 9.33 | 9.33 |

Tier 2: Pursuant to County's WAA, a Tier 2 analysis is required when a neighboring off-site well is located within 500 feet of the project well, the well is located within 1,500 feet from a spring, or the proposed project requests an increase in groundwater usage. The project does not request an increase in groundwater usage; therefore, a Tier 2 analysis is not required.

Tier 3: A Tier 3 review is the County's adopted method for complying with its duties under the Public Trust Doctrine. As discussed herein, the existing project will comply with the WAA guidance document. Per the County's WAA, a Tier 3 analysis was performed to evaluate potential groundwater to surface water interaction.

The project well is approximately 40-70 feet from the nearest portion of Dry Creek (located north of the project parcel) and the Silenus Easement Well is approximately 50-80 feet from the nearest portion of Dry Creek. Dry Creek is a designated Significant Stream. In the professional opinion of hydrogeologist RCS in their Tier III WAA, the Project well and Silenus Easement well are not in hydraulic connection with any defined Significant Streams because:

- a. Available groundwater depth measurements in the Project Well have been at least 72 feet lower in elevation than the bed elevation of Dry Creek, as measured along Cross Section A-A'. In March 2024, despite flows in the Creek being present in the proximal portion of Dry Creek, the water level in the Project Well was 89 ft below the bed of Dry Creek. In July 2025, the water level in the Project Well was more than 168 ft lower in elevation than the bed of Dry Creek, and ponded water was present in the nearby portion of the creek.
- b. Available groundwater depth measurements in the Silenus Easement Well have been at least 7 ft lower in elevation than the bed of Dry Creek, as measured along Cross Section A-A, and more recent water levels have been much deeper. In March 2024, despite flows being present in the proximal portion of Dry Creek, the water level in the Easement Well was 153 ft below the bed of Dry Creek, and ponded water was present in the nearby portion of the creek.
- c. The Project Well is constructed with a 50-foot-deep surface seal and a screen depth that begins below the bottom of the alluvial aquifer system. Between the bed of Dry Creek and the deeper aquifer materials accessible to the Project Well & Silenus Easement Well, low permeability strata have been documented in, and inferred from, various data sources. Therefore, Dry Creek is not connected to groundwater accessible to the Project Well & Silenus Easement Well. Pumping of the Project Well for the proposed project will not impact surface water flow in the proximal portions of Dry Creek because surface water in Dry Creek is hydrogeologically disconnected from groundwater accessible to the Project Well in the vicinity of the subject property. Similarly, pumping of the Easement Well to meet its existing demands will not impact surface water flow in the proximal portions of Dry Creek because surface water in the creek is hydrogeologically disconnected from groundwater accessible to the Easement Well in the vicinity of the subject property.

- d. Pumping of the Project Well & Silenus Easement Well will not directly influence flows in the proximal portion of Dry Creek because: 1) surface and subsurface data collected by others (LSCE, 2016 & 2022) demonstrate that groundwater in the deeper portion of the alluvial aquifer system (and therefore also the underlying earth materials) is not directly connected to overlying surface water flows in Dry Creek; 2) additional low-permeability strata exist between the screened sections of nearby monitoring well named "217d-swgw2", and above the screened sections of the Project Well and Silenus Easement Well; and 3) the Project & Silenus Easement Well, as constructed, can only extract groundwater from earth materials beneath those additional low permeability strata.

The Project Well and the Silenus Easement Well were constructed with the depth of uppermost perforations at 95 ft and 140 ft, respectively. The County's WAA requires that if a well is pumping at a rate of 30 gpm or more and has a depth of uppermost perforations less than 150 feet, the Tier III analysis shall demonstrate that low permeability deposits overly the zone from which extraction is proposed to occur. RCS's report reviews this feature and concludes that based on the detailed geologic logging of the borehole into which 216s-swgw2 and 217d-dwgw2 (nearby monitoring wells) were constructed, and on RCS's interpretation of several other driller's logs drilled proximal to the subject property abundant fine-grained materials are present beneath the subject property. This is true in both the alluvial sediments (Qhf and Qhf) and the underlying Tss/h materials. These fine-grained materials likely act as aquitards, significantly reducing the potential for connectivity and vertical flow between surface water and Dry Creek and groundwater in the aquifer systems beneath the subject property. Monitoring data for the "Site 2 at Dry Creek" well competitions in LSCE (2016 & 2022) demonstrates that Dry Creek is predominantly a losing stream, and those data demonstrate clear evidence of a disconnection.

This information indicates that the aquifers of the project well and Silenus Easement Well are not directly connected to Dry Creek. The proposed project conforms to Napa County's WAA Tier 3 guidelines. Due to these factors, the project well presumptively meets Napa County's Tier 3 WAA guidelines for groundwater-surface water interaction. County has satisfied its duty to consider impacts to trust resources and no further analysis is required. Impacts would be less than significant.

- c. The project would not substantially alter the drainage pattern on site or cause a significant increase in erosion or siltation on or off the project site. Improvement plans prepared prior to the issuance of grading or building permits would ensure that the proposed project does not increase runoff flow rate or volume as a result of project implementation. General Plan Policy CON-50 c) requires discretionary projects, including this project, to meet performance standards designed to ensure peak runoff in 2-, 10-, 50-, and 100-year events following development is not greater than predevelopment conditions. The preliminary grading and drainage plan has been reviewed by the Engineering Division. The proposed project would implement standard stormwater quality treatment controls to treat runoff prior to discharge from the project site. The incorporation of these features into the project would ensure that the proposed project would not create substantial sources of polluted runoff. In addition, the proposed project does not have any unusual characteristics that create sources of pollution that would degrade water quality. Impacts would be less than significant.
- d. The site is within the boundaries of the 100 year flood hazard boundaries. Any new construction will be required to obtain a floodplain management permit pursuant to Chapter 16.04 of the Napa County Code. The parcel is not located in an area that is subject to inundation by tsunamis, seiches, or mudflows.
- e. The proposed project would not conflict with a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

Mitigation Measures: None required.

| XI. | LAND USE AND PLANNING. Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|-----|---|--------------------------------------|---|-------------------------------------|-------------------------------------|
| a) | Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a/b. The project would not occur within an established community, nor would it result in the division of an established community. The project complies with the Napa County Code and all other applicable regulations. The subject parcel is located in the AP (Agricultural Preserve) zoning district, which allows wineries and uses accessory to wineries subject to use permit approval. The proposed project is compliant with the physical limitations of the Napa County Zoning Ordinance. The County has adopted the Winery Definition Ordinance (WDO) to protect agriculture and open space and to regulate winery development and expansion in a manner that avoids potential negative environmental effects.

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 AR (Agricultural Resource), which allows “agriculture, processing of agricultural products, and single-family dwellings.” More specifically, General Plan Agricultural Preservation and Land Use Policy AG/LU-2 recognizes 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.

| XII. | MINERAL RESOURCES. Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|------|---|--------------------------------|---|------------------------------|-------------------------------------|
| | | | | | |
| | a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion:

- a/b. Historically, the two most valuable mineral commodities in Napa County in economic terms have been mercury and mineral water. More recently, building stone and aggregate have become economically valuable. Mines and Mineral Deposits mapping included in the Napa County Baseline Data Report (Mines and Mineral Deposits, BDR Figure 2-2) indicates that there are no known mineral resources nor any locally important mineral resource recovery sites located on the project site. No impacts would occur.

Mitigation Measures: None required.

| XIII. | NOISE. Would the project result in: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|-------|-------------------------------------|--------------------------------|---|------------------------------|-----------|
| | | | | | |

- | | | | | |
|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a/b. The project would result in a temporary increase in noise levels during grading and construction activities for the proposed winery tasting room, production space, and water tank. 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 or vibration impacts. The nearest residence to the proposed winery addition is approximately The nearest residence to the proposed new winery building is approximately 195 feet to the northwest., but also on the opposite side of Dry Creek (note: different types of winery operations occur in different portions of the structure; therefore portions of this section include different distances that reflect estimated measurements between the location of a specific winery operation and the nearby neighbors). Due to this distance, 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 identified below 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.

"7.3 CONSTRUCTION NOISE

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

The project proposes to expand daily visitation from 15 visitors per day to 34 visitors per day and with a maximum of 238 visitors per week for Tours and Tasting by Prior Appointment Only. The project also proposes to expand a marketing program as described under Project Description (I). The applicant also proposes to allow for on-site consumption in conformity with Business and Professions Code Sections 23358, 23390 and 23396.5 on the outdoor patio.

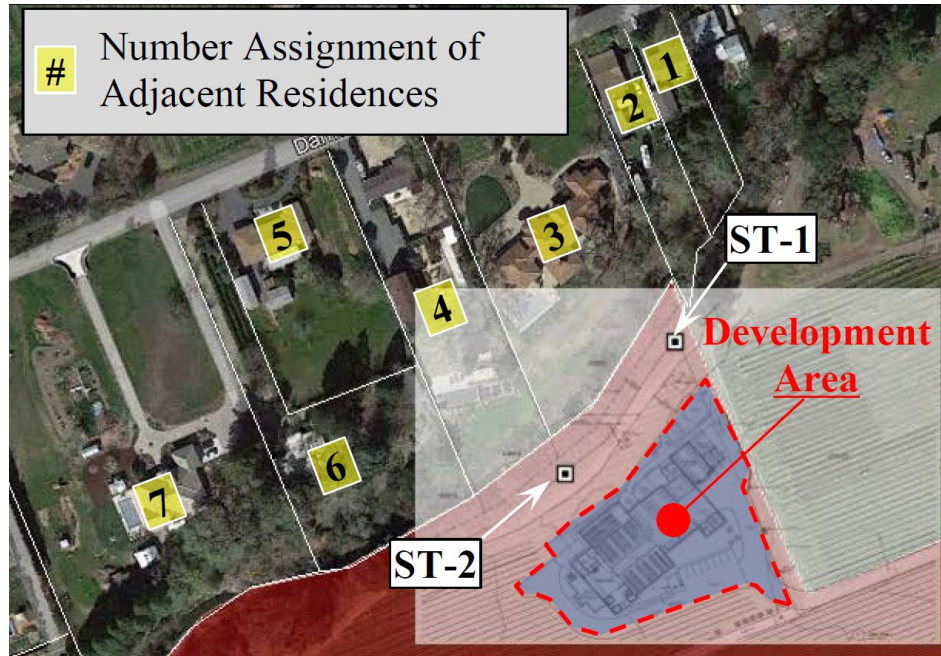
Additional regulations contained within County Code Chapter 8.16 establish exterior noise criteria for various land uses in the County. As described in the Project Setting, above, land uses that surround the proposed parcel are predominantly large lot residential properties, wineries, and vineyards; of these land uses, the residential land use is considered the most sensitive to noise. Based on the standards in County Code section 8.16.070, noise levels, measured at the exterior of a residential structure or residential use on a portion of a larger property, may not exceed 50 decibels for more than half of any hour in the window of daytime hours (7:00 a.m. to 10:00 p.m.) within which the applicant proposes to conduct events. Noise impacts of the proposed project would be considered bothersome and potentially significant if sound generated by it had the effect of exceeding the standards in County Code more than 50 percent of the time (i.e., more than 50 decibels for more than 30 minutes in an hour for a residential use). The nearest off-site residence to the proposed winery is approximately 210 feet to the northwest. Under the proposed project, the largest event that would occur on the parcel would have an attendance of no more than 125 guests, and all events would end by 10:00 p.m., including quiet clean-up. Winery operations would occur between 6:00 a.m. and 6:00 p.m. (production, excluding harvest), 10:00 am to 6:00 pm (tours and tasting), and 10:00 am to 10:00 pm (including quite clean-up). The potential for the creation of significant noise from visitation is significantly reduced, since the tasting areas are predominantly within the winery structure itself, with the exception of the outdoor patio which would potentially create noise in excess of Napa County's noise standards (additional detail below with mitigation measures). 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, including clean-up are required to finish by 10:00 p.m. Amplified music or sound systems would not be permitted for outdoor events as identified in Standard Condition of Approval 4.10 below. Temporary events would be subject to County Code Chapter 5.36 which regulates proposed temporary events.

“4.10 AMPLIFIED MUSIC

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

Illingworth & Rodkin prepared an October 18, 2023, Noise Assessment for the proposed project. The study reviews the proposed project's potential impacts to noise resources and comes to the following conclusions:



(Site, Noise Measurement Locations and Adjacent Residences, Illingworth & Rodkin, October 18, 2023)

- **Mechanical Equipment:** The winery operations currently, and will continue to, use noise-generating mechanical equipment such as air-cooled condensing units, pumps, and compressors as well as less significant sources of noise, such as air-conditioning systems and exhaust fans. The proposed project includes the use of mechanical equipment, to be located in a mechanical yard at the northern boundary of the parcel. This equipment may be as close as approximately 310, 230, 110, 130, and 200 feet from the property lines of adjacent Residences 1, 2, 3, 4, and 6. Under worst-case condition with the equipment located outside in the mechanical yard, constant noise levels could be 39, 42, 50, 49, and 44 dBA at adjacent Residences 1, 2, 3, 4, and 6. Noise levels associated with worst-case conditions would not exceed the 50 dBA L50 daytime noise limit. Other receptors in the project vicinity would be further from the mechanical equipment, and therefore, exposed to lower levels of noise.
- **Maintenance and Forklift Operations:** Forklift and maintenance operations are expected to take place in the covered crush/receiving areas and within the winery and production/barrel buildings. Such activities within buildings would receive significant noise shielding from the building and are not analyzed within the Noise Study. Outdoor forklift and maintenance operations are considered worst-case condition and are analyzed within the report. Such outdoor operations could occur as close as approximately, 300, 225, 175, 200, and 280 feet from the property lines of Residences 1, 2, 3, 4, and 6. It is anticipated that during high activity periods, these activities would be expected to occur for more than 15 but less than 30 minutes out of an hour and fall in the Project Specific Noise Criteria of 55 dBA L25. Noise levels associated with Forklift and Maintenance Activities are estimated to have noise levels of 45, 48, 47, 46, and 42 dBA from Residences 1, 2, 3, 4, and 5, which does not exceed the project specific noise standards and the closest noise sensitive uses.
- **Bottling Activities:** Bottling would occur over a period of a few weeks per year during the daytime. The analysis conservatively assumes that bottling will be done with a mobile bottling truck at the covered outdoor work area approximately 320, 240, 175, 200, and 265 feet from the property lines of Residences 1, 2, 3, 4, and 6. Noise levels associated with mobile bottling are

estimated to have noise levels of 38, 41, 44, 43, and 40 dBA from Residences 1, 2, 3, 4, and 6, which does not exceed the 50 dBA L50 noise limit.

- **Seasonal Crush Activities:** Under the modified use permit, annual crush related activities would continue to take place in the covered crush pad of the winery building. Crush activities occurring in these areas will receive some noise shielding from building structures. These activities could occur as close as approximately 320, 240, 180, 200, and 270 feet from the property lines of adjacent Residences 1, 2, 3, 4, and 6. Crush activities are made up of relatively constant noise, with occasional discrete maximum noise events, such as the setting of empty bins. When seasonal crush activities are occurring, the relatively constant noise is estimated to produce 30, 33, 36, 35, and 32 dBA from Residences 1, 2, 3, 4, and 6 respectively, which fall below the Napa County noise criteria of 50 dBA noise limit. An occasional discrete noise event (such as the setting of an empty bin) is estimated to produce 48, 51, 54, 53, and 50 dBA from Residences 1, 2, 3, 4, and 6 respectively, which fall below the Napa County's 70 dBA discrete noise event limit. Noise from crush activities would therefore fall below the Napa County noise criteria of 50 dBA L50 and 70 dBA Lmax daytime criteria and 65 dBA nighttime noise limit.
- **Tasting and Marketing Activities:** Marketing events would occur on a western outdoor patio and inside the winery structure. Outdoor amplified music is prohibited, so the primary noise source associated with the event would be raised conversations and acoustic instruments. Napa County's noise threshold is 45 dBA L50. Outdoor events held in the covered patio area could be as close as approximately 460, 380, 200, 175, and 190 feet from the property lines of adjacent property lines of residences 1, 2, 3, 4, and 6. Visitation and marketing events with 30 and 125 guests are estimated to meet Napa County's 45 dBA threshold. Visitation and marketing events with acoustic, non-amplified music, is estimated to produce 40, 42, 49, 50, and 50 dBA from Residences 1, 2, 3, 4, and 6. As the noise threshold is 45 dBA, the estimated noise for acoustic music will be greater than allowed as established by Napa County's noise criteria. In order to mitigate any potential impacts to noise, mitigation measure **NOISE-1** has been implemented to restrict outdoor music performances.

Indoor amplified music is included within the scope of the proposed project. Illingworth & Rodkin's noise analysis estimated that noise from amplified music within the winery structure with open windows and doors would reach levels of 39, 41, 47, 47, 46 dBA from Residences 1, 2, 3, 4, and 6. As the noise threshold is 45 dBA, the estimated noise from indoor amplified music will be greater than allowed as established by Napa County's noise criteria. Illingworth & Rodkin's noise analysis also estimated that noise from amplified music within the winery structure with closed windows and doors would be reduced to levels of 31, 33, 39, 39, and 38 dBA from Residences 1, 2, 3, 4, and 6. With all windows and doors closed, amplified music from winery events held within winery structures would meet Napa County's noise criteria of 45 dBA. In order to mitigate any potential impacts to noise, mitigation measure **NOISE-2** has been required to have the winery close all doors and windows if indoor amplified music were to occur. Illingworth and Rodkin's analysis estimates that all other winery operations will meet Napa County's noise criteria. With the implementation of mitigation measure **NOISE-1** and **NOISE-2**, the project will have a less than significant impact.

- c. The project site is not located within the influence area of the Napa County Airport, according to the Airport Land Use Compatibility Plan. No impacts would occur.

Mitigation Measures:

Mitigation measure **NOISE-1:** Outdoor visitation and marketing events shall not include acoustic music performances.

Mitigation measure **NOISE-2:** The applicant shall keep all windows and doors closed when amplified music is being played inside of the winery structure.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project and apply to operational characteristics of the winery. The Napa County Code Compliance Division will enforce winery use permit noise requirements and compliance with Napa County Code's noise ordinance.

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

Discussion:

- a. The Association of Bay Area Governments' Plan Bay Area 2050 Growth Pattern figures indicate that the total households for Napa County are projected to increase some 10% by the year 2050, increasing from 50,000 to 56,000. Unincorporated Napa County, along with the cities of American Canyon, Napa, St. Helena, Calistoga and the town of Yountville all have existing compliant 6th Cycle Housing Elements certified by the State Department of Housing and Community Development. For the 6th Cycle, which runs from 2023 – 2031, Napa county jurisdictions have identified and have rezoned or are in the process of rezoning land to accommodate 3,844 dwelling units, more than half of the households projected by ABAG to develop in Napa county by 2050. 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.

The one (1) additional full-time employee which is a 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 rise 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 on the local and regional population and housing balance would be less than significant.

The proposed use permit modification would facilitate ongoing operation of an existing winery. No new infrastructure is proposed that might induce growth by extending service outside of the boundaries of any of the winery owner's properties. The proposed project does not require installation of any additional new infrastructure, including that which might induce growth by extending services outside of the boundaries of the subject site or increasing the capacity of any existing roadway. Napa County collects fees from developers of nonresidential projects to help fund local affordable housing (see Napa County Code Section 18.107.060 – Nonresidential developments – Housing fee requirement). The fees are assessed with new construction and are collected at time of building permit issuance for new construction of winery buildings.

An increase in one (1) full-time employee is requested as part of the project. Employees and visitors to the winery could increase demand for group transportation services to the winery, though the potential for employment changes of other business supporting the winery's requested operations is uncertain, unquantifiable, and speculative. The policies and programs identified in the General Plan Housing Element, in combination with the County's housing impact mitigation fee, ensure adequate cumulative volume and diversity of housing. With limited staffing proposed and no off-site expansion of utilities or facilities to serve other developments, the project would have less than significant impact on population growth.

- b. No existing housing or people would be displaced as a result of the project. Therefore, the project would not displace substantial numbers of existing housing or numbers of people necessitating the construction of replacement housing elsewhere and no impact would occur.

Mitigation Measures: None required.

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

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. The property is located within the service areas of both the Napa County Sheriff's Department as well as the Napa County Fire Department. The proposed winery improvements, if approved, would be inspected by County building inspectors and fire officials in order to ensure that construction occurs in accordance with current Building and Fire Codes applicable at the time of submittal of any requisite building permit application. If approved, the requested use permit modification would facilitate the continued operation of a previously approved winery. The proposed project scope does not include construction of any new residential units nor accompanying introduction of new residents that would utilize existing parks or potentially increase student enrollment in schools located in the area of the winery. School impact fees, which assist local school districts with capacity building measures, would be levied pursuant to building permit submittal. No new parks or other public recreational amenities or institutions are proposed to be built with the proposed use permit. Impacts to public services would be less than significant. Also, see discussion below under Section XV.

Mitigation Measures: None required.

| XVI. | RECREATION. Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|--------------------------------------|---|-------------------------------------|--------------------------|
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ☐ ☐ ☐ ☒

Discussion:

- a. The project would not significantly increase the use of recreational facilities, nor does the project include recreational facilities that may have a significant adverse effect on the environment.
- b. No new public recreational amenities are proposed to be built with, or as a result of, the requested use permit modification application. The proposed project would not result in substantial population growth, resulting in no increase in the use of recreational facilities and requiring no construction or expansion of recreational facilities. The proposed project would have no impact.

Mitigation Measures: None required.

| XVII. | TRANSPORTATION. Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|-------|--|--------------------------------|---|-------------------------------------|--------------------------|
| a) | Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) | Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) | Substantially increase hazards due to a geometric design feature, (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) | Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) | Conflict with General Plan Policy CIR-14, which requires new uses to meet their anticipated parking demand, but to avoid providing excess parking which could stimulate unnecessary vehicle trips or activity exceeding the site's capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a/b/c. As part of the statewide implementation of Senate Bill (SB) 743, the Governor's Office of Land Use and Climate Innovation (LCI) settled upon automobile vehicle miles of travel (VMT) as the preferred metric for assessing passenger vehicle-related impacts under CEQA and issued revised CEQA Guidelines in December 2018, along with a Technical Advisory on Evaluating Transportation Impacts in CEQA to assist practitioners in implementing the CEQA Guidelines revisions.

The County's General Plan Circulation Element contains a policy statement (Policy CIR-7) indicating that the County expects development projects to achieve a 15% reduction in project-generated VMT to avoid triggering a significant environmental impact. Specifically, the policy directs project applicants to identify feasible measures that would reduce their project's VMT and to estimate the amount of VMT reduction that could be expected from each measure. The policy states that "projects for which the specified VMT reduction measures would not reduce unmitigated VMT by 15 or more percent shall be considered to have a significant environmental impact." That policy is followed by an action item (CIR-7.1) directing the County to update its CEQA procedures to develop screening criteria for projects that "would not be considered to have a significant impact to VMT" and that could therefore be exempted from VMT reduction requirements.

The new CEQA Guidelines and the LCI Technical Advisory note that CEQA provides a categorical exemption (Section 15303) for additions to existing structures of up to 10,000 square feet, so long as the project is in an area that is not environmentally sensitive and where public infrastructure is available. LCI determined that "typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract 110-

124 trips per 10,000 square feet". They concluded that, absent substantial evidence otherwise, the addition of 110 or fewer daily trips could be presumed to have a less than significant VMT impact.

The County maintains a set of Transportation Impact Study Guidelines (TIS Guidelines) that define situations and project characteristics that trigger the need to prepare a TIS. The purpose of a TIS is to identify whether the project is likely to cause adverse physical or operational changes on a County roadway, bridge, bikeway or other transportation facility, to determine whether the project should be required to implement or contribute to improvement measures to address those changes, and to ensure that the project is developed consistent with the County's transportation plans and policies. Per the County's current TIS Guidelines, a project is required to prepare a TIS if it generates 110 or more net new daily vehicle trips.

The TIS Guidelines also include VMT analysis requirements for projects based on trip generation, which includes a screening approach that provides a structure to determine what level of VMT analysis may be required for a given project. For a new project that would generate less than 110 net new daily vehicle and truck trips, not only is the project not required to prepare a TIS, it is also presumed to have a less than significant impact for VMT. However, applicants are encouraged to describe the measures they are taking and/or plan to take that would reduce the project's trip generation and/or VMT.

Projects that generate more than 110 net new passenger vehicle trips must conduct a VMT analysis and identify feasible strategies to reduce the project's vehicular travel; if the feasible strategies would not reduce the project's VMT by at least 15%, the conclusion would be that the project would cause a significant environmental impact.

Based on maximum winery employee and visitor/guest data for the harvest/crush season, the proposed project would be expected to generate 20 new daily trips on a weekday and 18 new daily trips on a Saturday. This count includes vehicle trips required for 281.3 tons of grape haul.

Since operational and visitor trips associated with the project is below the 110-trip threshold in the Office of Land Use and Climate Innovation guidelines and the County's TIS Guidelines and VMT screening criteria the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts would be less than significant.

- d/e. The winery project was analyzed to determine whether the proposed parking supply would be sufficient for the anticipated daily demand during harvest conditions. The project site, as proposed, would have a total of twelve (12) parking spaces (with one designated for ADA drivers). Visitors to the Winery will be by appointment only. On a busy day, the 34 visitors (14 daily vehicles) will arrive in a staggered arrangement so that there should never be more than six or seven guest vehicles on site at any time. Occasionally, visitors will arrive in a higher-occupancy vehicle such as an SUV, minivan or smaller shuttle bus. The five (5) employees per day would then occupy the remaining spaces. The project is designed to meet the Napa County Road and Street standards, to conform to the latest emergency access requirements, and the existing road system would continue to provide adequate emergency access to the project site. When larger marketing events are held, guests will be brought to the site via bus and daily visitation will not occur on days where a marketing event will be held; further, reducing the proposed project's need for additional parking.

Mitigation Measures: None required.

| XVIII. 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: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-------------------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

significance of the resource to a California Native American tribe.

Discussion:

- a/b. On June 2, 2025, County Staff sent invitations to consult on the proposed project to Native American tribes who had a cultural interest in the area and who as of that date had requested to be invited to consult on projects, in accordance with the requirements of Public Resources Code section 21080.3.1. The Yocha Dehe Wintun Nation responded by mail to Staff on July 1, 2025, and declined comment as the project site is not located within their aboriginal territories. No other comments were received and the consultation period closed on July 2, 2025.

Archaeological Resource Service was contracted by the applicant to provide a Cultural Resource Study for project parcel. A cultural resource study of the property was completed in March of 2023. The study was conducted to determine the presence or absence of historical or archaeological resources, and potential impacts, if any, as a result of the proposed project. According to the study, no historical resources were observed on the site and the property contains no archaeological remains. The report concluded that no further study or specific recommendations are required. The Cultural Resources conditions of approval discussed in Section V (Cultural Resources), would further avoid and reduce potential impacts to unknown resources.

As such, the proposed project, with the Cultural Resources conditions of approval, would result in less-than-significant impacts to Tribal Cultural Resources, including those that may be eligible for the California Historical Resources Information System or local register, or cultural resources as defined in Public Resources Code Section 5024.1(c).

Mitigation Measures: None required.

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

Discussion:

- a. As discussed in detail in Section VII. Geology and Soils, an Onsite Wastewater Feasibility Study, dated September 9, 2023, was prepared by Applied Civil Engineering which outlines the required wastewater system to meet the needs of the proposed winery production,

employees, visitation, and marketing programs. The Onsite Wastewater Feasibility Study proposes and recommends that the disposal of the treated winery process wastewater be via irrigation of the onsite vineyard. The study analyzed the potential of using approximately 4 acres vineyard that is located to the west of the new winery structure and outside of the well setbacks. In order to accommodate differences in the timing of wastewater generation, irrigation demand, and limitations of wet weather application of treated wastewater, a storage tank will be required. The proposed project includes an 81,000-gallon process wastewater storage tank. The analysis assumes that during the summer, the treated water will be used to offset the irrigation needs of the vineyard, and in the winter application of treated winery process wastewater will not occur to prevent runoff.

The process waste system will be designed per RWQCB and PBES requirements. The facility will have to enroll for coverage under the General Waste Discharge Requirements for Winery Process Water and meet discharge standards and monitoring requirements specific to the amount of waste discharged. The division of Environmental Health reviewed this report and concurred with its findings, conditioning that the plans shall be designed by a licensed Civil Engineer or Registered Environmental Health Specialist and approved by the Division of Environmental Health. Ongoing water quality monitoring will be required.

Based on the proposed uses, the onsite water system will be classified as a transient noncommunity (TNC) public water system per the State of California Drinking Water Requirements. Applied Civil Engineering completed a Transient Non-community Water System analysis, dated September 19, 2024. Applied Civil Engineering's report concludes that the project's well meets all applicable state standards, but a new water storage tank of a minimum of 2,369 gallons is required. Impacts would be less than significant.

- b. As discussed in Section X. A Tier I Water Availability Analysis was prepared by Applied Civil Engineering, dated July 7, 2025, and a Tier III Water Availability Analysis was completed by Richard C. Slade & Associates LLC (RSA), dated July 8, 2025. The report includes calculations for the existing and proposed water uses and a groundwater recharge analysis. An onsite water audit of existing uses was completed, and the existing water use associated with the winery, vineyards, landscaping, and the neighbor's easement well is estimated to be 9.33 AFY. Due to the proposed winery modification, total water usage would increase by 0.41 AFY; however, the proposed project includes reusing 0.41 AFY of process wastewater to offset groundwater that is currently being used to water onsite vineyards. Due to this factor, the proposed project proposes no net increase in groundwater usage. The Water Availability Analysis utilized Napa County's WAA guidance document to establish a 0.3 AFY per acre of recharge for the project parcel, since it is located within the GSA, and calculates a parcel recharge volume of 3.027 AFY. The project well currently draws 3.97AFY and the Silenus Easement Well is estimated to draw 5.36 AFY. Due to this factor, Napa County has conditioned the project to install a well flow meter on the project well and the Silenus Easement well, to verify that no more than the previously existing non-conforming volume of water is pumped from the project well and that the parcel does not exceed 9.33 AFY of groundwater usage. The proposed water use would not impact groundwater availability.
- c. Wastewater would be treated on-site and would not require a wastewater treatment provider; therefore, no impact would occur.
- d/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. The project would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, impacts would be less than significant.

Mitigation Measures: None required.

| XX. | WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|-----|--|--------------------------------|---|-------------------------------------|--------------------------|
| a) | Substantially impair an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) | Due to slope, prevailing winds and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a-d. The proposed project is located within the local responsibility area. There are no project features that would substantially impair an adopted emergency response plan or emergency evacuation plan. The project site is generally flat with slopes ranging from 0-5% and is located on the valley floor with access from Solano Avenue, a County maintained road. There are existing overhead power lines along the road. Water storage tanks for fire suppression are provided on site. The project would 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.

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

Discussion:

- a. The site has been previously disturbed and does not contain any known listed plant or animal species. The project will not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. All potential biological related impacts would be less than significant with the implementation of mitigation measures **BIO-1** through **BIO-5**. As identified in Section V above, no known historically sensitive sites or structures, archaeological or paleontological resources, or sites of unique geological features have been identified within the project site. No historic or prehistoric resources are anticipated to be affected by the proposed project nor will the proposed project eliminate important examples of the major periods of California history or prehistory. In the event archaeological artifacts are found, a standard condition of approval and mitigation measure would be incorporated into the project (See Above, Section V. Cultural Resources, COA 7.2 Archaeological Findings). Impacts would be less than significant.
- b. The project does not have impacts that are individually limited, but cumulatively considerable. Potential impacts to air quality, greenhouse gas emissions, hydrology, and traffic are discussed in the respective sections above and were determined to have a less than significant

impact. As discussed in Section VIII. Green House Gas and Section XVII. Transportation, potential impacts to air pollution and GHG emissions are being addressed through meeting BAAD recommended design elements, with the addition of Greenhouse Gas Voluntary Best Management Practices, and VMT reduction strategies. The applicant intends to implement a number of greenhouse gas reduction strategies including installation of solar panels; the preparation of a Vehicle Miles Traveled (VMT) reduction plan to reduce annual VMT by at least 15% by providing employee incentives, priority parking for efficient transportation, bike riding incentives, and bus transportation for large marketing events; installation of solar hot water heating; energy conserving lighting; installation of an energy star roof; installation of water efficient fixtures; low-impact development to manage stormwater as close to its source as possible; install a water efficient landscape design; implementation of a sustainable purchasing and shipping program; installation of electrical vehicle charging station(s); public transportation will be available; the structure design will be oriented to maximize passive cooling, heating, and lighting; use of recycled materials for construction and operation; education to staff and visitors on sustainable practices; use of 70-80% cover crop; retention of biomass via pruning and thinning by chipping the materials and reusing it rather than burning on-site; and water conservation by use of processed wastewater for re-use as irrigation. Section X. Hydrology includes detail on the Water Availability Analysis which demonstrates that the proposed project would result in no net increase over the existing levels. Potential cumulative impacts would be less than significant.

- c. All potential impacts identified in this Mitigated Negative Declaration are less than significant with the exception of Biological and Noise Resources, for which Mitigation measures are proposed. Therefore, the proposed project would not result in significant environmental effects that cause substantial adverse effects on human beings either directly or indirectly. Impacts would be less than significant.

Mitigation Measures: None required.

Arrow and Branch Winery, Use Permit Major Modification (P23-00057-MOD)
Mitigation Monitoring and Reporting Program

| Potential Environmental Impact | Adopted Mitigation Measure | Monitoring and Reporting Actions and Schedule | Implementation | Monitoring | Reporting & Date of Compliance/Completion |
|---|---|---|----------------|------------|---|
| MM BIO-1: Minimize potential indirect impacts to nesting birds | <p>BIO-1: The owner/permittee shall implement the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:</p> <ol style="list-style-type: none"> For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through October 15 – NCC Section 18.108.070.L, and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct a preconstruction surveys for nesting birds within all suitable habitat on the project site, and where there is potential for impacts adjacent to the project areas (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than seven (7) days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than seven (7) days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Planning Division and the CDFW prior to commencement of work. After commencement of work if there is a period of no work activity of seven (7) days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with the County Conservation Division and the USFWS and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with the County's Planning Division and/or the USFWS or CDFW. Exclusion buffers shall be fenced with temporary construction fencing (or the like), the installation of which shall be verified by Napa County prior to the commencement of any earthmoving and/or development activities. Exclusion buffers shall remain in effect until the young have | The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities. | P | PD | PC _/_/_ |

Notes: P = Permittee, PD = Planning Division, BD = Building Division, E = Engineering Division, DFW = Dept of Fish & Wildlife, CT = CALTRANS, EH = Environmental Health, PW = Public Works Dept, PE/G =Project Engineer/Geologist
PC = Prior to Project Commencement CPI = Construction Period Inspections FI = Final Inspection OG = Ongoing

| Potential Environmental Impact | Adopted Mitigation Measure | Monitoring and Reporting Actions and Schedule | Implementation | Monitoring | Reporting & Date of Compliance/ Completion |
|---|---|---|----------------|------------|--|
| | <p>fledged or nest(s) are otherwise determined inactive by a qualified biologist.</p> <p>Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) would be considered an impact to nesting birds and is prohibited. Any act associated with flushing birds from project areas should undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.</p> | | | | |
| MM BIO-2: Minimize potential indirect impacts to Northern Spotted Owls | <p>BIO-2: Minimize potential indirect impacts to Northern Spotted Owls</p> <p>a. For project activities occurring between March 15 and July 31, prior to any vegetation removal or construction activities, a qualified biologist shall perform a NSO habitat assessment to determine the potential for this species to be present within the disturbance area as well as within a 0.25-mile buffer surrounding each disturbance area. The assessment shall include both a review of recent aerial photography and a field visit to review conditions directly. Additionally, the qualified biologist shall perform an on-site nocturnal calling survey for NSO from at least mid-March onward and prior to initiation of construction activities. Survey stations for the calling survey shall be sited to cover post-fire forest stands that are most suitable for NSO occupation. The results of the updated habitat assessment and survey shall be provided to the County for review prior to project initiation. If NSO is observed or otherwise believed to be present within the focal area described above, measures shall be implemented in consultation with CDFW to ensure that project activities would not result in a take of the species and that any potential impacts are otherwise minimized to the extent feasible.</p> | The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities. | P | PD | PC _/_/_ |
| MM BIO-3: Minimize potential indirect impacts to bats | <p>BIO-3: Bat Tree Habitat Assessment and Surveys.</p> <p>Prior to the commencement of Project Construction activities, a qualified biologist shall conduct a habitat assessment for bats, unless otherwise approved in writing by CDFW. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to tree trimming shall include a visual inspection of potential roosting features of trees to be removed (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable</p> | The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be | P | PD | PC _/_/_ |

Notes: P = Permittee, PD = Planning Division, BD = Building Division, E = Engineering Division, DFW = Dept of Fish & Wildlife, CT = CALTRANS, EH = Environmental Health, PW = Public Works Dept, PE/G =Project Engineer/Geologist
PC = Prior to Project Commencement CPI = Construction Period Inspections FI = Final Inspection OG = Ongoing

| Potential Environmental Impact | Adopted Mitigation Measure | Monitoring and Reporting Actions and Schedule | Implementation | Monitoring | Reporting & Date of Compliance/ Completion |
|--------------------------------|--|--|----------------|------------|--|
| | canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming shall not proceed without approval in writing from CDFW. If the presence of bats is presumed or documented, trees may be trimmed only: a) using the two-step trimming process detailed below during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats. Two-step tree trimming shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree trimming, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the remainder shall be removed. | implemented in conjunction with all construction activities. | | | |
| MM BIO-4: Tree Trimming | BIO-4: Tree Trimming <ol style="list-style-type: none"> Prior to any earthmoving activities, the owner/permittee shall place temporary fencing at the edge of the dripline of trees to be retained that are located adjacent to the development area (typically within approximately 50-feet of the development area). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protection areas for the duration of project construction. The owner/permittee shall refrain from severely trimming the trees (typically no more than 1/3rd of the canopy) and vegetation to be retained adjacent to the winery development and water tank. In accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement), trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P23-00057-MOD shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for county review and approval that includes at a minimum, | The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits and shall be implemented in conjunction with all construction activities. | P | PD | PC _/_/_ |

Notes: P = Permittee, PD = Planning Division, BD = Building Division, E = Engineering Division, DFW = Dept of Fish & Wildlife, CT = CALTRANS, EH = Environmental Health, PW = Public Works Dept, PE/G =Project Engineer/Geologist
PC = Prior to Project Commencement CPI = Construction Period Inspections FI = Final Inspection OG = Ongoing

| Potential Environmental Impact | Adopted Mitigation Measure | Monitoring and Reporting Actions and Schedule | Implementation | Monitoring | Reporting & Date of Compliance/Completion |
|---------------------------------------|---|--|----------------|------------|---|
| | the locations where replacement trees will be planted, success criteria of at least 80%, and monitoring activities for the replacement trees. The replacement plan shall be implemented before improvements obtain final occupancy. Any replaced trees shall be monitored for at least three years to ensure an 80% survival rate. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the associated building permits. | | | | |
| MM BIO-5: Riparian Protection | <p>BIO-5: Riparian Protection. The Owner/Permittee shall implement the following measures to prevent the inadvertent encroachment into specified stream setbacks during construction:</p> <ul style="list-style-type: none"> a. The location of stream setbacks shall be clearly demarcated in the field with temporary construction fencing, which shall be placed at the outermost edge of required setbacks shown on the project plans. Prior to any earthmoving activities, temporary fencing shall be installed: the precise locations of said fences shall be inspected and approved by the Conservation Division prior to any earthmoving and/or development activities, no disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation. The protection fencing shall remain in place for the duration of project implementation. b. All construction and related traffic shall remain outside of the protective fencing to the maximum extent practicable to ensure that the stream, buffer zones, and associated woodland habitat remains undisturbed. | The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits and shall be implemented in conjunction with all construction activities. | P | PD | PC _/_/_ |
| MM NOISE-1: Outdoor Visitation | NOISE-1: Outdoor visitation and marketing events shall not include acoustic music performances. | The above measures shall be incorporated as conditions of approval of the project and apply to operational characteristics of the winery. The Napa County Code Compliance Division will enforce winery use permit noise requirements and compliance with Napa County Code's noise ordinance. | P | PD | PC _/_/_ |

Notes: P = Permittee, PD = Planning Division, BD = Building Division, E = Engineering Division, DFW = Dept of Fish & Wildlife, CT = CALTRANS, EH = Environmental Health, PW = Public Works Dept, PE/G = Project Engineer/Geologist
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| Potential Environmental Impact | Adopted Mitigation Measure | Monitoring and Reporting Actions and Schedule | Implementation | Monitoring | Reporting & Date of Compliance/Completion |
|------------------------------------|--|--|----------------|------------|---|
| MM NOISE-2: Indoor Amplified Music | NOISE-2: The applicant shall keep all windows and doors closed when amplified music is being played inside of the winery structure. | The above measures shall be incorporated as conditions of approval of the project and apply to operational characteristics of the winery. The Napa County Code Compliance Division will enforce winery use permit noise requirements and compliance with Napa County Code's noise ordinance. | P | PD | PC _/_/_ |

Notes: P = Permittee, PD = Planning Division, BD = Building Division, E = Engineering Division, DFW = Dept of Fish & Wildlife, CT = CALTRANS, EH = Environmental Health, PW = Public Works Dept, PE/G =Project Engineer/Geologist
PC = Prior to Project Commencement CPI = Construction Period Inspections FI = Final Inspection OG = Ongoing

“B”

Recommended Findings

**PLANNING COMMISSION HEARING – SEPTEMBER 17, 2025
RECOMMENDED FINDINGS**

**ARROW AND BRANCH WINERY USE PERMIT MAJOR
MODIFICATION P23-00057-MOD
5215 SOLANO AVE, NAPA, CA 94558
APN 034-190-040-000**

ENVIRONMENTAL:

The Planning Commission (Commission) has received and reviewed the proposed Mitigated Negative Declaration pursuant to the provisions of the California Environmental Quality Act (CEQA) and of Napa County's Local Procedures for Implementing CEQA, and makes the following findings. That:

1. The Planning Commission has read and considered the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (MMRP) prior to taking action on said Mitigated Negative Declaration and the proposed project.
2. The Mitigated Negative Declaration and MMRP is based on independent judgment exercised by the Commission.
3. The Mitigated Negative Declaration and MMRP was prepared and considered in accordance with the requirements of the California Environmental Quality Act (CEQA).
4. There is no substantial evidence in the record as a whole, that the project will have a significant effect on the environment provided that measures to mitigate potentially significant impacts to biological and noise resources are incorporated into the project approval.
5. There is no evidence, in considering the record as a whole that the proposed project will have a potential adverse effect on wildlife resources or habitat upon which the wildlife depends.
6. The site of this proposed project is not on any of the lists of hazardous waste sites enumerated under Government Code Section 65962.5 and is not within the boundaries of any airport land use plan.
7. The Secretary of the Commission is the custodian of the records of the proceedings on which this decision is based. Records are located at the Napa County Planning, Building, and Environmental Services Department, 1195 Third Street, Ste 210, Napa, California.

USE PERMIT:

The Commission has reviewed the Use Permit Major Modification request in accordance with the requirements of Napa County Code and makes the following findings:

8. The Commission has the power to issue the approval for the Use Permit Major Modification request under the Zoning Regulations in effect as applied to the property;

Analysis: The project is consistent with Agricultural Preserve (AP) zoning district regulations. A winery (as defined in Napa County Code Section 18.08.640) and uses in connection with a winery (see Napa County Code Section 18.16.030) are permitted in an AP zoned district with an approved use permit. Major Modifications to Use Permits for wineries located in the AP zoning district require Planning Commission Approval (Napa County Code Sections 18.16.030, 18.124.010, and 18.124.130). There is no companion action necessary for the requested Use Permit Major Modification that would require action by the Board of Supervisors. The project complies with the requirements of the Winery Definition Ordinance (Ord. No. 947, 1990) and the remainder of the Napa County Zoning Ordinance (Title 18, Napa County Code) as applicable.

9. The procedural requirements for a Use Permit Major Modification set forth in Chapter 18.124 of Napa County Code (zoning regulations) have been met;

Analysis: The use permit application for a Major Modification to the Use Permit has been appropriately filed, noticed, and public hearing requirements of County Code Sections 18.124.040.B and 18.136.040 have been met. The public hearing notice and intent to adopt a Mitigated Negative Declaration was posted and published in the Napa Valley Register on August 14, 2025, and copies of the notice were forwarded to property owners within 1,000 feet of the Property.

10. The grant of the Use Permit Major Modification, as conditioned, will not adversely affect the public health, safety or welfare of the County;

Analysis: Granting the Use Permit Major Modification for the project as proposed and conditioned will not adversely affect health, safety or welfare of the County. Applicable County divisions and departments have reviewed the project and commented regarding the proposed site access, grading, drainage, the existing septic system capacity, parking, building permits, and fire protection. Conditions are recommended which will be incorporated into the project to assure the protection of the public health, safety, and welfare.

11. The proposed Use Permit Major Modification complies with the applicable provisions of Napa County Code and is consistent with the policies and standards of the Napa County General Plan;

Analysis: Compliance with the Zoning Ordinance The project is consistent with the AP zoning district regulations. A winery (as defined in the Napa County Code Section 18.08.640) and uses in connection with a winery (refer to Napa County Code Section 18.16.030) are permitted in the AP zoning district subject to an approved use permit. The proposed project includes the expansion of an existing winery facility and expansion of an existing visitation and marketing program. The project, as conditioned, complies with the Napa County Winery Definition Ordinance (WDO) and all other requirements of the Zoning Code as applicable.

Analysis: Compliance with the General Plan As proposed and conditioned, the requested Use Permit is consistent with the overall goals and policies of the 2008 Napa County General Plan. The General Plan land use designation for the subject parcel is Agricultural Resource (AR). 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 use of the property for fermenting and processing grape juice into wine supports the economic viability of agriculture within the County, consistent with Goal AG/LU-3 and Policy AG/LU-4 (“The County will reserve agricultural lands for agricultural use including land used for grazing and watershed/open space...”). By allowing the proposed agricultural use, the requested Use Permit supports the economic viability of the existing vineyards and agricultural product processing, consistent with Economic Development Goal E-1 and Policy E-1. The “Right to Farm” is recognized throughout the General Plan and is specifically called out in Policy AG/LU-15 and in Chapter 2.94 of 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.

Applicable Napa County General Plan goals and policies:

Goal AG/LU-1: Preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County.

Goal AG/LU-3: Support the economic viability of agriculture, including grape growing, winemaking, other types of agriculture, and supporting industries to ensure the preservation of agricultural lands.

Policy AG/LU-4: The County will reserve agricultural lands for agricultural use including lands used for grazing and watershed/open space, except for those lands which are shown on the Land Use Map as planned for urban development. Policy AG/LU-8: The County’s minimum agricultural parcel sizes shall ensure that agricultural areas can be maintained as economic units.

Policy AG/LU-15: The County affirms and shall protect the right of agricultural operators in designated agricultural areas to commence and continue their agricultural practices (a “right to farm”), even though established urban uses in the general area may foster complaints against those agricultural practices. The “right to farm” shall encompass the processing of agricultural products and other activities inherent in the definition of agriculture provided in Policy AG/LU-2.

Goal CON-10: Conserve, enhance and manage water resources on a sustainable basis to attempt to ensure that sufficient amounts of water will be available for the uses allowed by this General Plan, for the natural environment, and for future generations.

Goal CON-11: Prioritize the use of available groundwater for agricultural and rural residential uses rather than for urbanized areas and ensure that land use decisions recognize the long-term availability and value of water resources in Napa County.

Policy CON-53: The County shall ensure that the intensity and timing of new development are consistent with the capacity of water supplies and protect groundwater and other water supplies by requiring all applicants for discretionary projects to demonstrate the availability of an adequate water supply prior to approval. Depending on the site location and the specific circumstances, adequate demonstration of availability may include evidence or calculation of groundwater availability via an appropriate hydrogeological analysis or may be satisfied by compliance with County Code “fair-share” provisions or applicable State law. In some areas, evidence may be provided through coordination with applicable municipalities and public and private water purveyors to verify water supply sufficiency.

Policy CON-55: The County shall consider existing water uses during the review of new water uses associated with discretionary projects, and where hydrogeological studies have shown that the new water uses will cause significant adverse well interference or substantial reductions in groundwater discharge to surface waters that will alter critical flows to sustain riparian habitat and fisheries or exacerbate conditions of overdraft, the County shall curtail those new or expanded water uses.

Policy CON-72: The County shall seek to reduce the energy impacts from new buildings by applying Title 24 energy standards as required by law and providing information to the public and builders on available energy conservation techniques, products, and methods available to exceed those standards by 15 percent or more.

Policy CON-77: All new discretionary projects shall be evaluated to determine potential significant project-specific air quality impacts and shall be required to incorporate appropriate design, construction, and operational features to reduce emissions of criteria pollutants regulated by the state and federal governments below the applicable significance standard(s) or implement alternate and equally effective mitigation strategies consistent with BAAQMD’s air quality improvement programs to reduce emissions. In addition to these policies, the County’s land use policies discourage scattered development which contributes to continued dependence on the private automobile as the only means of convenient transportation. The County’s land use policies also contribute to efforts to reduce air pollution.

Policy CON-81: The County shall require dust control measures to be applied to construction projects consistent with measures recommended for use by the BAAQMD [Bay Area Air Quality Management District].

Goal E-1: Maintain and enhance the economic viability of agriculture.

Policy E-1: The County's economic development will focus on ensuring the continued viability of agriculture in Napa County.

Policy SAF-20: All new development shall comply with established fire safety standards. Design plans shall be referred to the appropriate fire agency for comment as to:

- 1) Adequacy of water supply.
- 2) Site design for fire department access in and around structures.
- 3) Ability for a safe and efficient fire department response.
- 4) Traffic flow and ingress/egress for residents and emergency vehicles.
- 5) Site-specific built-in fire protection
- 6) Potential impacts to emergency services and fire department response

12. The proposed use would not require a new water system or improvement causing significant adverse effects, either individually or cumulatively, on an affected groundwater basin in Napa County, unless that use would satisfy any of the other criteria specified for approval or waiver of a groundwater permit under Section 13.15.070 or 13.15.080 of the Napa County Code.

Analysis: The subject property is not located in a "groundwater deficient area" as identified in Section 13.15.010 of the Napa County Code, and is consistent with General Plan Conservation Policies CON-53 and CON-55 which require that applicants, who are seeking discretionary land use approvals, prove that adequate water supplies are available to serve the proposed use without causing significant negative impacts to shared groundwater resources. Based on the submitted Tier I Water Availability Analysis (WAA) by Applied Civil Engineering and Tier III WAA by Richard C. Slade & Associates LLC, the subject 10.09 acre parcel has an estimated groundwater recharge of 3.027 acre-feet per year (af/yr). The parcel currently includes two wells, the project well and the Silenus Easement Well. Water Demand Calculations submitted for the project indicate the water demand for existing uses on the property as 12.47 af/yr which includes: vineyard irrigation (3 af/yr), landscape irrigation (0.2 af/yr), a winery visitation program (0.77 af/yr), and a neighbor's well that is located on the project parcel (8.5 af/yr). The proposed groundwater demand would use the following: vineyard irrigation (2.59 af/yr), landscape irrigation (0.2 af/yr), a winery visitation program (1.18 af/yr), and a neighbor's well that is located on the project parcel (8.5 af/yr).

The proposed project would not increase groundwater use beyond existing conditions, due to the modification of the winery's process wastewater system to irrigate vines which would offset the project's proposed expansion to the winery's production, visitation, marketing, and employee programs. The project has been conditioned to implement a Groundwater Demand Management Program that will monitor and report well meter readings to the County. The project will not interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater level.

Therefore, the project is considered not to have the potential to significantly impact groundwater resources. Since the projected water demand for Well 1 and the Silenus Easement Well are equivalent to the existing conditions on the parcel, the requested Use Permit Major Modification is consistent with General Plan Goals CON-10 and CON-11, as well as the policies mentioned above that support reservation and sustainable use of groundwater for agricultural and related purposes. The project will not require a new water system or other improvements that would have a negative impact on local groundwater.

“C”

Recommended Conditions of Approval

PLANNING COMMISSION HEARING – SEPTEMBER 17, 2025
RECOMMENDED CONDITIONS OF APPROVAL

ARROW AND BRANCH WINERY USE PERMIT MAJOR MODIFICATION
P23-00057-MOD
APN 034-190-040-000

This permit encompasses and shall be limited to the project commonly known as **Arrow and Branch Winery**, located at **5215 Solano Ave, Napa**. Part I encompasses the Project Scope and general conditions pertaining to statutory and local code references, project monitoring, and the process for any future changes or activities. Part II encompasses the ongoing conditions relevant to the operation of the project. Part III encompasses the conditions relevant to construction and the prerequisites for a Final Certificate of Occupancy. It is the responsibility of the permittee to communicate the requirements of these conditions and mitigations (if any) to all designers, contractors, employees, and guests of the winery to ensure compliance is achieved.

Where conditions are not applicable or relevant to this project, they shall be noted as “Reserved” and therefore have been removed.

When modifying a legally established entitlement related to this project, these conditions are not intended to be retroactive or to have any effect on existing vested rights except where specifically indicated.

PART I

1.0 PROJECT SCOPE

The permit encompasses and shall be limited to:

- 1.1 Approval to modify an existing 30,000 gallon per year winery, previously approved under P12-00440-UP, P13-00435-VMM, P15-00357-VMM, P16-00382-VMM, and P21-00087-MM to allow the following:
 - a. Increase production capacity from 30,000 gallons per year to 45,000 gallons per year;
 - b. Expansion of an existing winery building, including the construction of approximately 3,529 square feet of additional production space, for a total of 13,797 square feet of production space, and construction of approximately 3,929 square feet for additional accessory uses, for a total of 4,308 square feet for accessory uses;
 - c. Excavation of approximately 1,500 cubic yards of spoils associated with the construction of proposed structural pads and exterior improvements;
 - d. Increase employment from four (4) full-time employees to five (5) full-time employees;
 - e. Visitation, tours and tastings, and a marketing plan as set forth in Conditions of Approval (COAs) Nos. 4.1 through 4.3 below;
 - f. On-premises consumption of wines produced on-site within the outdoor hospitality area, labeled as ‘Covered Terrace’, and identified on Sheet A1.01 of the Site Plans, prepared by Taylor Lombardo Architects, dated August 3, 2023, in accordance with Business and Professions Code Sections 23358, 23390 and 23396.5 (AB 2004);
 - g. Relocation of onsite parking (no change in number of parking spaces);

- h. On-site domestic and process wastewater treatment systems, including the installation of an approximately 81,000 gallon process water storage tank; and
- i. Landscaping, and other improvements associated with wineries.

The winery shall be designed in substantial conformance with the submitted site plan, elevation drawings, and other submittal materials and shall comply with all requirements of the Napa County Code (the County Code). It is the responsibility of the permittee to communicate the requirements of these conditions and mitigations (if any) to all designers, contractors, employees, and guests of the winery to ensure compliance is achieved. Any expansion or change in winery use or alternative locations for fire suppression or other types of water tanks shall be approved in accordance with the County Code and may be subject to the permit modification process.

2.0 STATUTORY AND CODE SECTION REFERENCES

All references to statutes and code sections shall refer to their successor as those sections or statutes may be subsequently amended from time to time.

3.0 MONITORING COSTS

All staff costs associated with monitoring compliance with these conditions, previous permit conditions, and project revisions shall be borne by the permittee and/or property owner. Costs associated with conditions of approval and mitigation measures that require monitoring, including investigation of complaints, other than those costs related to investigation of complaints of non-compliance that are determined to be unfounded, shall be charged to the property owner or permittee. Costs shall be as established by resolution of the Board of Supervisors in accordance with the hourly consulting rate established at the time of the monitoring and shall include maintenance of a \$500 deposit for construction compliance monitoring that shall be retained until issuance of a Final Certificate of Occupancy. Violations of conditions of approval or mitigation measures caused by the permittee's contractors, employees, and/or guests are the responsibility of the permittee.

The Planning Commission may implement an audit program if compliance deficiencies are noted. If evidence of a compliance deficiency is found to exist by the Planning Commission at some time in the future, the Planning Commission may institute the program at the applicant's expense (including requiring a deposit of funds in an amount determined by the Commission) as needed until compliance assurance is achieved. The Planning Commission may also use the data, if so warranted, to commence revocation proceedings in accordance with the County Code.

PART II

4.0 OPERATIONAL CHARACTERISTICS OF THE PROJECT

Permittee shall comply with the following during operation of the winery:

4.1 GENERAL PROVISIONS

Consistent with the County Code, tours and tastings and marketing may occur at a winery only where such activities are accessory and “clearly incidental, related, and subordinate to the primary operation of the winery as a production facility.”

Tours and tastings (defined below) may include food and wine pairings, where all such food service is provided without charge except to the extent of cost recovery and is incidental to the tasting of wine. Food service may not involve menu options and meal service such that the winery functions as a café or restaurant.

Retail sales of wine shall be permitted as set forth in the County Code.

4.2 TOURS AND TASTINGS/VISITATION

Tours and tastings shall be by appointment only and shall be limited to the following:

- a. Frequency: 7 days per week, Monday through Sunday
- b. Maximum number of persons per day: 34
- c. Maximum number of persons per week: 238
- d. Hours of visitation: 10:00 a.m. to 6:00 p.m.
- e. Daily tours and tastings shall not occur on days with marketing events

“Tours and tastings” means tours of the winery and/or tastings of wine, where such tours and tastings are limited to persons who have made unsolicited prior appointments for tours or tastings. To the maximum extent feasible, scheduling of visitors shall not occur during peak travel times 4:00 p.m to 6:00 p.m.

A log book (or similar record) shall be maintained to document the number of visitors to the winery (for either tours and tastings or marketing events), and the dates of the visits. This record of visitors shall be made available to the Planning, Building and Environmental Services (PBES) Department upon request.

4.3 MARKETING

Marketing events shall be limited to the following:

- a. **Small Event**
 - 1. Frequency: 12 times per year
 - 2. Maximum number of persons: 30
 - 3. Time of Day: 10:00 a.m. to 10:00 p.m. (including clean-up)
- b. **Large Event**
 - 1. Frequency: 2 times per year
 - 2. Maximum number of persons: 125
 - 3. Time of Day: 10:00 a.m. to 10:00 p.m. (including clean-up)
 - 4. Visitors shall be brought to the site via a shuttle or bus service

"Marketing of wine" means any activity of a winery which is conducted at the winery on a prearranged basis for the education and development of customers and potential customers with respect to wine which can be sold at the winery on a retail basis pursuant to the County Code. Marketing of wine may include cultural and social events directly related to the education and development of customers and potential customers provided such events are clearly incidental, related and subordinate to the primary use of the winery. Marketing of wine may include food service, including food and wine pairings, where all such food service is provided without charge except to the extent of cost recovery.

Business events are similar to cultural and social events, in that they will only be considered as "marketing of wine" if they are directly related to the education and development of customers and potential customers of the winery and are part of a marketing plan approved as part of the winery's Use Permit. To be considered directly related to the education and development of customers or potential customers of the winery, business events must be conducted at no charge except to the extent of cost recovery, and any business content unrelated to wine must be limited.

Careful consideration shall be given to the intent of the event, the proportion of the business event's non-wine-related content, and the intensity of the overall marketing plan (County Code).

All marketing event activity, shall cease by 10:00 p.m. If any event is held which will exceed the available on-site parking, the permittee shall prepare an event-specific parking plan which may include, but not be limited to, valet service or off-site parking and shuttle service to the winery.

Auction Napa Valley (ANV) events need not be included in a participating winery's marketing plan because they are covered by ANV's Category 5 Temporary Permit. The winery may utilize any ANV event authorized in this permit for another charitable event of similar size.

4.4 ON-PREMISES CONSUMPTION

In accordance with State law and the PBES Director's July 17, 2008 memo, "Assembly Bill 2004 (Evans) & the Sale of Wine for Consumption On-Premises," on-premises consumption of wine produced on-site and purchased from the winery may occur solely in the area marked 'Covered Terrace' as identified on Sheet A1.01 of the Site Plans, prepared by Taylor Lombardo Architects, dated August 3, 2023. Any and all visitation associated with on-premises consumption shall be subject to the maximum per person weekday and weekend daily tours and tastings visitation limitation and/or applicable limitations of permittee's marketing plan set forth in COA Nos.4.2 and 4.3 above.

4.5 RESIDENCE OR NON-WINERY STRUCTURES **[RESERVED]**

4.6 GRAPE SOURCE

At least 75% of the grapes used to make the winery's still wine or the still wine used by the winery to make sparkling wine shall be grown within Napa County. The permittee shall keep records of annual production documenting the source of grapes to verify that 75% of the annual production is from Napa County grapes. The report shall recognize the Agriculture Commission's format for County of origin of grapes and juice used in the Winery Production Process. The report shall be provided to the PBES Department upon request, but shall be considered proprietary information and not available to the public.

4.7 COMPLIANCE REVIEW

Permittee shall obtain and maintain all permits (use permits and modifications) and licenses from the California Department of Alcoholic Beverage Control (ABC) and United States Tax and Trade Bureau (TTB), and California Department of Food and Agriculture (CDFA) Grape Crush Inquiry data, all of which are required to produce and sell wine. In the event the required ABC and/or TTB permits and/or licenses are suspended or revoked, permittee shall cease marketing events and tours and tastings until such time as those ABC and/or TTB permits and licenses are reinstated.

Visitation log books, visitor reports, custom crush client records, and any additional documentation determined by Staff to be necessary to evaluate compliance may be requested by the County for any code compliance. The permittee (and their successors) shall be required to participate fully in the winery code compliance review process.

4.8 RENTAL/LEASING

No winery facilities, or portions thereof, including, without limitation, any kitchens, barrel storage areas, or warehousing space, shall be rented, leased, or used by entities other than persons producing and/or storing wine at the winery, such as alternating proprietors and custom producers, except as may be specifically authorized in this Permit or pursuant to the Temporary Events Ordinance (County Code Chapter 5.36).

4.9 GROUND WATER MANAGEMENT – WELLS [RESERVED]

4.10 AMPLIFIED MUSIC

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

4.11 TRAFFIC

To the maximum extent feasible, scheduling of reoccurring vehicle trips to and from the site for employees and deliveries shall not occur during peak travel times (between 4:00 p.m. to 6:00 p.m.). All road improvements on private property required per Engineering Services shall be maintained in good working condition and in accordance with the Napa County Roads and Streets Standards.

4.12 PARKING

The location of visitor parking and truck loading zone areas shall be identified along with proposed circulation and traffic control signage (if any).

Parking shall be limited to approved parking spaces only and shall not occur along access or public roads or in other locations except during harvest activities and approved marketing events. In no case shall parking impede emergency vehicle access or public roads.

4.13 BUILDING DIVISION – USE OR OCCUPANCY CHANGES

Please contact the Building Division with any questions regarding the following:

In accordance with the California Building Code (CBC), no change shall be made in the use of occupancy of an existing building unless the building is made to comply with the requirements of the current CBC for a new building.

4.14 FIRE DEPARTMENT – TEMPORARY STRUCTURES

Please contact the Fire Department with any questions regarding the following:

The permittee and/or designee shall obtain a tent permit from the Fire Department for any temporary structures utilized for authorized marketing events allowed per COA No. 4.3 above.

4.15 NAPA COUNTY MOSQUITO ABATEMENT PROGRAM **[RESERVED]**

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

- a. All lighting shall be permanently maintained in accordance with the lighting and building plans approved by the County. Lighting utilized during harvest activities is exempt from this requirement.
- b. All landscaping and outdoor screening, storage, and utility structures shall be permanently maintained in accordance with the landscaping and building plans approved by the County. No stored items shall exceed the height of the screening. Exterior winery equipment shall be maintained so as to not create a noise disturbance or exceed noise thresholds in the County Code.
- c. The colors used for the roof, exterior walls and built landscaping features of the winery shall be limited to earth tones that will blend the facility into the colors of the surrounding site specific vegetation. The permittee shall obtain the written approval of the Planning Division prior to any change in paint colors that differs from the approved building permit. Highly reflective surfaces are prohibited.
- d. Designated trash enclosure areas shall be made available and properly maintained for intended use.

4.17 NO TEMPORARY SIGNS

Temporary off-site signage, such as “A-Frame” signs, is prohibited.

4.18 COMPLIANCE WITH OTHER DEPARTMENTS AND AGENCIES – OPERATIONAL CONDITIONS

The attached project conditions of approval include all of the following County Divisions, Departments and Agencies' requirements. Without limiting the force of those other requirements which may be applicable, the following are incorporated by reference as enumerated herein:

- a. Engineering Services Division operational conditions as stated in their Memorandum dated July 17, 2025.
- b. Environmental Health Division operational conditions as stated in their Memorandum dated October 9, 2024.
- c. Department of Public Works operational conditions as stated in their Memorandum dated October 30, 2024.
- d. Fire Department operational conditions as stated in their Inter-Office Memo dated April 10, 2023.

The determination as to whether or not the permittee has substantially complied with the requirements of other County Divisions, Departments and Agencies shall be determined by those County Divisions, Departments or Agencies. The inability to substantially comply with the requirements of other County Divisions, Departments and Agencies may result in the need to modify this permit.

4.19 OPERATIONAL MITIGATION MEASURES

The permittee shall comply with the following operational mitigation measures identified in the adopted Initial Study/Mitigated Negative Declaration and Project Revision Statement/Mitigation Monitoring and Reporting Program prepared for the project:

- a. The permittee shall comply with Mitigation Measures BIO-1 through BIO-5 and NOISE-1 and NOISE-2 as listed in COA No. 6.12 below.

4.20 OTHER CONDITIONS APPLICABLE TO THE OPERATIONAL ASPECTS OF THE PROJECT

- a. Greenhouse Gas Best Management Practices – Operational items checked on the attached Voluntary Best Management Practices Checklist for Development Projects by the applicant, shall be implemented and evidence of implementation shall be provided to staff upon request.
- b. Groundwater Management – The parcel shall be limited to 3.97 af/yr of groundwater for all water consuming activities (utilizing wells) on the project parcel. A Groundwater Demand Management Program shall be developed and implemented for the property as outlined in COA 6.15(d) below.

In the event that changed circumstances or significant new information provide substantial evidence¹ that the groundwater system referenced in the Use Permit would significantly affect the groundwater basin, the PBES Director shall be authorized to recommend additional reasonable conditions on the permittee, or revocation of this permit, as necessary to meet the requirements of the County Code and to protect public health, safety, and welfare.

4.21 PREVIOUS CONDITIONS

The permittee shall comply with the following previous conditions of approval for the winery use as consolidated into the attached document as Exhibit A. To the extent there is a conflict between a previous condition of approval identified in the attached document and these conditions, the more stringent condition shall control.

PART III

5.0 PREREQUISITE FOR ISSUANCE OF PERMITS

5.1 PAYMENT OF FEES

No building, grading or sewage disposal permits shall be issued or other permits authorized until all accrued planning permit processing fees have been paid in full. This includes all fees associated with plan check and building inspections, associated development impact fees established by County Ordinance or Resolution, and the Napa County Affordable Housing Mitigation Fee in accordance with County Code.

6.0 GRADING/DEMOLITION/ENVIRONMENTAL/BUILDING PERMIT/OTHER PERMIT PREREQUISITES

Permittee shall comply with the following with the submittal of a grading, demolition, environmental, building and/or other applicable permit applications.

6.1 COMPLIANCE WITH OTHER DEPARTMENTS AND AGENCIES – PLAN REVIEW, CONSTRUCTION AND PREOCCUPANCY CONDITIONS

The attached project conditions of approval include all of the following County Divisions, Departments and Agencies' requirements. The permittee shall comply with all applicable building codes, zoning standards, and requirements of County Divisions, Departments and Agencies at the time of submittal and may be subject to change. Without limiting the force of those other requirements which may be applicable, the following are incorporated by reference as enumerated herein:

- a. Engineering Services Division operational conditions as stated in their Memorandum dated July 17, 2025.

¹ Substantial evidence is defined by case law as evidence that is of ponderable legal significance, reasonable in nature, credible and of solid value. The following constitute substantial evidence: facts, reasonable assumptions predicated on facts; and expert opinions supported by facts. Argument, speculation, unsubstantiated opinion or narrative, or clearly inaccurate or erroneous information do not constitute substantial evidence.

- b. Environmental Health Division operational conditions as stated in their Memorandum dated October 9, 2024.
- c. Department of Public Works operational conditions as stated in their Memorandum dated October 30, 2024.
- d. Fire Department operational conditions as stated in their Inter-Office Memo dated April 10, 2023.

The determination as to whether or not the permittee has substantially complied with the requirements of other County Divisions, Departments and Agencies shall be determined by those County Divisions, Departments or Agencies. The inability to substantially comply with the requirements of other County Divisions, Departments and Agencies may result in the need to modify the permit.

6.2 BUILDING DIVISION – GENERAL CONDITIONS

- a. A building permit shall be obtained for all construction occurring on the site not otherwise exempt by the California Building Code (CBC) or any State or local amendment adopted thereto.
- b. If there are any existing structures and/or buildings on the property that will need to be removed to accommodate construction activities, a separate demolition permit shall be required from the Building Division prior to removal. The permittee shall provide a “J” number from the Bay Area Air Quality Management District (BAAQMD) at the time the permittee applies for a demolition permit if applicable.
- c. All areas of newly designed and newly constructed buildings, facilities and on-site improvements must comply with the CBC accessibility requirements, as well as, American with Disability Act requirements when applicable. When alterations or additions are made to existing buildings or facilities, an accessible path of travel to the specific area of alteration or addition shall be provided as required per the CBC.

6.3 LIGHTING – PLAN SUBMITTAL

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

6.4 LANDSCAPING – PLAN SUBMITTAL

- a. Two (2) copies of a detailed final landscaping and irrigation plan, including parking details, shall be submitted with the building permit application package for the Planning Division’s review and approval prior to the issuance of any building permit associated with this Use Permit. The plan shall be prepared pursuant to the County’s Water Efficient Landscape Ordinance (Chapter 18.118 of the County Code) requirements in effect at the time of building permit application submittal, as applicable, and shall indicate the names and locations of all plant materials to be used along with their method of maintenance.
- b. Plant materials shall be purchased locally when practical, and to the greatest extent possible, the plant materials shall be the same native plants found in Napa County. The Agricultural Commissioner’s office shall be notified of all impending deliveries of live plants with points of origin outside of Napa County.
- c. No trees greater than 6” diameter at breast height shall be removed, except for those identified on the submitted site plan. Any Oak trees removed as a result of the project shall be replaced at a 2:1 ratio and shown on the landscaping plans for the Planning Division’s review and approval. Trees to be retained shall be protected during construction by fencing securely installed at the outer most dripline of the tree or trees. Such fencing shall be maintained throughout the duration of the work undertaken in connection with the winery development/construction. In no case shall construction material, debris or vehicles be stored in the fenced tree protection area.
- d. Evergreen screening shall be installed between the industrial portions of the operation (e.g. tanks, crushing area, parking area, etc.) and any off-site residence from which these areas can be viewed.

6.5 COLORS

The colors used for the roof, exterior walls and built landscaping features of the winery shall be limited to earth tones that will blend the facility into the colors of the surrounding site specific vegetation. The permittee shall obtain the written approval of the Planning Division in conjunction with building permit review and/or prior to painting the building. Highly reflective surfaces are prohibited.

6.6 OUTDOOR STORAGE/SCREENING/UTILITIES

- a. Details of outdoor storage areas and structures shall be included on the building and landscape plans. All outdoor storage of winery equipment shall be screened from the view of residences of adjacent properties by a visual barrier consisting of fencing or dense landscaping. No stored item shall exceed the height of the screening. Water and fuel tanks, and similar structures, shall be screened to the extent practical so as to not be visible from public roads and adjacent parcels.

- b. New utility lines required for this project that are visible from any designated scenic transportation route (see Community Character Element of the General Plan and the County Code) shall be placed underground or in an equivalent manner be made virtually invisible from the subject roadway.
- c. Exterior winery equipment shall be located, enclosed or muffled so as not to exceed noise thresholds in the County Code.

6.7 TRASH ENCLOSURES

Adequate area must be provided for collection and loading of garbage and recyclables generated by the project. The applicant must work with the franchised garbage hauler for the service area in which they are located, in order to determine the area and the pedestrian and vehicle access needed for the collection site. The garbage and recycling enclosure shall meet the minimum enclosure requirements established by staff and the franchised hauler, which shall be included in the building permit submittal.

6.8 ADDRESSING

All project site addresses shall be determined by the PBES Director, and be reviewed and approved by the United States Post Office. The PBES Director reserves the right to issue or re-issue an appropriate situs address at the time of issuance of any building permit to ensure proper identification and sequencing of numbers. For multi-tenant or multiple structure projects, this includes building permits for later building modifications or tenant improvements.

6.9 HISTORIC RESOURCES **[RESERVED]**

6.10 DEMOLITION ACTIVITIES **[RESERVED]**

6.11 VIEWSHED – EXECUTION OF USE RESTRICTION **[RESERVED]**

6.12 PERMIT PREREQUISITE MITIGATION MEASURES

The permittee shall comply with the following permit prerequisite mitigation measures identified in the adopted Initial Study/Mitigated Negative Declaration and Project Revision Statement/Mitigation Monitoring and Reporting Program prepared for the project:

- a. **BIO-1:** The owner/permittee shall implement the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:
 - 1. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through October 15 – NCC Section 18.108.070.L, and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct

a preconstruction surveys for nesting birds within all suitable habitat on the project site, and where there is potential for impacts adjacent to the project areas (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than seven (7) days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than seven (7) days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Conservation Division and the CDFW prior to commencement of work.

2. After commencement of work if there is a period of no work activity of seven (7) days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity.
3. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with the County Conservation Division and the USFWS and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with the County's Conservation Division and/or the USFWS or CDFW.
4. Exclusion buffers shall be fenced with temporary construction fencing (or the like), the installation of which shall be verified by Napa County prior to the commencement of any earthmoving and/or development activities. Exclusion buffers shall remain in effect until the young have fledged or nest(s) are otherwise determined inactive by a qualified biologist.

Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) would be considered an impact to nesting birds and is prohibited. Any act associated with flushing birds from project areas should undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities.

Responsible Agency: California Department of Fish and Wildlife

b. **BIO-2:** Minimize potential indirect impacts to Northern Spotted Owls

1. For project activities occurring between March 15 and July 31, prior to any vegetation

removal or construction activities, a qualified biologist shall perform a NSO habitat assessment to determine the potential for this species to be present within the disturbance area as well as within a 0.25-mile buffer surrounding each disturbance area. The assessment shall include both a review of recent aerial photography and a field visit to review conditions directly. Additionally, the qualified biologist shall perform an on-site nocturnal calling survey for NSO from at least mid-March onward and prior to initiation of construction activities. Survey stations for the calling survey shall be sited to cover post-fire forest stands that are most suitable for NSO occupation. The results of the updated habitat assessment and survey shall be provided to the County for review prior to project initiation. If NSO is observed or otherwise believed to be present within the focal area described above, measures shall be implemented in consultation with CDFW to ensure that project activities would not result in a take of the species and that any potential impacts are otherwise minimized to the extent feasible.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities.

Responsible Agency: California Department of Fish and Wildlife

c. **BIO-3: Bat Tree Habitat Assessment and Surveys.**

Prior to the commencement of Project Construction activities, a qualified biologist shall conduct a habitat assessment for bats, unless otherwise approved in writing by CDFW. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to tree trimming shall include a visual inspection of potential roosting features of trees to be removed (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming shall not proceed without approval in writing from CDFW. If the presence of bats is presumed or documented, trees may be trimmed only: a) using the two-step trimming process detailed below during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats. Two-step tree trimming shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree trimming, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the remainder shall be removed.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits with survey recommendations to be implemented in conjunction with all construction activities

Responsible Agency: California Department of Fish and Wildlife

d. **BIO-4: Tree Trimming**

1. Prior to any earthmoving activities temporary fencing shall be placed at the edge of the dripline of trees to be retained that are located adjacent to the development area (typically within approximately 50-feet of the development area). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protection areas for the duration of project construction.
2. The owner/permittee shall refrain from severely trimming the trees (typically no more than 1/3rd of the canopy) and vegetation to be retained adjacent to the winery development and water tank.
3. In accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement), trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P23-00057-MOD shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for county review and approval that includes at a minimum, the locations where replacement trees will be planted, success criteria of at least 80%, and monitoring activities for the replacement trees. The replacement plan shall be implemented before improvements obtain final occupancy. Any replaced trees shall be monitored for at least three years to ensure an 80% survival rate. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the associated building permits.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits and shall be implemented in conjunction with all construction activities.

Responsible Agency: Planning, Building, & Environmental Services

- e. **BIO-5: Riparian Protection.** The Owner/Permittee shall implement the following measures to prevent the inadvertent encroachment into specified stream setbacks during construction:

1. The location of stream setbacks shall be clearly demarcated in the field with temporary construction fencing, which shall be placed at the outermost edge of required setbacks shown on the project plans. Prior to any earthmoving activities, temporary fencing shall be installed: the precise locations of said fences shall be inspected and approved by the Conservation Division prior to any earthmoving and/or development activities, No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation. The protection fencing shall remain in place for the duration of project implementation.
2. All construction and related traffic will remain outside of the protective fencing to the maximum extent practicable to ensure that the stream, buffer zones, and associated woodland habitat remains undisturbed.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project (if approved) and apply to associated building and grading permits and shall be implemented in conjunction with all construction activities.

Responsible Agency: Planning, Building, & Environmental Services

- f. **NOISE-1:** Outdoor visitation and marketing events shall not include acoustic music performances.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project and apply to operational characteristics of the winery. The Napa County Code Enforcement Division will enforce winery use permit noise requirements and compliance with Napa County Code's noise ordinance.

Responsible Agency: Planning, Building, & Environmental Services

- g. **NOISE-2:** The permittee shall keep all windows and doors closed when amplified music is being played inside of the winery structure.

Method of Monitoring: The above measures shall be incorporated as conditions of approval of the project and apply to operational characteristics of the winery. The Napa County Code Compliance Division will enforce winery use permit noise requirements and compliance with Napa County Code's noise ordinance.

Responsible Agency: Planning, Building, & Environmental Services

6.13 PARCEL CHANGE REQUIREMENTS **[RESERVED]**

6.14 FINAL MAPS **[RESERVED]**

6.15 OTHER CONDITIONS APPLICABLE TO THE PROJECT PERMITTING PROCESS

- a. In conjunction with building permit application submittal, the permittee shall not include natural gas appliances or natural gas plumbing within new areas of winery building construction and/or renovation of existing winery buildings.
- b. In conjunction with building permit application submittal, the project shall comply with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- c. In conjunction with building permit application submittal, the permittee shall provide documentation confirming to the Planning Division that all checked Voluntary Best Management Practices Measures submitted with the project Minor Modification application shall be addressed through project construction and/or implemented through winery operation.
- d. Groundwater Demand Management Program
 - 1. The permittee shall install a meter on each well serving the parcel (Well 1). Each meter shall be placed in a location that will allow for the measurement of all groundwater used on the project parcel. Prior to the issuance of a grading or building permit for the winery the permittee shall submit for review and approval by the PBES Director a groundwater demand management plan which includes a plan for the location and the configuration of the installation of a meter on the two wells serving the parcel.
 - 2. The plan shall identify how best available technology and best management water conservation practices will be applied throughout the parcel.
 - 3. The Plan shall identify how best management water conservation practices will be applied where possible in the structures on site. This includes but is not limited to the installation of low flow fixtures and appliances.
 - 4. As groundwater consuming activity already exists on the property, meter installation and monitoring shall begin immediately and the first monitoring report is due to the County within 120 days of approval of this Use Permit.
 - 5. For the first twelve months of operation under this permit, the permittee shall read the meters of at the beginning of each month and provide the data to the PBES Director monthly. If the water usage on the property exceeds, or is on track to exceed, the maximum groundwater usage values in i through ii below, or if the permittee fails to report, additional reviews and analysis and/or a corrective action program at the permittee's expense shall be required to be submitted to the PBES Director for review and action. In

addition to monthly meter readings, Permittee shall also provide well level data to the PBES Director.

- i. Annual groundwater usage for Well 1 shall not exceed 3.97 af/yr.
- ii. The Silenus Easement Well shall not be used for any uses on the Arrow and Branch Winery parcel.

6. The permittee's wells shall be included in the Napa County Groundwater Monitoring program if the County finds the well suitable.

7. At the completion of the reporting period per 6.15(d)(5) above, and so long as the water usage is within the maximum acre-feet per year as specified above, the permittee may begin the following meter reading schedule:

- i. On or near the first day of each month the permittee shall read the water meter and provide the data to the PBES Director during the first weeks of April and October. The PBES Director, or the Director's designated representative, has the right to access and verify the operation and readings of the meters during regular business hours.

7.0 PROJECT CONSTRUCTION

Permittee shall comply with the following during project construction:

7.1 SITE IMPROVEMENTS

Please contact Engineering Services with any questions regarding the following.

a. GRADING AND SPOILS

All grading and spoils generated by construction of the project facilities shall be managed per Engineering Services direction. Alternative locations for spoils are permitted, subject to review and approval by the PBES Director, when such alternative locations do not change the overall concept, and do not conflict with any environmental mitigation measures or conditions of approval.

b. 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 mph.

c. AIR QUALITY

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

1. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD's phone number shall also be visible.
2. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
3. Cover all haul trucks transporting soil, sand, or other loose material off-site.
4. Remove all visible mud or dirt traced onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
5. All vehicle speeds on unpaved roads shall be limited to 15 mph.
6. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
7. Idling times shall be minimized either by shutting off equipment when not in use or reducing the maximum idling time to five (5) minutes (as required by State Regulations). Clear signage shall be provided for construction workers at all access points.
8. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. Any portable engines greater than 50 horsepower or associated equipment operated within the BAAQMD's jurisdiction shall have either a California Air Resources Board (ARB) registration Portable Equipment Registration Program (PERP) or a BAAQMD permit. For general information regarding the certified visible emissions evaluator or the registration program, visit the ARB FAQ http://www.arb.ca.gov/portable/perp/perpfact_04-16-15.pdf or the PERP website <http://www.arb.ca.gov/portable/portable.htm>.

d. STORM WATER CONTROL

The permittee shall comply with all construction and post-construction storm water pollution prevention protocols as required by the County Engineering Services Division, and the California Regional Water Quality Control Board.

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.

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.

7.4 CONSTRUCTION MITIGATION MEASURES

The permittee shall comply with the following construction mitigation measures identified in the adopted Initial Study/Mitigated Negative Declaration and Project Revision Statement/Mitigation Monitoring and Reporting Program prepared for the project,

- b. The permittee shall comply with Mitigation Measures BIO-1 through BIO-5 and NOISE-1 and NOISE-2 as listed in COA No. 6.12 above.

**7.5 OTHER CONSTRUCTION CONDITIONS APPLICABLE TO THE PROJECT PROPOSAL
[RESERVED]**

8.0 TEMPORARY CERTIFICATE OF OCCUPANCY - PREREQUISITES

A Temporary Certificate of Occupancy (TCO) may be granted pursuant to the County Code to allow the commencement of production activities prior to completion of all project improvements. Permittee shall comply with the following before a TCO is granted:

8.1 TEMPORARY OCCUPANCY

All life and safety conditions shall be addressed prior to issuance of a TCO by the County Building Official. TCOs shall not be used for the occupancy of hospitality buildings and shall not exceed the maximum time allowed by the County Code which is 180 days. Departments and/or agencies with jurisdiction over the project are authorized as part of the TCO process to require a security deposit or other financial instrument to guarantee completion of unfinished improvements.

9.0 FINAL CERTIFICATE OF OCCUPANCY – PREREQUISITES

Permittee shall comply with the following before a Final Certificate of Occupancy is granted by the County Building Official, which upon granting, authorizes all use permit activities to commence.

9.1 FINAL OCCUPANCY

All project improvements, including compliance with applicable codes, conditions, and requirements of all Departments and Agencies with jurisdiction over the project, shall be completed.

9.2 SIGNS

Detailed plans, including elevations, materials, color, and lighting for any winery identification or directional signs shall be submitted to the Department for administrative review and approval prior to installation. Administrative review and approval is not required if signage to be installed is consistent with signage plans submitted, reviewed and approved as part of this permit approval. All signs shall meet the design standards as set forth in the County Code. At least one legible sign shall be placed at the property entrance with the words "Tours and Tasting by Prior Appointment Only" to inform the public of same. Any off-site signs allowed shall be in conformance with the County Code.

9.3 GATES/ENTRY STRUCTURES

Any gate installed at the winery entrance shall be reviewed by the PBES Department and the Fire Department to assure that the design allows large vehicles, such as motorhomes, to turn around if the gate is closed without backing into the public roadway, and that fire suppression access is available at all times. If the gate is part of an entry structure an additional permit shall be required pursuant to the County Code and in accordance with the Napa County Roads and Street Standards. A separate entry structure permit is not required if the entry structure is consistent with entry structure plans submitted, reviewed, and approved as part of this permit approval.

9.4 LANDSCAPING

Landscaping shall be installed in accordance with the approved landscaping plan.

9.5 ROAD OR TRAFFIC IMPROVEMENT REQUIREMENTS **[RESERVED]**

9.6 DEMOLITION ACTIVITIES **[RESERVED]**

9.7 GRADING SPOILS

All spoils shall be removed in accordance with the approved grading permit and/or building permit.

9.8 MITIGATION MEASURES APPLICABLE PRIOR TO ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY

The permittee shall comply with the following preoccupancy mitigation measures identified in the adopted Initial Study/Mitigated Negative Declaration and Project Revision Statement/Mitigation Monitoring and Reporting Program prepared for the project,

- a. The permittee shall comply with Mitigation Measures BIO-1 through BIO-5 and NOISE-1 and NOISE-2 as listed in COA No. 6.12 above.

9.9 OTHER CONDITIONS APPLICABLE PRIOR TO ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY **[RESERVED]**

Exhibit A

PLANNING COMMISSION HEARING – SEPTEMBER 17, 2025
PREVIOUS CONDITIONS OF APPROVAL

ARROW AND BRANCH WINERY USE PERMIT MAJOR MODIFICATION
P23-00057-MOD
APN 034-190-040-000

- 4.21 The permittee shall comply with the following previous conditions of approval for the winery use as consolidated in this document. To the extent there is a conflict between a previous condition of approval identified in the attached document and these conditions, the more stringent condition shall control.

Operational conditions from previous entitlements that are not modified with application No. P23-00057-MOD are listed below.

A. P12-00440-UP (Approved November 6, 2013)

This Use Permit approval allows Use Permit #P12-00440-UP to establish a new winery that includes the following:

1. Annual wine production 30,000 gallons/year
2. Construction of a winery building with approximately 3,191 square feet barrel storage, 3,748 square feet covered crush pad and 1,584 square foot of accessory space;
3. ~~Allow an approximately 2,962 square feet second story single family dwelling with a 635 square feet entry area and a 844 square feet garage below;~~ **[Revised by P13-00435]**
4. ~~Allow daily, appointment only tours and tastings with 15 people/day;~~ **[Revised by P23-00057]**
5. ~~Allow a winery marketing plan with six annual 30-person events and one annual 60-person event;~~ **[Revised by P23-00057]**
6. Installation of a new process wastewater treatment system;
7. Allow days of operation from 6:00 AM-6:00 PM, daily, excluding marketing events;
8. ~~Allow four employees;~~ **[Revised by P23-00057]**
9. Allow 12 on-site parking spaces;
10. Installation of an automatic gate with a winery identification and “Tours and Tasting by Prior Appointment Only” signs at the Solano Avenue entrance; and
11. Allow on-site sale and consumption of wine pursuant to AB 2004 (Evans).

4.A. Tours and Tastings [Revised by P23-00057]

Tours and tastings are limited to the following:

1. ~~Frequency: 7 days per week, Monday through Sunday~~
2. ~~Visitation hours: 8:00 AM to 6:00 PM~~
3. ~~Number of persons per day: 15~~
4. ~~Maximum number of persons per week: 105~~
5. ~~Time of operation: 6:00 AM to 6:00 PM~~

6. Catered food and wine pairings

4.B. Marketing [Revised by P23-00057]

Marketing events are limited to the following:

1. ~~Type of Event: Marketing Events~~
~~Frequency 6 times per year~~
~~Number of persons: 30 maximum~~
~~Time of Day: 11:00 AM – 10:00 PM~~
2. ~~Type of Event: Marketing Events~~
~~Frequency 1 times per year~~
~~Number of persons: 60 maximum~~
~~Time of Day: 11:00 AM – 10:00 PM~~

B. P13-00435-VMM (Approved August 25, 2015)

Approval of a Use Permit Very Minor Modification to the existing Use Permit to allow:

1. Adding 3 feet to the north side of the crush pad;
2. Adding 3 feet to the south side of the tasting room and offices;
3. Relocate the project outside of the flood zone; and
4. Remove the residence from the winery footprint.

C. P15-00357-VMM (Approved November 4, 2015)

1. Extend the expiration date of the use permit by one year, to expire on November 6, 2016.

D. P16-00382-VMM (Approved October 14, 2016)

1. This permit encompasses and shall be limited to a relocation of the projects position, on the site, as shown on the submitted site plan.

E. P21-00087-MM (Approved March 29, 2022)

1. The construction of an approximately 10,633 square foot winery facility per the plans submitted to the Planning Division on August 30, 2021. Previous entitlements allow for a 4,775 square foot winery building and 3,748 square foot covered crush pad. The current Use Permit for Arrow and Branch winery allows for a 4,775 square foot building (3,191 square feet of barrel storage and 1,584 square feet of accessory space) and a 3,784 square foot covered crush pad. The proposed modification would include an 8,566 square foot production facility with 2,067 square feet of accessory use. Total square footage would be 10,633 square feet; with an overall increase of approximately 2,074 square feet. No increase in tours, tastings, visitation, or employee count is proposed as a part of this application. The project would require the removal of approximately 1.3 acres of existing vineyard. The overall project area and total area of land disturbance would be approximately 2 acres.



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A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Brian D. Bordona
Director

MEMORANDUM

| | |
|------------------------------|--|
| To: Matthew Ringel, Planning | From: Jeannette Doss, Engineering <i>JD</i> |
| Date: July 17, 2025 | Re: Arrow and Branch Winery Use Permit Mod – Engineering CoA 5215 Solano Avenue, Napa, CA P23-00057 APN 034-190-040-000 |

The Engineering Division received a referral for comment on a modification to an existing use permit. Based upon the information provided in the application, Engineering finds the application **complete** and recommends the following conditions of approval:

EXISTING CONDITIONS:

1. Existing access taken from Solano Avenue via an existing paved driveway.
2. The existing parcel is approximately 10.09 acres.
3. Portions of the site are located entirely within a Federal Emergency Management Agency (FEMA) regulated 100-year Special Flood Hazard Area (SFHA) Zone A associated with the Dry Creek flooding source.
4. Site is currently development with winery.

RECOMMENDED APPROVAL CONDITIONS:

OPERATIONAL CHARACTERISTICS

1. The facility is designated as a discharger that discharges stormwater associated with industrial activity to waters of the United States. Therefore, the facility shall maintain or apply for coverage under the State Water Resources Control Board's Industrial General Permit (IGP), including meeting all applicable provision and protocols of the IGP. If the facility fails to meet the discharge prohibitions of the IGP, Napa County may require the facility to make the necessary improvements to eliminate all exposures to stormwater of the pollutant(s) for which the water body is impaired.
2. The Engineering Division has reviewed the Water Availability Analysis (WAA) titled Tier I Water Availability Analysis dated July 7, 2025, by Applied Civil Engineering, and the Tier III Water Availability Analysis dated July 8, 2025, by Richard C. Slade & Associates LLC prepared for A&B Vineyards LLC – Major Mod, P23-00057, located on Assessor parcel number 034-190-040-000 at 5215 Solano Avenue. The Engineering Division has evaluated the project based on information provided by the applicant, its location, and available geologic and hydrologic

information and has determined the WAA to be complete and reasonable. Engineering concludes the WAA is technically adequate as it relates to Napa County's water use criteria, well and spring interference, groundwater/surface water interaction pursuant to Napa County's WAA Guidelines, Governor's Executive Order N-7-22/N-3-23, Napa Valley Subbasin Groundwater Sustainability Plan, and the Public Trust Doctrine.

3. Any proposed or required modifications to the existing project wells shall be completed **prior to execution** of any new entitlements approved under this Use Permit Modification.
4. The Permittee shall (at the Permittee's expense) record and maintain well monitoring data for the project well (specifically, static water level no less than quarterly, and the volume of water no less than monthly) and that groundwater extraction shall not exceed 3.97 AF/yr. All monitoring required by these conditions shall verify that the water use assumptions, and the actual water use are consistent with the usage and assumptions analyzed in the Water Availability Analysis prepared by RSA+ (August 2024) for the Parable Winery project.
5. All roadway, access drive, and parking area improvements shall be completed **prior to execution** of any new entitlements approved under this Use Permit Modification.

PREREQUISITES FOR ISSUANCE OF PERMITS

6. All on site civil improvements including but not limited to the excavation, fill, general grading, drainage, curb, gutter, surface drainage, storm drainage, parking and drive isles, shall be constructed according to plans prepared by a registered civil engineer, which will be reviewed and approved by the Engineering Division of the Napa County Planning, Building, and Environmental Services Department (PBES) **prior to the commencement** of any on site land preparation or construction. Plans shall be wet signed and submitted with the building and/or grading permit documents at the time of permit application. A plan check fee will apply.
7. Grading and drainage improvements shall be constructed according to the current Napa County Road and Street Standards, and Chapter 16.28 of the Napa County Code, and Appendix J of the California Building Code.
8. **Prior to issuance of a building or grading permit** the owner shall submit the necessary documents for Erosion Control as determined by the area of disturbance of the proposed development in accordance with the Napa Countywide Stormwater Pollution Prevention program Erosion and Sediment Control Plan Guidance for Applicant and Review Staff dated December 2014.
9. **Prior to issuance of a building or grading permit** the owner shall demonstrate on the plans that all roadways, access driveways, and parking areas serving the project either currently meet the requirements and/or how they will be improved to meet the requirements as outlined in the latest edition of the Napa County Road & Street Standards for Commercial development.

10. **Prior to issuance of a building, or grading permit** the owner shall submit a complete application for a floodplain management permit for any proposed work within the FEMA 100-year SFHA. A complete submittal shall include, but is not limited to:
 - a) A complete site plan demonstrating the Floodplain and Floodway Boundaries.
 - b) Plans shall include all existing and proposed structures, fill, storage of materials, drainage facilities
 - c) Spot ground elevations at the corners of all structures and at twenty-foot or smaller intervals along the foundation footprint, or one-foot contour elevations throughout the building site;
 - d) Locations of water supply, sanitary sewer facilities, and utilities;
11. **Prior to issuance of a building or grading permit** the owner shall prepare a Stormwater Control Plan (SCP) in accordance with the latest edition of the BASMAA Post-Construction Manual for review and approval by the Engineering Division in PBES. The Stormwater Control Plan shall include the water balance analysis for the use of the existing wastewater pond to handle the additional stormwater flows.
12. **Prior to issuance of a building permit**, an Operation and Maintenance Plan shall be submitted and tentatively approved by the Engineering Division in PBES. **Before final occupancy** the property owner must legally record the "Operation and Maintenance Agreement", approved by the Engineering Division in PBES.

PREREQUISITES FOR TEMPORARY CERTIFICATE OF OCCUPANCY

13. All roadway, access drive, and parking area improvements shall be completed **prior to** issuance of temporary occupancy of any new and/or remodeled structures.
14. A Completed Elevation certificate (FEMA Form FF-206-FY-22-152) shall be submitted and approved by the Engineering Division **prior to** issuance of temporary occupancy of any new and/or remodeled structures.

**** If no temporary occupancy is requested, then the above conditions become requirements prior to final occupancy.**

PREREQUISITES FOR FINAL CERTIFICATION OF OCCUPANCY

15. Operations and Maintenance Agreement for any required post-construction Stormwater facilities must be legally recorded.
16. Site shall be completely stabilized to the satisfaction of the County Engineer prior to Final Occupancy.

Any changes in use may necessitate additional conditions for approval.

P23-00057

Arrow and Branch Winery Use Permit Modification

Engineering Division – Recommended Conditions of Approval

Page 4 of 4

If you have any questions regarding the above items, please contact Jeannette Doss from Napa County Planning, Building, and Environmental Services Department, Engineering and Conservation Division, at (707) 259-8179 or by email at Jeannette.Doss@countyofnapa.org



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Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Brian D Bordona
Director

MEMORANDUM

MSB

| | |
|-------------------------------------|--|
| To: Matthew Ringel, Project Planner | From: Maureen S. Bown, Senior Environmental Health Specialist |
| Date: October 9, 2024 | Re: Arrow and Branch Winery Assessor Parcel # 034-190-040-000 Permit # P23-00057 |

This Division has reviewed an application requesting approval for a major modification and related improvements as described and depicted in application materials. This Division has no objection to approval of the application with the following conditions of approval:

Prior to issuance of building permits:

1. Plans to modify the process wastewater treatment systems, as described in the Onsite Wastewater Disposal Feasibility Study dated 9/9/2024, shall be designed by a licensed Civil Engineer or Registered Environmental Health Specialist and submitted for review and approval; and be accompanied by complete design criteria based upon local conditions and plan check fee. No building clearance (or issuance of a building permit) for any structure that generates wastewater to be disposed of by this system will be approved until such plans are approved by this Division.
2. The applicant shall maintain enrollment for coverage under the State Water Resources Control Board General Waste Discharge Requirements for Winery Process Water by submitting a revised Notice of Intent, Technical Report and Application to the San Francisco Regional Water Quality Control Board for the proposed changes to the winery process water treatment system.
3. The water supply and related components must comply with the California Safe Drinking Water Act and Related Laws. This will require plan review and approval prior to approval of building permits. The technical report must be completed by a licensed engineer with experience in designing water systems. The preliminary technical report must be submitted to the Regional Water Quality Control Board staff a minimum of six (6) months prior to beginning any water-related improvement in accordance with the California Health and Safety Code, Section 116527. Prior to occupancy, the owner must apply for and obtain an annual operating permit for the water system from this Division. The applicant must comply with all required monitoring and reporting.
4. Adequate area must be provided for collection of recyclables and compostables. The applicant must work with the franchised garbage hauler for the service area in which they are located, in order to determine the area and the access needed for the collection site. The garbage and recycling enclosure

must meet the enclosure requirements provided during use permit process and be included on the building permit submittal. The designated area shall remain available and be properly maintained for its intended use.

Prior to granting final occupancy:

5. Annual alternative sewage treatment system monitoring permit(s) must be obtained for the wastewater subsurface drip onsite wastewater treatment system prior to issuance of a final on the project if required.
6. During the construction, demolition, or renovation period of the project the applicant must use the franchised garbage hauler for the service area in which they are located for all wastes generated during project development, unless applicant transports their own waste. If the applicant transports their own waste, they must use the appropriate landfill or solid waste transfer station for the service area in which the project is located.
7. Any hazardous waste produced on site must be stored and disposed of in a manner consistent with Chapter 6.5, Division 20 of the California Health and Safety Code and with Title 22, Division 4.5 of the California Code of Regulations. Additionally, a Hazardous Waste Generator Permit must be obtained from this Division.

Upon final occupancy and thereafter:

8. Proposed food service will be catered; therefore, all food must be prepared and served by a Napa County permitted caterer. If the caterer selected does not possess a valid Napa County Permit to operate, refer the business to this Division for assistance in obtaining the required permit prior to providing any food service.
9. A commercial food facility is not included in this project. The architectural plans submitted with the use permit application show an employee break room located within the proposed facility. This break room is approved for employee use only and must be designed considering this use. If the proposed break room or caterers room includes components typical of a commercial kitchen facility the applicant will be required to redesign these room(s) or apply for a use permit modification for approval of a commercial kitchen meeting all applicable requirements.
10. The applicant shall provide portable toilet facilities for guest use during events of 30 persons or more as indicated in the septic feasibility report/use permit application. The portable toilet facilities must be pumped by a Napa County permitted pumping company.
11. Pursuant to Chapter 6.95 of the California Health and Safety Code, businesses that store hazardous materials above threshold planning quantities (55 gallons liquid, 200 cubic feet compressed gas, or 500 pounds of solids) shall obtain a permit, file an approved Hazardous Materials Business Plan to <http://cers.calepa.ca.gov/>, and be approved by this Division within 30 days of said activities.

12. The use of the absorption field/drain field area and reserve area shall be restricted to activities which will not contribute to compaction of the soil with consequent reduction in soil aeration. Activities which must be avoided in the area of the septic system and reserve include equipment storage, traffic, parking, pavement, livestock, etc.
13. All solid waste shall be stored and disposed of in a manner to prevent nuisances or health threats from insects, vectors and odors.
14. All diatomaceous earth/bentonite must be disposed of in an approved manner. If the proposed septic system is an alternative sewage treatment system, the plan submitted for review and approval must address bentonite disposal.
15. If applicable, the applicant shall file a Notice of Intent (NOI) and complete a Storm Water Pollution Prevention Plan with the State of California Water Resources Control Board's (SWRCB) Industrial Permitting program, if applicable, within 30 days of receiving a temporary or final certificate of occupancy. Additional information, including a list of regulated SIC codes, may be found at: \ http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml

Additionally, the applicant shall file for a storm water permit from this Division, if applicable, within 30 days of receiving a temporary or final certificate of occupancy. Certain facilities may be exempt from storm water permitting. A verification inspection will be conducted to determine if exemption applies.



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Department of Public Works

1195 Third Street, Suite 101
Napa, CA 94559-3092
www.countyofnapa.org/publicworks

Main: (707) 253-4351
Fax: (707) 253-4627

Steven Lederer
Director

MEMORANDUM

| | |
|------------------------|--|
| To: PBES Staff | From: Anna Vickroy, P.E., T.E. Traffic Engineering Staff Consultant |
| Date: October 30, 2024 | Re: Arrow & Branch Winery, P23-00057 Conditions of Approval |

This memorandum is prepared at the request of Planning, Building, and Environmental Services (PBES) staff to provide conditions of approval regarding the Major Modification Use Permit Application #P23-00057 (APN 034-190-040), for the proposed Arrow & Branch Winery located at 5215 Solano Avenue, Napa, CA 94558.

To prepare this memorandum, the following documents were reviewed:

- Administrative Permit Application P23-00222 dated September 11, 2024
- Updated Trip Generation & Left-Turn Lane Warrant Analysis dated September 3, 2024 by Crane Transportation Group
- Traffic Analysis dated January 18, 2024 by Crane Transportation Group
- Revised Project Description Letter dated September 12, 2024 by Donna Oldford
- Transient Non-Community Water System Information dated September 19, 2024 by Applied Civil Engineering
- Tier 1 Water Availability Analysis dated September 19, 2024 by Applied Civil Engineering
- Revised Onsite Wastewater Disposal Feasibility Study dated September 9, 2024 by Applied Civil Engineering
- Conceptual Site Improvement Plans dated August 9, 2024 by Applied Civil Engineering

After careful evaluation of the above mentioned submitted documents, we offer no additional comments at this time. A traffic impact study is not required since the projected daily trips generated by the project are fewer than 110, based on the Trip Generation Analysis provided in the permit application. Additionally, the installation of a left turn lane for Solano Avenue at the project driveway did not meet the warrant criteria based on the left turn warrant study.

The Department of Public Works has established the following conditions of approval related to the Use Permit Application Number P23-00057. All listed conditions of approval shall be fully completed accordingly prior to the issuance of Occupancy permit:

1. Project Driveway

Driveway access to the public right-of-way must conform to the latest edition of the Napa County Road and Street Standards.

2. Landscaping Maintenance

Landscaping adjacent to the project driveway shall be designed and maintained to not interfere with sight lines required for safe stopping distance on the public right-of-way. No items wider than 18 inches can be taller than 30 inches other than street trees and traffic control devices. Street trees should be deciduous and have branches lower than 6 feet in height removed once the tree is established.

3. Encroachment Permit Requirement

An encroachment permit along with the required fee and a proposed traffic control plan will be required for the construction of any improvements within the public right-of-way. Please contact the Roads office at (707) 944-0196 to initiate the encroachment permit process. More information on these is available at our website: <http://www.countyofnapa.org/publicworks/roads/>

4. Transportation Demand Management Plan

Traffic Analysis dated January 18, 2024 identifies a Transportation Demand Management (TDM) Plan in Appendix D to be implemented by the project. This TDM Plan includes strategies to reduce employee vehicle trips as well as visitor vehicle trips. Key aspects of this TDM Plan include:

- Assign dedicated person to oversee and manage the TDM Plan.
- Post transportation information in common employee areas.
- Provide new employees with a packet that includes transportation options and programs.
- Enroll in the Napa Valley Forward program.
- Encourage high occupancy vehicles for large marketing events.
- Provide visitors with information to utilize shuttle services for large marketing events.

5. On Street Parking

Parking within the public right-of-way will be prohibited at all times, including large marketing and/or temporary events.

6. Bicycle Facilities

The project shall install bicycle parking adjacent to the guest entrance. Bicycle parking should be provided per the County of Napa Municipal Code.

If you have any questions or concerns on this matter, please contact Ahsan Kazmi, P. E. at ahsan.kazmi@countyofnapa.org or call (707) 259-8370 if you have any questions.



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A Commitment to Service

Napa County Fire Department
Fire Marshal's Office
Hall of Justice, 2nd Floor
1125 3rd Street
Napa, CA 94559

Office: (707) 299-1464

Jake White
Fire Marshal

Napa County Fire Department Conditions of Approval

| | | | |
|-----------------|----------------------------------|-----------------|-----------------|
| TO: | Planning Department | DATE: | 4/10/2023 |
| FROM: | Jason Downs, Deputy Fire Marshal | PERMIT # | P23-00057 |
| SUBJECT: | Arrow and Branch Winery | APN: | 034-190-040-000 |

The Napa County Fire Marshal's Office has reviewed the submittal package for the above-proposed project. The Fire Marshal approves the project as submitted with the following conditions of approval:

1. All construction and use of the facility shall comply with all applicable standards, regulations, codes, and ordinances at the time of Building Permit issuance.
2. Beneficial occupancy will not be granted until all fire department fire and life safety items have been installed, tested, and finalized.
3. Where conditions listed in 2022 California Fire Code Section 105 are proposed, separate permits will be required prior to Building Permit issuance for:
 1. Automatic fire-extinguishing systems
 2. Fire alarm and detection systems and related equipment
 3. Fire pumps and related equipment
4. All buildings, facilities, and developments shall be accessible to fire department apparatus by way of approved access roadways and/or driveways. The fire access road shall comply with the requirements of the Napa County Road & Street Standards
5. Access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities. Provide an engineered analysis of the proposed roadway noting its ability to support apparatus weighing 75,000 lbs.
6. Provide fire department access roads to within 150 feet of any exterior portion of the buildings as measured by an approved route around the exterior of the building or facility.



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Napa County Fire Department
Fire Marshal's Office
Hall of Justice, 2nd Floor
1125 3rd Street
Napa, CA 94559

Office: (707) 299-1464

Jake White
Fire Marshal

Napa County Fire Department Conditions of Approval

7. Roadways shall be a minimum of 20 feet in width with a 2-foot shoulder and 15-foot vertical clearance.
8. Driveways shall be a minimum of 10 feet in width with a 4-foot shoulder and 15-foot vertical clearance.
9. Turnouts shall be a minimum of 12 feet in width, 30 feet in length, and 25-foot taper on each end.
10. Turnarounds are required on driveways and dead-end roadways.
11. Grades for all roadways and driveways shall not exceed 16 percent.
12. Roadway radius shall not have an inside radius of fewer than 50 feet. An additional surface width of 4 feet shall be added to curves of 50-100 feet radius and 2 feet to curves of 100-200 feet radius.
13. Gates for driveways and/or roadways shall comply with the California Fire Code, section 503.5, the Napa County Road & Street Standards, and CA Fire Safe Regulations for projects within SRA.
14. Commercial - Water storage (for buildings not served by a public water system) and fire flow calculations shall be provided by a Certified State Licensed Civil Engineer, C-16 licensed contractor, or registered engineer indicating compliance with California Fire Code Appendix B and the Napa County Municipal Code.
15. Commercial - Approved steamer hydrants shall be installed within 250 feet of any exterior portion of the building as measured along vehicular access roads. Private fire service mains shall be installed, tested, and maintained per NFPA 24.
16. Commercial - Fire Department Connections (FDC) for automatic sprinkler systems shall be located fully visible and recognizable from the street or fire apparatus access roads. FDC shall be located within 50 feet of an approved fire hydrant.



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Napa County Fire Department
Fire Marshal's Office
Hall of Justice, 2nd Floor
1125 3rd Street
Napa, CA 94559

Office: (707) 299-1464

Jake White
Fire Marshal

Napa County Fire Department Conditions of Approval

17. Commercial - The minimum main size of all fire hydrants shall be 6 inches in diameter. Piping shall be installed with C-900 class 200 piping or ductile iron or equivalent per NFPA 24 for the installation of Underground Fire Protection Mains
18. An automatic fire sprinkler system shall be installed in accordance with provisions set forth in the California Fire Code as amended by the County of Napa and the applicable National Fire Protection Association Standard. Automatic fire sprinkler systems shall be designed by a fire protection engineer or C-16 licensed contractor.
19. All buildings shall comply with California Fire Code, Chapter 10 Means of Egress requirements. Including but not limited to; exit signs, exit doors, exit hardware, and exit illumination.
20. Provide 100 feet of defensible space around all structures.
21. Provide 10 feet of defensible space for fire hazard reduction on both sides of all roadways of the facility.

Please note that the comments noted above are based on a Fire Marshal review only. There may be additional comments or information requested from other County Departments or Divisions reviewing this application submittal package. Napa County Fire Marshal's Office Development Guidelines can be found @ www.countyofnapa.org/firemarshal. Please contact me at (707) 299-1467 or email at jason.downs@countyofnapa.org with any questions or concerns.

“D”

45,000-gallon
Winery Comparison Chart

Arrow and Branch Winery
Use Permit Major Modification #P23-00057
Winery Comparison 40,000-50,000 gallons per year

*Note: Comparison chart was expanded to show a wider range, because the 45,000 gallon sample size was small.

| Name | Bldg Size | Cave size | Production | Daily Visitors | Weekly Visitors | Annual Visitors | Annual Marketing Visitors | Number of Marketing Events | Annual Visitation | Acres | Location | Pre-WDO |
|-------------------------------|-----------|-----------|------------|----------------|-----------------|-----------------|---------------------------|----------------------------|-------------------|--------|---------------|---------|
| JERICHO CANYON WINERY | 10291 | 4100 | 50000 | 90 | 500 | 13800 | 1200 | 12 | 15000 | 131.05 | hillside | No |
| TOM EDDY WINERY | 10200 | 21437 | 48000 | 0 | 20 | 1040 | 309 | 8 | 1349 | 14.59 | hillside | No |
| CALISTOGA ARTISAN VILLAGE | | | 48000 | 40 | 240 | 12480 | 384 | 8 | 12864 | 21.97 | valley floor | No |
| BENNETT LANE WINERY | 17550 | 0 | 50000 | 32 | 200 | 10400 | 2495 | 55 | 12895 | 10 | valley floor | No |
| SHUTTERS WINERY | 20934 | 11600 | 50000 | 18 | 40 | 2080 | 1000 | 26 | 3080 | 13.36 | hillside | No |
| NORMAN ALUMBAUGH WINERY | 21052 | 0 | 50000 | 20 | 140 | 7280 | 244 | 8 | 7524 | 80.92 | Pope Valley | No |
| OUTPOST WINES | 9155 | 0 | 50000 | 30 | 180 | 9360 | 325 | 9 | 9685 | 37.61 | Angwin | Yes |
| ROBERT FOLEY VINEYARDS | 1760 | 12350 | 50000 | 10 | 60 | 3120 | 244 | 14 | 3364 | 13.04 | Angwin | No |
| LAST RESORT WINERY | 9839 | 0 | 50000 | 20 | 140 | 7280 | 720 | 12 | 8000 | 55.44 | Pope Valley | No |
| PRIDE MOUNTAIN VINEYARDS | 5400 | 14000 | 50000 | 20 | 20 | 1040 | 1060 | 49 | 2100 | 22.27 | hillside | No |
| FLYNNVILLE WINE COMPANY | 26200 | | 40000 | 25 | 175 | 9100 | 150 | 6 | 9250 | 10.09 | valley floor | No |
| TITUS VINEYARDS | 18452 | 0 | 48000 | 60 | 350 | 18200 | 1700 | 20 | 19900 | 31.77 | valley floor | No |
| CHATEAU BOSWELL | 8155 | 10860 | 48000 | 30 | 210 | 10920 | 0 | 0 | 10920 | 9.12 | hillside | Yes |
| BENESSERE | 9994 | 0 | 44000 | 60 | 300 | 15600 | 1760 | 56 | 17360 | 42.61 | valley floor | Yes |
| LOKOYA | 16712 | 0 | 50000 | 30 | 70 | 3640 | 720 | 24 | 4360 | 72.55 | hillside | Yes |
| ROBERT KEENAN WINERY | 10006 | 0 | 50000 | 35 | 245 | 12740 | 1050 | 21 | 13790 | 147.39 | hillside | Yes |
| SPRING MOUNTAIN VINEYARDS | 14000 | 19660 | 48000 | 0 | 0 | 0 | 0 | 0 | 0 | 233.35 | hillside | Yes |
| MEADOWOOD LANE WINERY | 9520 | 15000 | 48000 | 19 | 90 | 4680 | 1140 | 50 | 5820 | 14.7 | hillside | No |
| NAPA VALLEY RESERVE | 26130 | 42000 | 48000 | 6 | 20 | 1040 | 4540 | 266 | 5580 | 63.7 | hillside | No |
| ANDERSON'S CONN VALLEY WINERY | 26099 | 0 | 40000 | 15 | 20 | 1040 | 360 | 16 | 1400 | 40 | hillside | Yes |
| BUEHLER VINEYARDS | 12187 | 0 | 50000 | 0 | 0 | 0 | 0 | 0 | 0 | 47.76 | hillside | Yes |
| BROWN ESTATE VINEYARDS | 2704 | 6000 | 50000 | 2 | 2 | 104 | 220 | 9 | 324 | 130.46 | Chiles Valley | No |
| DEL DOTTO FAMILY WINERY | 4200 | 15163 | 48000 | 0 | 200 | 10400 | 1146 | 31 | 11546 | 10 | valley floor | No |
| NIEBAUM COPPOLA ESTATE NIEBAU | 30090 | 0 | 50000 | 20 | 15 | 780 | 1170 | 41 | 1950 | 78.76 | hillside | Yes |
| SWANSON VINEYARDS | 8480 | 0 | 42500 | 20 | 100 | 5200 | 0 | 0 | 5200 | 1.32 | valley floor | Yes |
| FOLIE A DEUX | 9700 | 0 | 50000 | 50 | 350 | 18200 | 0 | 0 | 18200 | 3 | valley floor | No |
| TENCH WINERY | 6779 | 6245 | 42840 | 14 | 98 | 5264 | 150 | 3 | 5414 | 60.86 | valley floor | No |
| B CELLARS | 21552 | 22946 | 45000 | 80 | 450 | 23400 | 2235 | 71 | 25635 | 11.53 | valley floor | No |
| GAMBLE FAMILY VINEYARDS | 32760 | 0 | 50000 | 30 | 300 | 15600 | 1410 | 34 | 17010 | 11.17 | valley floor | No |
| BALDACCI FAMILY VINEYARDS | 7474 | 18644 | 40000 | 100 | 700 | 36400 | 1420 | 34 | 37820 | 28.72 | valley floor | Yes |

Arrow and Branch Winery
Use Permit Major Modification #P23-00057
Winery Comparison 40,000-50,000 gallons per year

*Note: Comparison chart was expanded to show a wider range, because the 45,000 gallon sample size was small.

| Name | Cave Bldg Size | Cave size | Production | Daily Visitors | Weekly Visitors | Annual Visitors | Annual Marketing Visitors | Number of Marketing Events | Annual Visitation | Acres | Location | Pre-WDO |
|-------------------------------|----------------|-----------|------------|----------------|-----------------|-----------------|---------------------------|----------------------------|-------------------|--------|---------------|---------|
| NEYERS VINEYARDS WINERY | 8000 | 6800 | 40000 | 0 | 0 | 0 | 0 | 0 | 0 | 29.31 | hillside | Yes |
| VINE CLIFF WINERY | 7780 | 15000 | 48000 | 50 | 350 | 18200 | 2516 | 140 | 20716 | 99.59 | hillside | Yes |
| KITOKO VINEYARDS WINERY | 7448 | 13662 | 40000 | 20 | 140 | 7280 | 400 | 11 | 7680 | 20 | Atlas Peak | No |
| ALTAMURA WINERY | 11800 | 3115 | 50000 | 0 | 20 | 1040 | 0 | 0 | 1040 | 58.59 | Wooden Valley | No |
| JARVIS VINEYARDS | 20424 | 51724 | 40000 | 50 | 350 | 18200 | 0 | 0 | 18200 | 124 | hillside | No |
| SHIFFLETT RANCH AND VINEYARD | 3000 | 0 | 40000 | 20 | 56 | 2912 | 510 | 14 | 3422 | 46.2 | valley floor | No |
| CHATEAU POTELLE | 5790 | 0 | 48000 | 36 | 250 | 13000 | 0 | 0 | 13000 | 122.68 | hillside | Yes |
| PROGENY WINERY | 20882 | 0 | 50000 | 60 | 350 | 18200 | 4640 | 76 | 22840 | 236.66 | hillside | No |
| KNOLLWOOD VINEYARDS | 7956 | 0 | 40000 | 14 | 98 | 5096 | 450 | 13 | 0 | 31.7 | valley floor | Yes |
| REGUSCI WINERY | 22000 | 0 | 50000 | 150 | 400 | 20800 | 1450 | 16 | 22250 | 162.62 | valley floor | No |
| HAGAFEN CELLARS | 6800 | 0 | 50000 | 25 | 150 | 7800 | 725 | 12 | 8525 | 12.28 | valley floor | No |
| SIGNORELLO WINERY | 5475 | 15906 | 50000 | 60 | 350 | 18200 | 2011 | 53 | 20211 | 56.59 | valley floor | Yes |
| REYNOLDS WINERY | 10066 | 0 | 40000 | 40 | 280 | 14560 | 1906 | 52 | 16466 | 13.45 | hillside | No |
| REFUGE WINERY | 18875 | 0 | 50000 | 124 | 868 | 45136 | 3370 | 115 | 48506 | 13.23 | valley floor | No |
| MADONNA ESTATE - MONT ST JOHN | 16360 | 0 | 50000 | 280 | 1044 | 54288 | 0 | 0 | 54288 | 4.37 | Carneros | Yes |
| CEJA VINEYARDS | 31758 | 0 | 45000 | 24 | 168 | 1176 | 4485 | 56 | 5661 | 10.42 | Carneros | No |
| ITALICS WINERY | 13967 | 16500 | 50000 | 20 | 50 | 2600 | 390 | 8 | 2990 | 45.98 | MST | No |
| DAVID BUSBY WINERY | 18162 | 0 | 50000 | 0 | 0 | 0 | 0 | 0 | 0 | 1.28 | industrial | No |
| PIAZZA DEL DOTTO | 17923 | 15970 | 48000 | 0 | 200 | 10400 | 1146 | 31 | 11546 | 10.08 | valley floor | No |
| TWO ROCKS WINERY | 6950 | 20682 | 50000 | 6 | 15 | 780 | 920 | 13 | 1700 | 46.66 | hillside | No |
| KELLER WINERY | 27930 | 0 | 50000 | 75 | 350 | 18200 | 1500 | 27 | 19700 | 43.33 | valley floor | No |
| | | | | | | | | | | | | |
| AVERAGE CALCULATION | 13,934 | 7,742 | 47,203 | 38 | 210 | 10,550 | 1,050 | 30 | 11,492 | 51.73 | | |
| MEDIAN CALCULATION | 10,246 | 0 | 50,000 | 24 | 168 | 7,800 | 720 | 14 | 8,525 | 31.77 | | |
| | | | | | | | | | | | | |
| ARROW AND BRANCH WINERY | 18,105 | 0 | 45,000 | 34 | 238 | 12,410 | 610 | 14 | 13,020 | 10.09 | Valley floor | No |

Arrow and Branch Winery
Use Permit Major Modification
#P23-00057

| LOCATIONAL CRITERIA | STAFF COMMENTS |
|---|---|
| Size of Parcel | 10.09 acres |
| Proximity of Nearest Residence | 210 feet to the northwest |
| Number of Wineries Located Within One Mile | 7 |
| Located Within the Napa Valley Business Park | No |
| Primary Road a Dead End | No |
| Located Within a Flood Zone | No |
| Located Within a Municipal Reservoir Watershed | No |
| Located Within a State Responsibility Area or Fire Hazard Severity Zone | Local Responsibility Area - NonWild Land Severity Zone |
| Located Within an Area of Expansive Soils | No |
| Located Within a Protected County Viewshed | No |
| Result in the Loss of Sensitive Habitat | No |
| OPERATIONAL CRITERIA | STAFF COMMENTS |
| Napa Green Certified or Other Related Program | No |
| Percentage of Estate Grapes Proposed | 75% of grapes are from Napa County |
| Number of Proposed Variances | None |
| Wastewater Processed On-Site | Yes |
| Voluntary Greenhouse Gas Emission Reduction Measures Proposed | <p>These practices include installation of solar panels; the preparation of a Vehicle Miles Traveled (VMT) reduction plan to reduce annual VMT by at least 15% by providing employee incentives, priority parking for efficient transportation, bike riding incentives, and bus transportation for large marketing events; installation of solar hot water heating; energy conserving lighting; installation of an energy star roof; installation of water efficient fixtures; low-impact development to manage stormwater as close to its source as possible; install a water efficient landscape design; implementation of a sustainable purchasing and shipping program; installation of electrical vehicle charging station(s); public transportation will be available; the structure design will be oriented to maximize passive cooling, heating, and lighting; use of recycled materials for construction and operation; education to staff and visitors on sustainable</p> |

Arrow and Branch Winery
Use Permit Major Modification
#P23-00057

| | |
|---|---|
| Voluntary Greenhouse Gas Emission Reduction Measures Proposed (cont.) | education to staff and visitors on sustainable practices; use of 70-80% cover crop; retention of biomass via pruning and thinning by chipping the materials and reusing it rather than burning on-site; and water conservation by use of processed wastewater |
| Violations Currently Under Investigation | No |
| High Efficiency Water Use Measures Proposed | Yes |
| Existing Vineyards Proposed to be Removed | No |
| On-Site Employee or Farmworker Housing Proposed | No |
| Site Served by a Municipal Water Supply | No |
| Site Served by a Municipal Sewer System | No |
| Recycled Water Use Proposed | Yes |
| New Vineyards Plantings Proposed | No |
| Hold & Haul Proposed | No |
| Trucked in Water Proposed | No |

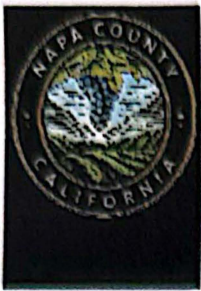
Arrow and Branch Winery
Use Permit Major Modification #P23-00057
Summary of Operational Changes

| Existing Conditions | | Proposed Request | Net Change Analyzed |
|---------------------------------|------------------------------|-------------------------------------|---------------------|
| Visitation | | | |
| 15 Visitors/Day | 34 Visitors/Day | Net increase of 19 Visitors/Day | |
| 105 Visitors/Week (average) | 238 Visitors/Week | Net increase of 133 Visitors/Week | |
| 5,475 Visitors/Year | 12,410 Visitors/Year | Net increase of 6,935 Visitors/Year | |
| Marketing Program | | | |
| 7 Total Events | 14 Total Events | Net increase 7 Total Events | |
| 305 Total Marketing Guests/Year | 610 Marketing Guests/Year | Net increase 305 Marketing Guests | |
| 6 events for 30 guests | 12 events for 30 guests | 6 events for 30 guests | |
| 1 event for 125 guests | 2 events for 125 guests | 1 event for 125 guests | |
| | | | |
| | | | |
| | | | |
| | | | |
| Employees | | | |
| Four (4) full-time employees | Five (5) full-time employees | One (1) full-time employees | |

“E”

Applications and Project Narratives

| | |
|---------|--------------------------------|
| Page 2 | Winery Use Permit Application |
| Page 20 | Project Narrative |
| Page 24 | Supplemental Project Narrative |



Planning, Building, and Environmental Services
1195 Third Street, Suite 210
Napa, California, 94559
Main: (707) 253-4417
Fax: (707) 253-4336

PLANNING APPLICATION FORM

Applicant Information

| | |
|--|--|
| Applicant Contact Name: <u>Steven L. Contursi</u> Mailing Address: <u>1042 North Pacific Coast Hwy.</u> City: <u>Laguna Beach</u> State: <u>CA</u> Zip: <u>92651</u> Phone: <u>(949) 679-1222 - X200</u> E-Mail Address: <u>steve@arrowandbranch.com</u> | Property Owner Contact: Name: <u>Steven L. Contursi</u> Mailing Address: <u>1042 North Pacific Coast Hwy.</u> City: <u>Laguna Beach</u> State: <u>CA</u> Zip: <u>92651</u> Phone: <u>(949) 679-1222 - X200</u> E-Mail Address: <u>steve@arrowandbranch.com</u> |
|--|--|

| | |
|--|--|
| Agent Contact Name: <u>Donna Oldford, Plans4Wine</u> Mailing Address: <u>2620 Pinot Way</u> City: <u>St. Helena</u> State: <u>CA</u> Zip: <u>94574</u> Phone: <u>(707) 204-5794</u> E-Mail Address: <u>dboldford@aol.com</u> | Other Representative Contact <input checked="" type="checkbox"/> Engineer <input type="checkbox"/> Architect <input type="checkbox"/> Agent Name: <u>Mike Muelrath</u> Mailing Address: <u>2160 Jefferson St., Ste. 230</u> City: <u>Napa</u> State: <u>CA</u> Zip: <u>94559</u> Phone: <u>(707) 320-4968</u> E-Mail Address: <u>mike@appliedcivilengineering.com</u> |
|--|--|

Property Information

Project Name: Arrow and Branch Winery

Project Address: 5215 Solano Avenue Napa, CA 94558

Assessor's Parcel Number(s): 034-190-040

Size of site (acreage and/or square footage): 10.1 acres

General Plan Designation: AR (Ag Reserve) Zoning: AP (Agricultural Preserve)

Application Type¹ (For Staff Use)

| Administrative | Planning Commission/ALUC/BOS | Zoning Administrator |
|--|---|---|
| Erosion Control Plan: <input type="checkbox"/> Track I <input type="checkbox"/> Track II <input type="checkbox"/> Admin Viewshed <input type="checkbox"/> Fence Entry Structure Permit <input type="checkbox"/> Land Division/Mergers <input type="checkbox"/> Site Plan Approval/Modification <input type="checkbox"/> Winery Administrative Permit <input type="checkbox"/> Winery Administrative Permit <input type="checkbox"/> Other Very Minor Modification <input type="checkbox"/> Addressing <input type="checkbox"/> Signs Temporary Event: <input type="checkbox"/> 51-400 <input type="checkbox"/> 401+ <input type="checkbox"/> Late Application Submittal <input type="checkbox"/> Application Entitled to Fee Waiver <input type="checkbox"/> Other: _____ | Major Modification: <input checked="" type="checkbox"/> Winery <input type="checkbox"/> Other Use Permit: <input checked="" type="checkbox"/> Winery <input type="checkbox"/> Other <input type="checkbox"/> Viewshed <input type="checkbox"/> AG Preserve Contract <input type="checkbox"/> Development Agreement <input type="checkbox"/> Airport Land Use Consistency Determination <input type="checkbox"/> General, Specific or Airport Land Use Plan Amendment <input type="checkbox"/> Variance <input type="checkbox"/> Zoning Map/Text Amendment <input type="checkbox"/> Road Exception <input type="checkbox"/> Con. Reg. Exception <input type="checkbox"/> Other: _____ | <input type="checkbox"/> Certificate of Legal Non Conformity <input type="checkbox"/> Other Minor Modification <input type="checkbox"/> Road Exception <input type="checkbox"/> Small Winery Exemption <input type="checkbox"/> Winery Minor Modification <input type="checkbox"/> Variance <input type="checkbox"/> Viewshed <input type="checkbox"/> Other: _____ Misc. Services <input type="checkbox"/> Use Determination <input type="checkbox"/> Status Determination <input type="checkbox"/> Other: _____ |

¹Include corresponding submittal requirements for each application type.

Detailed Project Description (required): A typed, detailed project description is required that describes the proposed development or use(s); the existing site conditions/uses; the number, size, type and nature of any proposed residential dwelling units or total amount of new non-residential square-footage by type of use. Please refer to specific Supplemental Application submittal handouts for details to describe the project and required special studies.

Conditions of Application

1. All materials (plans, studies, documents, etc.) and representations submitted in conjunction with this form shall be considered a part of this application and publicly available for review and use, including reproduction.
2. The owner shall inform the Planning Division in writing of any changes.
3. Agent authorization: The property owner authorizes the listed agent(s) and/or other representative(s) to appear before staff, the Director, the Zoning Administrator, and Planning Commission to represent the owner's interests and to file applications, plans and other information on the owner's behalf.
4. Certification and Indemnification Form: Refer to attached form for notifications and required signature.
5. Fees: The applicant agrees to pay the County any and all processing fees imposed by Board of Supervisor's current Fee Resolution including the establishment of an hourly fee application agreement and initial deposit. Applicant understands that fees include, but not limited to: Planning, Engineering, Public Works, and County Counsel staff time billed at an hourly rate; required Consultant service billed rates; production or reproduction of materials and exhibits; public notice advertisements; and postage. In the event the property owner is different than the applicant, the property owner must sign to indicate consent to the filing and agreement to pay fees in the event of the applicant's failure to pay said fees. Failure to pay all accumulated fees by the time of public hearing will result in a continuance.
6. This form, together with the corresponding application forms for specific permits, will become the Permit Document.

I have read and agree with all of the above. The above information and attached documents are true and correct to the best of my knowledge. All property owners holding a title interest must sign the application form. If there are more than two property owners, list their names, mailing addresses, phone numbers and signatures on a separate sheet of paper.

If you wish notice of meetings/correspondence to be sent to parties other than those listed on Page 1, please list them on a separate piece of paper.

[Signature] 6/23/2025
Property Owner's Signature and Date

Property Owner's Signature and Date

Applicant/Agent Statement

I am authorized and empowered to act as an agent on behalf of the owner of record on all matters relating to this application. I declare that the foregoing is true and correct and accept that false or inaccurate owner authorization may invalidate or delay action on this application.

[Signature] 6/23/2025
Applicant's Signature and Date

| | Application Fees | |
|----------------------|------------------|----|
| Date Received: _____ | Deposit Amount | \$ |
| Received By: _____ | Flat Fee Due | \$ |
| Receipt No.: _____ | Total | \$ |
| File No.: _____ | Check No | |

Certification and Indemnification

Applicant certifies that all the information contained in this application, including all information required in the Checklist of Required Application Materials and any supplemental submitted information including, but not limited to, the information sheet, water supply/waste disposal information sheet, site plan, floor plan, building elevations, water supply/waste disposal system site plan and toxic materials list, is complete and accurate to the best of his/her knowledge. Applicant and property owner hereby authorize such investigations including access to County Assessor's Records as are deemed necessary by the County Planning Division for preparation of reports related to this application, *including the right of access to the property involved.*

Pursuant to Chapter 1.30 of the Napa County Code, as part of the application for a discretionary land use project approval for the project identified below, Applicant agrees to defend, indemnify, release and hold harmless Napa County, its agents, officers, attorneys, employees, departments, boards and commissions (hereafter collectively "County") from any claim, action or proceeding (hereafter collectively "proceeding") brought against County, the purpose of which is to attack, set aside, void or annul the discretionary project approval of the County, or an action relating to this project required by any such proceeding to be taken to comply with the California Environmental Quality Act by County, or both. This indemnification shall include, but not be limited to damages awarded against the County, if any, and cost of suit, attorneys' fees, and other liabilities and expenses incurred in connection with such proceeding that relate to this discretionary approval or an action related to this project taken to comply with CEQA whether incurred by the Applicant, the County, and/or the parties initiating or bringing such proceeding. Applicant further agrees to indemnify the County for all of County's costs, attorneys' fees, and damages, which the County incurs in enforcing this indemnification agreement.

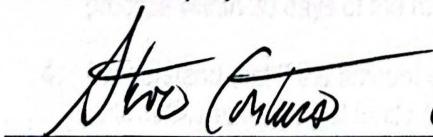
Applicant further agrees, as a condition of project approval, to defend, indemnify and hold harmless the County for all costs incurred in additional investigation of or study of, or for supplementing, redrafting, revising, or amending any document (such as an EIR, negative declaration, specific plan, or general plan amendment) if made necessary by said proceeding and if the Applicant desires to pursue securing approvals which are conditioned on the approval of such documents.

In the event any such proceeding is brought, County shall promptly notify the Applicant of the proceeding, and County shall cooperate fully in the defense. If County fails to promptly notify the Applicant of the proceeding, or if County fails to cooperate fully in the defense, the Applicant shall not thereafter be responsible to defend, indemnify, or hold harmless the County. The County shall retain the right to participate in the defense of the proceeding if it bears its own attorneys' fees and costs, and defends the action in good faith. The Applicant shall not be required to pay or perform any settlement unless the settlement is approved by the applicant.

Steven L. Contursi

Print Name of Property Owner

Print Name of Applicant (if different)



Signature of Property Owner

6/23/2025

Date

Signature of Applicant

Date

Hourly Fee Agreement

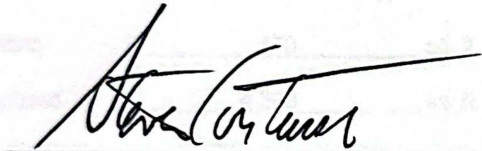
PROJECT File: P23-00057; request for Use Permit Minor Modification. I, Steven L. Contursi, the undersigned, hereby authorize the County of Napa to process the above referenced permit request in accordance with the Napa County Code. I am providing \$_____ as a deposit to pay for County staff review, coordination and processing costs related to my permit request based on actual staff time expended and other direct costs. **In making this deposit, I acknowledge and understand that the deposit may only cover a portion of the total processing costs. Actual costs for staff time are based on hourly rates adopted by the Board of Supervisors in the most current Napa County fee schedule. I also understand and agree that I am responsible for paying these costs even if the application is withdrawn or not approved.**

I understand and agree to the following terms and conditions of this Hourly Fee Agreement:

1. Time spent by Napa County staff in processing my application and any direct costs will be billed against the available deposit. "Staff time" includes, but is not limited to, time spent reviewing application materials, site visits, responding by phone or correspondence to inquiries from the applicant, the applicant's representatives, neighbors and/or interested parties, attendance and participation at meetings and public hearings, preparation of staff reports and other correspondence, or responding to any legal challenges related to the application during the processing of your application. "Staff" includes any employee of the Planning, Building and Environmental Services Department (PBES), the Office of the County Counsel, or other County staff necessary for complete processing of the application. "Direct costs" include any consultant costs for the peer review of materials submitted with the application, preparation of California Environmental Quality Act (CEQA) documents, expanded technical studies, project management, and/or other outside professional assistance required by the County and agreed to by the applicant. The cost to manage consultant contracts by staff will also be billed against the available deposit.
2. Staff will review the application for completeness and provide me with a good faith estimate of the full cost of processing the permit. Any requested additional deposit shall be submitted to PBES to allow continued processing of the project.
3. I understand that the County desires to avoid incurring permit processing costs without having sufficient funds on deposit. If staff determines that inadequate funds are on deposit for continued processing, staff shall notify me in writing and request an additional deposit amount estimated necessary to complete processing of my application. I agree to submit sufficient funds as requested by staff to process the project through the hearing process within 30 days of the request.
4. I understand that if the amount on deposit falls below zero, staff will notify me and stop work on the application until sufficient additional funds are provided.
5. If the final cost is less than the amount remaining on deposit, the unused portion of the deposit will be refunded to me. If the final cost is more than the available deposit, I agree to pay the amount due within 30 days of billing.
6. If I fail to pay any invoices or requests for additional deposits within 30 days, the County may either stop processing my permit application, or after conducting a hearing, may deny my permit application. If I fail to pay any amount due after my application is approved, I understand that my permit may not be exercised, or may be subject to revocation. I further agree that no building, grading, sewage, or other project related permits will be issued if my account is in arrears.

Initial Statement of Grape Source

Pursuant to Napa County Zoning Ordinance Sections 12419(b) and (c), I hereby certify that the current application for establishment or expansion of a winery pursuant to the Napa County Winery Definition Ordinance will employ sources of grapes in accordance with the requirements of Section 12419(b) and/or (c) of that Ordinance.



Owner's Signature

6/23/2025

Date

Letters of commitment from grape suppliers and supporting documents may be required prior to issuance of any building permits for the project. Recertification of compliance will be required on a periodic basis. Recertification after initiation of the requested wine production may require the submittal of additional information regarding individual grape sources. Proprietary information will not be disclosed to the public.



None - no vineyard expansion



Current Planting (Class II)



Proposed Planting (Class III)



Marketing Events and/or Temporary Events (Class III)

Please identify the winery's:

Current vineyard (acres) Existing 100 ac. Proposed 100 ac.

Current vineyard (Production) Existing N/A ac. Proposed N/A ac.

Current vineyard (Proprietary) Existing N/A ac. Proposed N/A ac.

Current vineyard (Public) Existing 100 ac. Proposed 100 ac.

Unplanted vineyard (acres) Existing N/A ac. Proposed 0 ac.

Cave Space Used: No Cave Existing 0 ac. Proposed 0 ac.

Cave Space Used: ☐ Cave ☐ Cellar ☐ Other

Winery Coverage and Accessory/Production Ratio

Winery Development Area. Consistent with the definition at "a.", and with the marked-up side plans included in your submittal, please indicate your proposed winery development area. If the facility already exists, please differentiate between existing and proposed.

| | | |
|----------|-----------------------|--------------------|
| Existing | <u>12,715</u> sq. ft. | <u>0.29</u> acres |
| Proposed | <u>18,868</u> sq. ft. | <u>0.449</u> acres |

Winery Coverage. Consistent with the definition at "b.", and with the marked-up site plans included in your submittal, please indicate your proposed winery coverage (maximum 25% of parcel or 15 acres, whichever is less).

| | | |
|-----------------------|-------------------|-------------------------|
| <u>63,735</u> sq. ft. | <u>1.43</u> acres | <u>14.4</u> % of parcel |
|-----------------------|-------------------|-------------------------|

Production Facility. Consistent with the definition at "c.", and the marked-up floor plans included in your submittal, please indicate your proposed production square footage. If the facility already exists, please differentiate between existing and proposed.

| | | | |
|----------|-----------------------|------------------|-----------------------|
| Existing | <u>10,268</u> sq. ft. | Proposed | <u>3,529</u> sq. ft. |
| | | (Combined Total) | <u>13,797</u> sq. ft. |

Accessory Use. Consistent with the definition at "d.", and the marked-up floor plans included in your submittal, please indicate your proposed accessory square footage. If the facility already exists, please differentiate between existing and proposed. (maximum = 40% of the production facility).

| | | |
|----------|----------------------|---------------------------------------|
| Existing | <u>379</u> sq. ft. | <u>3.7</u> % of production facility |
| Proposed | <u>4,308</u> sq. ft. | <u>33.97</u> % of production facility |

Caves and Crush pads

If new or expanded caves are proposed please indicate which of the following best describes the public accessibility of the proposed and existing cave space. Please denote on cave floor plans the location of existing and proposed cave type/activities and identify location of on-site cave spoils on a site plan.

Existing Cave: No Cave

☒ None – no visitors/tours/events (Class I) ☐ Guided Tours Only (Class II) ☐ Public Access (Class III)
☐ Marketing Events and/or Temporary Events (Class III)

Expanded or New Cave: N/A

☒ None – no visitors/tours/events (Class I) ☐ Guided Tours Only (Class II) ☐ Public Access (Class III)
☐ Marketing Events and/or Temporary Events (Class III)

Please Identify the winery's...

| | | |
|--------------------------|---|------------------------------|
| Cave area (total) | Existing: <u>N/A</u> sq. ft. | Proposed: <u>N/A</u> sq. ft. |
| Cave area (Production) | Existing: <u>N/A</u> sq. ft. | Proposed: <u>N/A</u> sq. ft. |
| Cave area (Accessory) | Existing: <u>N/A</u> sq. ft. | Proposed: <u>N/A</u> sq. ft. |
| Covered crush pad area | Existing: <u>1,206</u> sq. ft. | Proposed: <u>620</u> sq. ft. |
| Uncovered crush pad area | Existing: <u>N/A</u> sq. ft. | Proposed: <u>0</u> sq. ft. |
| Cave Spoils total: | No Cave | Proposed: <u>N/A</u> cy. |
| Cave Spoils Use: | <input type="checkbox"/> Onsite <input type="checkbox"/> Offsite <u>N/A</u> | |

Grape Origin

All new wineries and any existing (pre-WDO) winery expanding beyond its winery development area must comply with the 75% rule and complete the attached "Initial Statement of Grape Source". See Napa County Code §18.104.250(B) & (C). The project description should include information on location and quantity of grapes.

Ownership of existing vineyards and contracts with various growers. All will be at least 75% Napa fruit.

Marketing Program

Please describe the winery's proposed marketing program. Include event type, maximum attendance, hours, location/facilities to be used, food service details, etc. Provide a site plan showing where the marketing event activities will occur, including overflow/off-site parking. Differentiate between existing and proposed activities. (Attach additional sheets as necessary.)

Small marketing events from 6 per year (30 each) to 12 per year (30 each).

Large marketing events from 1 per year (125 each) to 2 per year (125 each).

On-Site Consumption

If requesting On-Site Consumption, please provide a site plan showing where such activities will occur

Existing 3000 sq. ft. on winery terrace.

Food Service

Please describe the nature of any proposed food service including type of food, frequency of service, whether prepared on site or not, kitchen equipment, eating facilities, etc. Please differentiate between existing and proposed food service and existing type of commercial kitchen (low, medium or high risk) and/or food preparation areas authorized by the County Environmental Health Division. (Attach additional sheets as necessary.)

Catered. No winery commercial kitchen.

7. I may file a written request for a further explanation or itemization of invoices, but such a request does not alter my obligation to pay any invoices in accordance with the terms of this agreement.

Name of Applicant responsible for payment of all County processing fees (Please Print):

Steven L. Contursi

Mailing Address of the Applicant responsible for paying processing fees:

1042 North Pacific Coast Highway

Laguna Beach, CA 92651

Signature:*



Email Address: steve@arrowandbranch.com

Date:

6/23/2025

Phone Number: (949) 679-1222, Ext. 200

*ATTENTION – The applicant will be held responsible for all charges.

WINERY OPERATIONS

Please indicate whether the activity or uses below are already legally **EXISTING**, whether they exist and are proposed to be **EXPANDED** as part of this application, whether they are **NEWLY PROPOSED** as part of this application, or whether they are neither existing nor proposed (**NONE**).

| | | | | |
|---|--|--|---|-------------------------------|
| Retail Wine Sales | <input type="checkbox"/> Existing | <input checked="" type="checkbox"/> Expanded | <input type="checkbox"/> Newly Proposed | <input type="checkbox"/> None |
| Tours and Tasting – Open to the Public | <input type="checkbox"/> Existing | | | |
| Tours and Tasting – By Appointment | <input type="checkbox"/> Existing | <input checked="" type="checkbox"/> Expanded | <input type="checkbox"/> Newly Proposed | <input type="checkbox"/> None |
| Food at Tours and Tastings | <input type="checkbox"/> Existing | <input checked="" type="checkbox"/> Expanded | <input type="checkbox"/> Newly Proposed | <input type="checkbox"/> None |
| Marketing Events* | <input type="checkbox"/> Existing | <input checked="" type="checkbox"/> Expanded | <input type="checkbox"/> Newly Proposed | <input type="checkbox"/> None |
| Food at Marketing Events | <input type="checkbox"/> Existing | <input checked="" type="checkbox"/> Expanded | <input type="checkbox"/> Newly Proposed | <input type="checkbox"/> None |
| Will food be prepared... | <input type="checkbox"/> On-site? | <input checked="" type="checkbox"/> Catered? | | |
| Public display of art or wine-related items | <input checked="" type="checkbox"/> Existing | <input type="checkbox"/> Expanded | <input type="checkbox"/> Newly Proposed | <input type="checkbox"/> None |
| Wine Sales/Consumption – AB 2004 | <input checked="" type="checkbox"/> Existing | | <input type="checkbox"/> Proposed | <input type="checkbox"/> None |

*For reference please see definition of "Marketing," at Napa County Code §18.08.370 – <http://library.municode.com/index.aspx?clientid=16513>

Production Capacity*

Please Identify the winery's...

Existing permitted production capacity: 30,000 gal/y Per Permit: 21-00087-UP
13-00440-UP Permit Date: 03-29-2022
11-06-2013

Current maximum actual production: 0 gal/y For what year? 2022

Average 3 year production: 0 gal/y

Proposed production capacity: 45,000

*For this section please see "Winery Production Process".

Visitation and Operations

Please identify the winery's...

Maximum daily tours/tastings visitation: 15 existing 34 proposed

Maximum weekly tours/tastings visitation: 105 existing 238 proposed

Visitation hours (e.g. M-Sa, 10am-4pm): 10 a.m. – 6 p.m. existing No Change proposed

Production days and hours¹: 7 days/wk existing No Change proposed

¹It is assumed that wineries will operate up to 24 hours per day during crush.



A Tradition of Stewardship
A Commitment to Service

WINERY TRIP GENERATION WORKSHEET

Planning, Building & Environmental Services

1195 Third Street, Suite 210

Napa, CA 94559-3082

(707) 253-4417

PROJECT DESCRIPTION

Clear Form

| | |
|---|-----------------------|
| Winery Name: Arrow and Branch Major Modification | Date Prepared: |
|---|-----------------------|

| Existing Entitled Winery | | Harvest | Non-Harvest |
|---|---------|---------|-------------|
| Number of Full Time Employees* | Weekday | 4 | 4 |
| | Weekend | 4 | 4 |
| Number of Part Time Employees* | Weekday | 0 | 0 |
| | Weekend | 0 | 0 |
| Maximum Daily Visitation | Weekday | 15 | 15 |
| | Weekend | 15 | 15 |
| Annual Gallons of Production | | 30,000 | 30,000 |
| Annual Tons of Grape Haul | | 187.5 | N/A |
| Number of Visitors at the Largest Event that occurs two or more times per month, on average | Weekday | 0 | 0 |
| | Weekend | 0 | 0 |

| Proposed Winery | | Harvest | Non-Harvest |
|---|---------|---------|-------------|
| Number of Full Time Employees* | Weekday | 5 | 5 |
| | Weekend | 5 | 5 |
| Number of Part Time Employees* | Weekday | 0 | 0 |
| | Weekend | 0 | 0 |
| Maximum Daily Visitation | Weekday | 34 | 34 |
| | Weekend | 34 | 34 |
| Annual Gallons of Production | | 45,000 | 45,000 |
| Annual Tons of Grape Haul | | 281.3 | N/A |
| Number of Visitors at the Largest Event that occurs two or more times per month, on average | Weekday | 0 | 0 |
| | Weekend | 0 | 0 |

*Number of full time and part time employees should represent the max number of employees that will be working on any given day (including all vendors and contractors employed for the largest event that occurs two or more times per month on average).

Arrow and Branch Major Modification TRIP GENERATION

| Existing Winery | | | | | Harvest | Non-Harvest |
|---|----------------|--------------------|--|-------------------------|---------------------------------------|--------------|
| <u>Maximum Daily Weekday Traffic (Friday)</u> | | | | | | |
| | <u>Harvest</u> | <u>Non-Harvest</u> | | | | |
| FT Employees | 4 | 4 | 3.05 one way trips/employee | FT Employee Daily Trips | 12.2 | 12.2 |
| PT Employees | 0 | 0 | 1.9 one way trips/employee | PT Employee Daily Trips | 0.0 | 0.0 |
| Max Visitors | 15 | 15 | 2.6 visitors/vehicle for 2 one way trips | Max Visitor Daily Trips | 11.5 | 11.5 |
| Max Event | 0 | 0 | 2.6 visitors/vehicle for 2 one way trips | Max Event Daily Trips | 0.0 | 0.0 |
| Gallons of Production | 30,000 | | 0.000018 truck trips | Production Daily Trips | 0.5 | 0.5 |
| Tons of Grape Haul# | 187.5 | | 0.013889 truck trips | Grape Haul Daily Trips | 2.6 | 0.0 |
| | | | | | Total Weekday Daily Trips | 27 |
| | | | | | Total Weekday Peak Hour Trips* | 10 |
| <u>Maximum Daily Weekend Traffic (Saturday)</u> | | | | | | |
| | <u>Harvest</u> | <u>Non-Harvest</u> | | | | |
| FT Employees | 4 | 4 | 3.05 one way trips/employee | FT Employee Daily Trips | 12.2 | 12.2 |
| PT Employees | 0 | 0 | 1.9 one way trips/employee | PT Employee Daily Trips | 0.0 | 0.0 |
| Max Visitors | 15 | 15 | 2.8 visitors/vehicle for 2 one way trips | Max Visitor Daily Trips | 10.7 | 10.7 |
| Max Event | 0 | 0 | 2.8 visitors/vehicle for 2 one way trips | Max Event Daily Trips | 0.0 | 0.0 |
| Gallons of Production | 30,000 | | 0.000018 truck trips | Production Daily Trips | 0.5 | 0.5 |
| Tons of Grape Haul# | 187.5 | | 0.013889 truck trips | Grape Haul Daily Trips | 2.6 | 0.0 |
| | | | | | Total Weekend Daily Trips | 27 |
| | | | | | Total Weekend Peak Hour Trips* | 12 |
| <u>Maximum Annual Traffic</u> | | | | | | |
| | | | | | Total Annual Trips** | 9,197 |

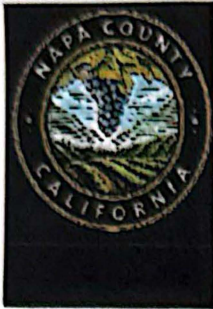
| Proposed Winery | | | | | Harvest | Non-Harvest |
|---|----------------|--------------------|--|-------------------------|---------------------------------------|---------------|
| <u>Maximum Daily Weekday Traffic (Friday)</u> | | | | | | |
| | <u>Harvest</u> | <u>Non-Harvest</u> | | | | |
| FT Employees | 5 | 5 | 3.05 one way trips/employee | FT Employee Daily Trips | 15.3 | 15.3 |
| PT Employees | 0 | 0 | 1.9 one way trips/employee | PT Employee Daily Trips | 0.0 | 0.0 |
| Max Visitors | 34 | 34 | 2.6 visitors/vehicle for 2 one way trips | Max Visitor Daily Trips | 26.2 | 26.2 |
| Max Event | 0 | 0 | 2.6 visitors/vehicle for 2 one way trips | Max Event Daily Trips | 0.0 | 0.0 |
| Gallons of Production | 45,000 | | 0.000018 truck trips | Production Daily Trips | 0.8 | 0.8 |
| Tons of Grape Haul# | 281.3 | | 0.013889 truck trips | Grape Haul Daily Trips | 3.9 | 0.0 |
| | | | | | Total Weekday Daily Trips | 47 |
| | | | | | Total Weekday Peak Hour Trips* | 17 |
| <u>Maximum Daily Weekend Traffic (Saturday)</u> | | | | | | |
| | <u>Harvest</u> | <u>Non-Harvest</u> | | | | |
| FT Employees | 5 | 5 | 3.05 one way trips/employee | FT Employee Daily Trips | 15.3 | 15.3 |
| PT Employees | 0 | 0 | 1.9 one way trips/employee | PT Employee Daily Trips | 0.0 | 0.0 |
| Max Visitors | 34 | 34 | 2.8 visitors/vehicle for 2 one way trips | Max Visitor Daily Trips | 24.3 | 24.3 |
| Max Event | 0 | 0 | 2.8 visitors/vehicle for 2 one way trips | Max Event Daily Trips | 0.0 | 0.0 |
| Gallons of Production | 45,000 | | 0.000018 truck trips | Production Daily Trips | 0.8 | 0.8 |
| Tons of Grape Haul# | 281.3 | | 0.013889 truck trips | Grape Haul Daily Trips | 3.9 | 0.0 |
| | | | | | Total Weekend Daily Trips | 45 |
| | | | | | Total Weekend Peak Hour Trips* | 22 |
| <u>Maximum Annual Traffic</u> | | | | | | |
| | | | | | Total Annual Trips** | 15,795 |

| Net New Trips | | | | Harvest | Non-Harvest |
|--|--|--|--|---|--------------|
| <u>Maximum Weekday Traffic (Friday)</u> | | | | | |
| If total net new daily trips is greater than 40, a TIS is required | | | | | |
| | | | | Net New Weekday Daily Trips | 20 |
| | | | | Net New Weekday Peak Hour Trips* | 7 |
| <u>Maximum Weekend Traffic (Saturday)</u> | | | | | |
| If total net new daily trips is greater than 40, a TIS is required | | | | | |
| | | | | Net New Weekend Daily Trips | 18 |
| | | | | Net New Weekend Peak Hour Trips* | 10 |
| <u>Maximum Annual Traffic</u> | | | | | |
| A Traffic Impact Study is NOT Required | | | | | |
| | | | | Net New Annual Trips** | 6,598 |

#Trips associated with Grape Haul represent harvest season only.

*Weekday peak hour trips are calculated as 38% of daily trips associated with visitors and production plus one trip per employee. Weekend peak hour trips are calculated as 57% of daily trips associated with visitors and production plus one trip per employee.

**Annual trips represent a conservative calculation that assumes 11 weeks of harvest, all weekdays are Fridays, all weekends are Saturdays, and assumes that the largest event that occurs two or more times per month on average occurs every day.



Project name & APN: Arrow and Branch Winery APN 034-190-040
Project number if known: P21-00087
Contact person: Steven L. Contursi 1042 No. Pacific Coast Hwy. Laguna Beach, CA 92651
Contact email & ph no: steve@arrowandbranch.com (949) 679-1222 X200
Today's date: June 20, 2023

Voluntary Best Management Practices Checklist for Development Projects

Napa County General Plan Policy CON-65(e) and Policy CON-67(d) requires the consideration of Greenhouse Gas (GHG) emissions in the review of discretionary projects and to promote and encourage "green building" design. The below Best Management Practices (BMPs) reduce GHG emissions through energy and water conservation, waste reduction, efficient transportation, and land conservation. The voluntary checklist included here should be consulted early in the project and be considered for inclusion in new development. It is not intended, and likely not possible for all projects to adhere to all of the BMPs. Rather, these BMPs provide a portfolio of options from which a project could choose, taking into consideration cost, co-benefits, schedule, and project specific requirements. Please check the box for all BMPs that your project proposes to include and include a separate narrative if your project has special circumstances.

Practices with Measurable GHG Reduction Potential

The following measures reduce GHG emissions and if needed can be calculated. They are placed in descending order based on the amount of emission reduction potential.

| Already Doing | Plan To Do | ID # | BMP Name |
|--------------------------|-------------------------------------|-------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-1 | Generation of on-site renewable energy <i>If a project team designs with alternative energy in mind at the conceptual stage it can be integrated into the design. For instance, the roof can be oriented, sized, and engineered to accommodate photovoltaic (PV) panels. If you intend to do this BMP, please indicate the location of the proposed PV panels on the building elevations or the location of the ground mounted PV array on the site plan. Please indicate the total annual energy demand and the total annual kilowatt hours produced or purchased and the potential percentage reduction of electrical consumption. Please contact staff or refer to the handout to calculate how much electrical energy your project may need.</i> Solar Panels _____ _____ _____ _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-2 | Preservation of developable open space in a conservation easement <i>Please indicate the amount and location of developable land (i.e.: under 30% slope and not in creek setbacks or environmentally sensitive areas for vineyards) conserved in a permanent easement to prohibit future development.</i> Observe stream setbacks as per County Conservation Regulations _____ _____ |

| Already Doing | Plan To Do | ID # | BMP Name |
|--------------------------|-------------------------------------|-------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-3 | Habitat restoration or new vegetation (e.g. planting of additional trees over ½ acre) <i>Napa County is famous for its land stewardship and preservation. Restoring areas within the creek setback reduces erosion potential while planting areas that are currently hardscape (such as doing a bio-retention swale rather than underground storm drains) reduces storm water and helps the groundwater recharge. Planting trees can also increase the annual uptake of CO2e and add the County's carbon stock.</i> <div style="text-align: center;">N/A</div> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-4 | Alternative fuel and electrical vehicles in fleet <i>The magnitude of GHG reductions achieved through implementation of this measure varies depending on the analysis year, equipment, and fuel type replaced.</i> Number of total vehicles _____ Typical annual fuel consumption or VMT _____ Number of alternative fuel vehicles _____ Type of fuel/vehicle(s) _____ Potential annual fuel or VMT savings _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-5 | Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 2 <i>The California Building Code update effective January 1, 2011 has new mandatory green building measures for all new construction and has been labeled CALGREEN. CALGREEN provides two voluntary higher levels labeled CALGREEN Tier 1 and CALGREEN Tier 2. Each tier adds a further set of green building measures that go above and beyond the mandatory measures of the Code. In both tiers, buildings will use less energy than the current Title 24 California Energy Code. Tier 1 buildings achieve at least a 15% improvement and Tier 2 buildings are to achieve a 30% improvement. Both tiers require additional non-energy prerequisites, as well as a certain number of elective measures in each green building category (energy efficiency, water efficiency, resource conservation, indoor air quality and community).</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-6 | Vehicle Miles Traveled (VMT) reduction plan <i>Selecting this BMP states that the business operations intend to implement a VMT reduction plan reducing annual VMTs by at least 15%.</i> Tick box(es) for what your Transportation Demand Management Plan will/does include: <input checked="" type="checkbox"/> employee incentives <input type="checkbox"/> employee carpool or vanpool <input checked="" type="checkbox"/> priority parking for efficient transportation (hybrid vehicles, carpools, etc.) <input checked="" type="checkbox"/> bike riding incentives <input checked="" type="checkbox"/> bus transportation for large marketing events <input type="checkbox"/> Other: _____ _____ Estimated annual VMT _____ Potential annual VMT saved _____ % Change _____ |

| Already Doing | Plan To Do | ID # | BMP Name |
|--------------------------|-------------------------------------|--------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-7 | <p>Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 1 See description below under BMP-5</p> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-8 | <p>Solar hot water heating Solar water heating systems include storage tanks and solar collectors. There are two types of solar water heating systems: active, which have circulating pumps and controls, and passive, which don't. Both of them would still require additional heating to bring them to the temperature necessary for domestic purposes. They are commonly used to heat swimming pools.</p> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-9 | <p>Energy conserving lighting Lighting is approximately 25% of typical electrical consumption. This BMP recommends installing or replacing existing light bulbs with energy-efficient compact fluorescent (CF) bulbs or Light Emitting Diode (LED) for your most-used lights. Although they cost more initially, they save money in the long run by using only ¼ the energy of an ordinary incandescent bulb and lasting 8-12 times longer. Typical payback from the initial purchase is about 18 months.</p> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-10 | <p>Energy Star Roof/Living Roof/Cool Roof Most roofs are dark-colored. In the heat of the full sun, the surface of a black roof can reach temperatures of 158 to 194 °F. Cool roofs, on the other hand, offer both immediate and long-term benefits including reduced building heat-gain and savings of up to 15% the annual air-conditioning energy use of a single-story building. A cool roof and a green roof are different in that the green roof provides living material to act as a both heat sink and thermal mass on the roof which provides both winter warming and summer cooling. A green (living) roof also reduces storm water runoff.</p> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-11 | <p>Bicycle Incentives Napa County Zone Ordinance requires 1 bicycle rack per 20 parking spaces (\$18,110.040). Incentives that go beyond this requirement can include on-site lockers for employees, showers, and for visitor's items such as directional signs and information on biking in Napa. Be creative!</p> <p><u>Winery is very near Vine Trail Path. Will provide bicycle racks.</u></p> <hr/> <hr/> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-12 | <p>Bicycle route improvements (Refer to the Napa County Bicycle Plan (NCTPA, December 2011) and note on the site plan the nearest bike routes. Please note proximity, access, and connection to existing and proposed bike lanes (Class I: Completely separated right-of-way; Class II: Striped bike lane; Class III: Signed Bike Routes). Indicate bike accessibility to project and only proposed improvements as part of the project on the site plan or describe below.</p> <hr/> <hr/> |

| Already Doing | Plan To Do | ID # | BMP Name |
|--------------------------|-------------------------------------|--------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-13 | Connection to recycled water <i>Recycled water has been further treated and disinfected to provide a non-potable (non-drinking water) water supply. Using recycled water for irrigation in place of potable or groundwater helps conserve water resources.</i> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-14 | Install Water Efficient fixtures <i>WaterSense, a partnership program by the U.S. Environmental Protection Agency administers the review of products and services that have earned the WaterSense label. Products have been certified to be at least 20 percent more efficient without sacrificing performance. By checking this box you intend to install water efficient fixtures or fixtures that conserve water by 20%.</i> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-15 | Low-impact development (LID) <i>LID is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Please indicate on the site or landscape plan how your project is designed in this way.</i> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-16 | Water efficient landscape <i>If your project is a residential development proposing in excess of 5,000 sq. ft. or a commercial development proposing in excess of 2,500 sq. ft. the project will be required to comply with the Water Efficient Landscape Ordinance (WELO).</i> <i>Please check the box if you will be complying with WELO or if your project is smaller than the minimum requirement and you are still proposing drought tolerant, zeroscape, native plantings, zoned irrigation or other water efficient landscape.</i> <u>See landscape concept.</u> <hr/> <hr/> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-17 | Recycle 75% of all waste <i>Did you know that the County of Napa will provide recycling collectors for the interior of your business at no additional charge? With single stream recycling it is really easy and convenient to meet this goal. To qualify for this BMP, your business will have to be aggressive, proactive and purchase with the goal in mind.</i> <hr/> <hr/> |

| Already Doing | Plan To Do | ID # | BMP Name |
|--------------------------|-------------------------------------|--------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-18 | Compost 75% food and garden material <i>The Napa County food composting program is for any business large or small that generates food scraps and compostable, including restaurants, hotels, wineries, assisted living facilities, grocery stores, schools, manufacturers, cafeterias, coffee shops, etc. All food scraps (including meat & dairy) as well as soiled paper and other compostable – see http://www.naparecycling.com/foodcomposting for more details</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-19 | Implement a sustainable purchasing and shipping program <i>Environmentally Preferable Purchasing (EPP) or Sustainable Purchasing refers to the procurement of products and services that have a reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. By selecting this BMP, you agree to have an EPP on file for your employees to abide by.</i> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-20 | Planting of shade trees within 40 feet of the south side of the building elevation <i>Well-placed trees can help keep your building cool in summer. If you choose a deciduous tree after the leaves drop in autumn, sunlight will warm your building through south and west-facing windows during the colder months. Well-designed landscaping can reduce cooling costs by 20%. Trees deliver more than energy and cost savings; they are important carbon sinks. Select varieties that require minimal care and water, and can withstand local weather extremes. Fruit or nut trees that produce in your area are great choices, providing you with local food as well as shade. Please the site or landscape plan to indicate where trees are proposed and which species you are using.</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-21 | Electrical Vehicle Charging Station(s) <i>As plug-in hybrid electric vehicles (EV) and battery electric vehicle ownership is expanding, there is a growing need for widely distributed accessible charging stations. Please indicate on the site plan where the station will be.</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-22 | Public Transit Accessibility <i>Refer to http://www.ridethevine.com/vine and indicate on the site plan the closest bus stop/route. Please indicate if the site is accessed by transit or by a local shuttle. Provide an explanation of any incentives for visitors and employees to use public transit. Incentives can include bus passes, informational hand outs, construction of a bus shelter, transportation from bus stop, etc.</i> <u>Winery is near bus stop on Solano Avenue.</u> |

| Already Doing | Plan To Do | ID # | BMP Name |
|---|-------------------------------------|--------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-23 | <p>Site Design that is oriented and designed to optimize conditions for natural heating, cooling, and day lighting of interior spaces, and to maximize winter sun exposure; such as a cave.</p> <p><i>The amount of energy a cave saves is dependent on the type of soil, the microclimate, and the user's request for temperature control. Inherently a cave or a building burned into the ground saves energy because the ground is a consistent temperature and it reduces the amount of heating and cooling required. On the same concept, a building that is oriented to have southern exposure for winter warmth and shading for summer cooling with an east-west cross breeze will naturally heat, cool, and ventilate the structure without using energy. Please check this box if your design includes a cave or exceptional site design that takes into consideration the natural topography and sitting. Be prepared to explain your approach and estimated energy savings.</i></p> <hr/> <hr/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-24 | <p>Limit the amount of grading and tree removal</p> <p><i>Limiting the amount of earth disturbance reduces the amount of CO2 released from the soil and mechanical equipment. This BMP is for a project design that either proposes a project within an already disturbed area proposing development that follows the natural contours of the land, and that doesn't require substantial grading or tree removal.</i></p> <hr/> <hr/> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-25 | <p>Will this project be designed and built so that it could qualify for LEED?</p> <p>BMP-25(a) <input type="checkbox"/> LEED™ Silver (check box BMP-25 and this one)</p> <p>BMP-25(b) <input type="checkbox"/> LEED™ Gold (check box BMP-25 (a), and this box)</p> <p>BMP-25(c) <input type="checkbox"/> LEED™ Platinum (check all 4 boxes)</p> |
| Practices with Un-Measured GHG Reduction Potential | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-26 | <p>Are you, or do you intend to become a Certified Green Business or certified as a "Napa Green Winery"?</p> <p><i>As part of the Bay Area Green Business Program, the Napa County Green Business Program is a free, voluntary program that allows businesses to demonstrate the care for the environment by going above and beyond business as usual and implementing environmentally friendly business practices. For more information check out the Napa County Green Business and Winery Program at www.countyofnapa.org.</i></p> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-27 | <p>Are you, or do you intend to become a Certified "Napa Green Land"?</p> <p><i>Napa Green Land, fish friendly farming, is a voluntary, comprehensive, "best practices" program for vineyards. Napa Valley vintners and growers develop farm-specific plans tailored to protect and enhance the ecological quality of the region, or create production facility programs that reduce energy and water use, waste and pollution. By selecting this measure either you are certified or you are in the process of certification.</i></p> |

| Already Doing | Plan To Do | ID # | BMP Name |
|-------------------------------------|-------------------------------------|--------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-28 | Use of recycled materials <i>There are a lot of materials in the market that are made from recycled content. By ticking this box, you are committing to use post-consumer products in your construction and your ongoing operations.</i> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-29 | Local food production <i>There are many intrinsic benefits of locally grown food, for instance reducing the transportation emissions, employing full time farm workers, and improving local access to fresh fruits and vegetables.</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-30 | Education to staff and visitors on sustainable practices <i>This BMP can be performed in many ways. One way is to simply put up signs reminding employees to do simple things such as keeping the thermostat at a consistent temperature or turning the lights off after you leave a room. If the project proposes alternative energy or sustainable winegrowing, this BMP could include explaining those business practices to staff and visitors.</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-31 | Use 70-80% cover crop <i>Cover crops reduce erosion and the amount of tilling which is required, which releases carbon into the environment.</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | BMP-32 | Retain biomass removed via pruning and thinning by chipping the material and reusing it rather than burning on-site <i>By selecting this BMP, you agree not to burn the material pruned on site.</i> |
| <input type="checkbox"/> | <input type="checkbox"/> | BMP-33 | Are you participating in any of the above BMPs at a 'Parent' or outside location? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | BMP-34 | Are you doing anything that deserves acknowledgement that isn't listed above? <u>Water conservation via in-ground wastewater treatment with partially treated wastewater re-used for irrigation.</u> |
| | | | Comments and Suggestions on this form? |

**REVISED PROJECT STATEMENT FOR
ARROW AND BRANCH WINERY USE PERMIT MAJOR MOD**

**5215 SOLANO AVENUE, NAPA, CA 94558
APN 034-190-040**

JUNE 20, 2023

The application is for a proposed major modification to the existing and approved Arrow and Branch Winery. The application proposes an increase in wine production for the winery, from an existing approved 30,000 gpy to 45,000 gpy; an updated employees count (~~10 or fewer~~); and proposed changes in both the daily visitors (from a max of 15 daily to a max of ~~40~~ ²⁴ per day; a change in winery marketing plan events, from an existing approved six smaller events (30) per year, to a maximum of twelve smaller events (30) per year; and a change from one larger event (125) to two (125) events per year. Direction for the proposed marketing program and dynamics areas are described herein and in the County application. 5 FTE

The civil engineering technical reports for water use, wastewater treatment, stormwater quality mitigation, and public water system feasibility are included in the application. Also included is a matrix of square footage for existing and proposed winery uses, and an updated Winery Traffic Generation Form.

The project is currently under construction for improvements approved in a recent (3-29-2022) minor mod. The minor mod did not propose any intensification of use, but was timed to add production improvements that would allow the owners to do a harvest on-site. Due to the extended period associated with major mods, the owners had to proceed with the absolutely necessary production improvements and come in later with the more extensive remodel and time restrictive improvements associated with a major mod.

Winery Sq. Ft.

The newly proposed production is 13,797 sq. ft. (compared to 10,268 sq. ft. reflected in the approved minor mod. The proposed accessory sq ft. is 4,308 sq. ft., as compared to 379 sq. ft. reflected in the minor mod approval. The resulting accessory to production use is 33.97 percent, below the 40 percent threshold in the Winery Definition Ordinance. The proposed mod also includes a 620-sq. ft. covered area on the production pad. This will be a cover for outdoor fermentation tank(s).

The proposed production increase provides for a second fermentation room and second barrel storage area. Accessory uses proposed include winery offices, mixed-use conference and tasting rooms, winery storage, a catering staging area, and visitor restrooms. Also reflected in the mod

is a utilities area to house the fire pump, mechanical and trash receptable provisions, and the wastewater treatment area.

A newly proposed modification of the site plan includes a 67,836-gallon water storage tank. Landscape screening for the tank is presented, consistent with the County's direction for water tank screening. The height of the newly proposed tank is 18 ft measured from the lowest adjacent ground surface. The tank is next to the winery structure and is a substitution for two smaller previously proposed water storage tanks.

Landscape Concept

The landscape concept depicted in the enclosed design drawings relies on mostly native California trees and shrubs that complement existing site conditions, including the creek setback area. This allows the winery and outside areas to be compatible with its natural surroundings. These plant materials have very low through moderate irrigation requirements. Trees and large shrubs will screen views toward the site from offsite locations and will also screen the winery's views to neighboring properties.

Coast Live Oak and Coffeeberry trees to screen the proposed tank are shown in the modified elevations herein, and are also reflected in the overall winery landscape concept plan.

Low-height shrubs soften the open areas and add to a natural landscape. Olive trees located beyond the creek setback will screen views of the emergency vehicle turnaround and the north and west elevations of the wineries to the residential neighbors. Although not a native California tree species olives thrive throughout Northern California, are drought tolerant, and are a typical screening tree.

The goal for irrigation of the landscaping minimizes water use as much as possible. After the plantings establish, irrigation for them will be significantly reduced through use of the "smart" irrigation controller. This utilizes weather monitoring to ensure that irrigation will only occur when needs arise.

Production

The proposed new production level is 45,000 gallons per year. The winery is currently approved for 30,000 gallons per year. The analyses contained in this major mod application reflect the carrying capacity of winery utilities such as wastewater treatment and water use. All production will adhere to the County's 75 percent grape source rule.

Grape Source for Production

The on-site property has five acres of planted vines, which produce up to four tons per acre. The applicant also owns two more vineyards that will contribute to the winery production. In addition, the owners has a number of agreements with Napa County growers, who will supply

the necessary fruit to meet proposed production. They continue to seek additional sources of fruit and believe that all this fruit will be Napa County sourced. The proposed production level will not be immediately actualized, but is part of the long-range planning for the winery.

Off-site grape deliveries, once the winery reaches full capacity, will result in approximately 46 truckloads, all occurring during the harvest period.

Winery Activities and Dynamics

The major mod includes a proposal to increase the daily visitors from an existing 15 per day to 40 visitors on the busiest visitation days.

The proposed updated employee numbers are ~~"less than 10," as compared to four full-time and four part-time employees reported previously in the earlier application.~~ Requests 5 FTE & 2 PTE

The winery marketing plan is proposed for expansion, from a total of six small events (30 persons each) per year and one larger event (125 persons), to a total of twelve smaller events (30 persons each) and two larger events (125 each). Shuttle bus service will be offered for the larger marketing events.

The food served with tastings and marketing events will be catered by a licensed catering company. The winery proposal includes a small (212 sq. ft.) kitchen area that is not a commercial kitchen, but an employee break area and a staging area for the caterers when needed.

Hours of Operation

Production hours for the winery are 6:00 AM until 6:00 PM, seven days per week. Hospitality hours are 10:00 AM until 6:00 PM. Evening marketing events hours will be after 6:00 PM and will conclude by 10:00 PM. This includes cleanup after the event.

No amplified outdoor music is proposed for the outdoor area, in keeping with the standards for new wineries.

Wastewater Feasibility

The updated *Onsite Wastewater Disposal Feasibility Study* contains calculations that show the wastewater flows associated with the use permit modification. Such flows will exceed the capacity of the permitted process wastewater system but will not exceed the capacity of the permitted sanitary wastewater system. There are at least two options for how to handle the planned increased process wastewater flow rates, which include adding to the existing system and capturing the treated water for re-use as irrigation. See report for details.

Water Availability Analysis

The project as proposed complies with the WAA Water Use Screening Criteria of 1.0 acre-foot per acre of groundwater use. However, this criteria has been superseded by a new Reduced Water Use Screening Criteria. The property currently uses more than the Reduced Water Use Screening Criteria of 0.3 acre-feet per year and therefore, the proposed project must not increase water use beyond current levels.

By implementing the recommendations outlined in the *Tier 1 Water Availability Analysis* and re-using winery process wastewater for irrigation, the proposed project complies with Napa County's current requirements.

Tier 2 and Tier 3 Analyses are not required according to the *WAA Guidance Document* and current practice, since no additional use of groundwater is required for this project.

Stormwater Control Plan for a Regulated Project

Applied Civil Engineering has prepared a *Stormwater Control Plan for a Regulated Project* which describes how stormwater runoff from new roofs, pavements, and other impervious surfaces is directed to a bioretention area or otherwise dispersed across vegetated areas. All natural drainage features on-site will be preserved. Proposed work within the creek setback will be minimized and generally involve appropriately selected new landscape planting. The project has been designed with respect to stream setbacks, as set forth in the *Napa County Conservation Regulations*. Details of grading and drainage are contained in the Site Improvement Plans submitted with this major mod.

Transient Non-Community Water System Information

Napa County requires an analysis and statement of qualified technical capacity, managerial and financial ability to provide for a transient non-community water system. This system is required for any project that proposes to serve more than 25 persons (all uses) on-site for 25 days or more per year. The findings for technical, managerial, and financial support have been made and are detailed in the Applied Civil Engineering *Water System Information* report conveyed with this mod application.

Further Information

Design, engineering drawings, square footage matrix, and other technical information are contained in detail and submitted as part of this major mod filing. Questions may be directed to the project team. We look forward to hearing from the County after the 30-day in-house review.

September 12, 2024

Mr. Matthew Ringel
Planner III
Napa County Dept. of Planning, Building & Environmental Management
1195 Third Street, Suite 210
Napa, CA 94559

RE: ARROW & BRANCH WINERY MAJOR MOD P23-00057
5215 SOLANO AVENUE, NAPA CA. APN 034-190-004-000

Dear Matt:

We are submitting the materials referenced in your last "completeness" letter dated July 22, 2024. The civil engineer, Mike Muelrath of Applied Civil Engineering, will be submitting this link to you. All materials will be included, including the left-turn lane analysis referenced.

This letter is a request for a Project Description Revision, which lowers the number of winery employees and visitors, resulting in our falling below the threshold of the County's requirement for a left-turn lane on Solano Avenue. There are currently no existing left-turn lanes in this area.

On August 17 and 24th, updated traffic counts were done, which support this request and the traffic engineer's conclusion that a left-turn lane is not warranted. The changes are as follows.

Lower the proposed full-time employees from 8 to 5. (The current use permit shows a total of two full-time employees, and the major mod will replace this number to 5.)

Lower the number of proposed daily visitors from 40 to 34.

Please see the attached analysis completed by Mark Crane of Crane Transportation Group, which concludes that the threshold for a left-turn lane provision as mitigation has not been met.

Since this revision represents a reduction in the intensity of use for traffic, wastewater treatment, and water use, we are well within the parameters of the County in these areas.

Thank you. Please contact Mike Muelrath, Mark Crane, or me with any questions.

Sincerely,

Donna B. Oldford

“F”

Water Availability Analysis

| | |
|---------|--|
| Page 2 | Tier I WAA – Applied Civil Engineering |
| Page 17 | Tier III WAA – Richard C. Slade Associates LLC |

TIER I WATER AVAILABILITY ANALYSIS

FOR THE

A & B VINEYARDS LLC WINERY USE PERMIT MODIFICATION

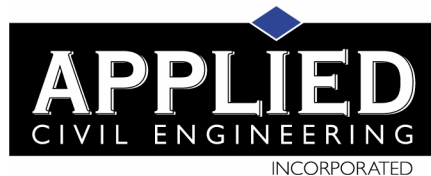
LOCATED AT:

5215 Solano Avenue
Napa, CA 94558
Napa County APN 034-190-040

PREPARED FOR:

A & B Vineyards LLC
Care Of: Steve Contursi
1042 North Coast Highway
Laguna Beach, CA 92651

PREPARED BY:



2160 Jefferson Street, Suite 230
Napa, CA 94559
Telephone: (707) 320-4968
www.appliedcivil.com

Job Number: 20-139

Michael R. Muelrath

Michael R. Muelrath R.C.E. 67435

7/7/2025

Date



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INTRODUCTION

A & B Vineyards LLC is applying for a Use Permit Modification to change the entitlements for their existing winery facility located at 5215 Solano Avenue in Napa County, California. The subject property is located just north of the intersection of Solano Avenue and Oak Knoll Avenue and is also known as Napa County Assessor's Parcel Number 034-190-040.



Figure 1: Location Map

The Use Permit Modification application under consideration proposes to increase production and visitation to the following levels:

- Wine Production:
 - 45,000 gallons of wine per year
 - Crushing, fermenting, aging and bottling
- Employees:
 - 5 total employees

- Marketing Plan:
 - Daily Tours and Tastings by Appointment
 - 34 visitors per day maximum
 - Marketing Events Type #1
 - 12 per year
 - 30 guests maximum
 - Food prepared offsite by catering company
 - Marketing Events Type #2
 - 2 per year
 - 125 guests maximum
 - Food prepared offsite by catering company
 - Portable toilets used for restrooms

Existing development on the property includes approximately six acres of vineyards, two wells, access roads, winery buildings and the related access and utility infrastructure typical of this type of agricultural and winery development. Water for the winery will be provided by the existing Winery Well located on the subject property. Please see the A & B Vineyards LLC Use Permit Modification Conceptual Site Improvement Plans for approximate locations of existing and proposed features.

Groundwater is currently used for vineyard irrigation and to support the existing A & B Vineyards LLC Winery. Groundwater will continue to be used for these activities moving forward including the proposed winery use modifications.

The second well on the property is used exclusively by the adjoining winery, Silenus Vintners, located on APN 034-212-035. According to the property owner, this well supplies water for the existing winery and vineyards and the residential uses on the property are supplied by the City of Napa water system.

A & B Vineyards LLC has requested that Applied Civil Engineering Incorporated (ACE) prepare a Tier I Water Availability Analysis in accordance with the Water Availability Analysis (WAA) – Guidance Document adopted by the Napa County Board of Supervisors on May 12, 2015. The remainder of this report describes the estimated groundwater demand on the subject property for existing and proposed conditions and compares that to the prescribed water use screening criteria.

ESTIMATED GROUNDWATER DEMAND

Groundwater is currently used to irrigate approximately six acres of vineyard and support the existing A & B Vineyards LLC Winery on the subject property and approximately six acres of vineyard and the existing Silenus Vintners Winery on the adjacent property (via a well easement) as shown in Figure 2.

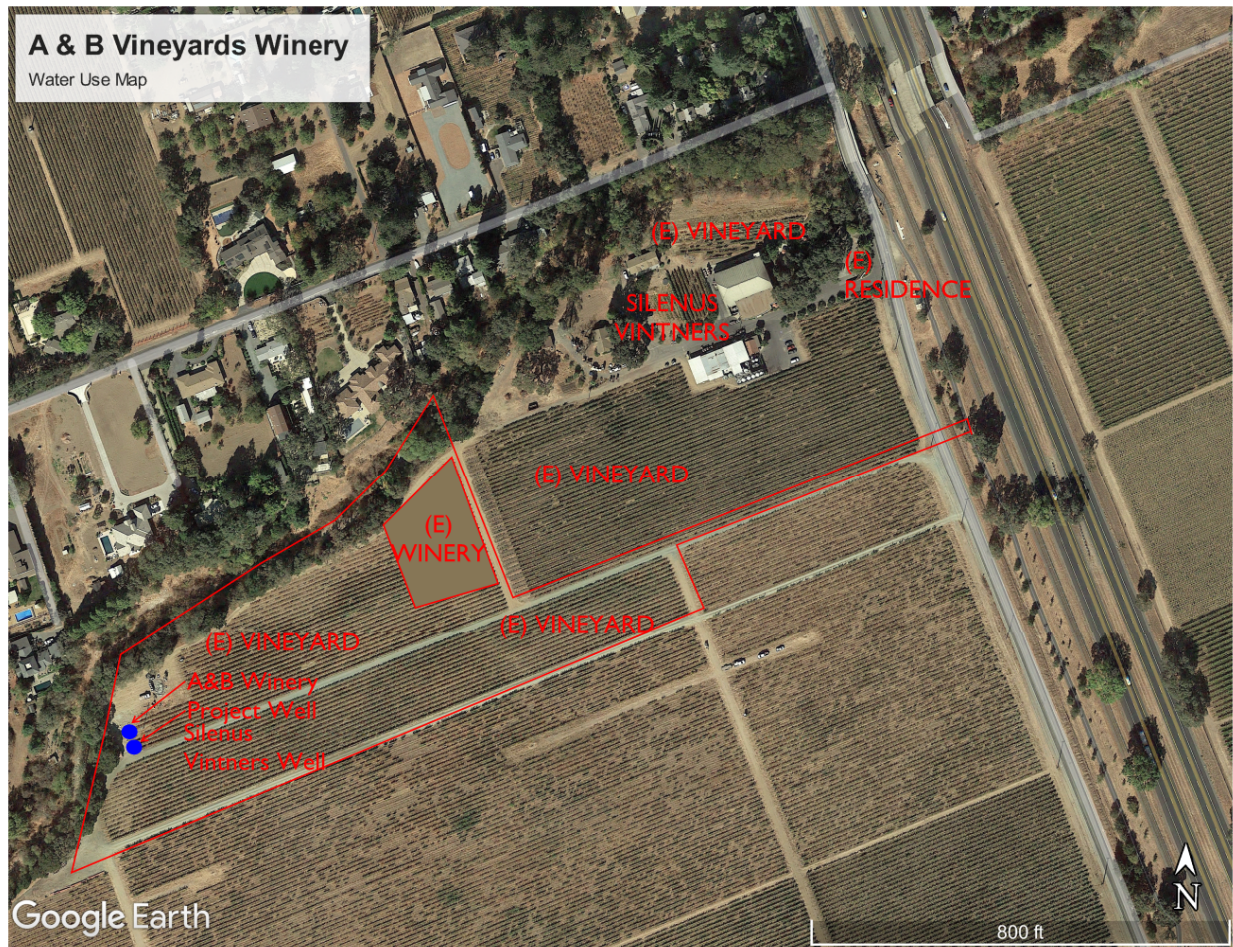


Figure 2: Water Use Map

Proposed water use will include the A & B Vineyards Winery’s increased production and visitation plan and all other existing demands for the subject and adjacent Silenus Vintners property.

The estimated groundwater demand, broken down by parcel, is summarized in the tables below and details of the calculations supporting these estimates are included in the Water Use Estimate Supporting Calculations in Appendix I.

Table I: Estimated Groundwater Demand – A & B Vineyards LLC Winery Property

| | Existing (ac-ft/yr) | Proposed (ac-ft/yr) |
|----------------------|---------------------|---------------------|
| Residential | 0 | 0 |
| Winery | 0.77 | 1.18 |
| Vineyard Irrigation | 3.00 | 3.00 |
| Landscape Irrigation | 0.2 | 0.2 |
| Total | 3.97 | 4.38 |

Table 2: Estimated Groundwater Demand – Silenus Vintners Winery Property

| | Existing (ac-ft/yr) | Proposed (ac-ft/yr) |
|----------------------|---------------------|---------------------|
| Residential | 0 | 0 |
| Winery | 2.00 | 2.00 |
| Vineyard Irrigation | 3.00 | 3.00 |
| Landscape Irrigation | 0.36 | 0.36 |
| Total | 5.36 | 5.36 |

Table 3: Estimated Groundwater Demand

A & B Vineyards LLC Winery & Silenus Vintners Winery Properties Combined

| | Existing (ac-ft/yr) | Proposed (ac-ft/yr) |
|----------------------|---------------------|---------------------|
| Residential | 0 | 0 |
| Winery | 2.77 | 3.18 |
| Vineyard Irrigation | 6.00 | 6.00 |
| Landscape Irrigation | 0.56 | 0.56 |
| Total | 9.33 | 9.74 |

It should be noted that while both properties have a City of Napa water service for vineyard irrigation the service is not guaranteed (in fact no water was provided in 2022) and therefore it is assumed for this analysis that all vineyard irrigation will come from groundwater.

WATER USE SCREENING CRITERIA

According to the WAA - Guidance Document properties located in the Napa Valley Floor area are subject to a Water Use Screening Criteria of 1.0 acre-feet of water per acre of land per year. A project complies with the requirements of the Tier 1 WAA if the total water use on the property is less than 1.0 acre-feet per acre per year. If the Tier 1 Water Use Screening Criteria is met and the property is located in the Napa Valley Floor area Tier 2 and Tier 3 Analyses are not required unless substantial evidence exists in the record that indicates a potential significant impact from the project.

Furthermore, Napa County is now also requiring that properties in the Napa Valley Floor area limit groundwater use to a Reduced Water Use Screening Criteria of 0.3 acre-feet per acre per year due to extended drought conditions except on properties where current use is more than 0.3 acre-feet per year in which case no-net increase in water use beyond existing baseline conditions is the applicable screening criteria.

The subject property is located in the Napa Valley Floor area and the geology is mapped as Qhy & Qha (alluvium) on the USGS geology maps as shown in Figure 3.

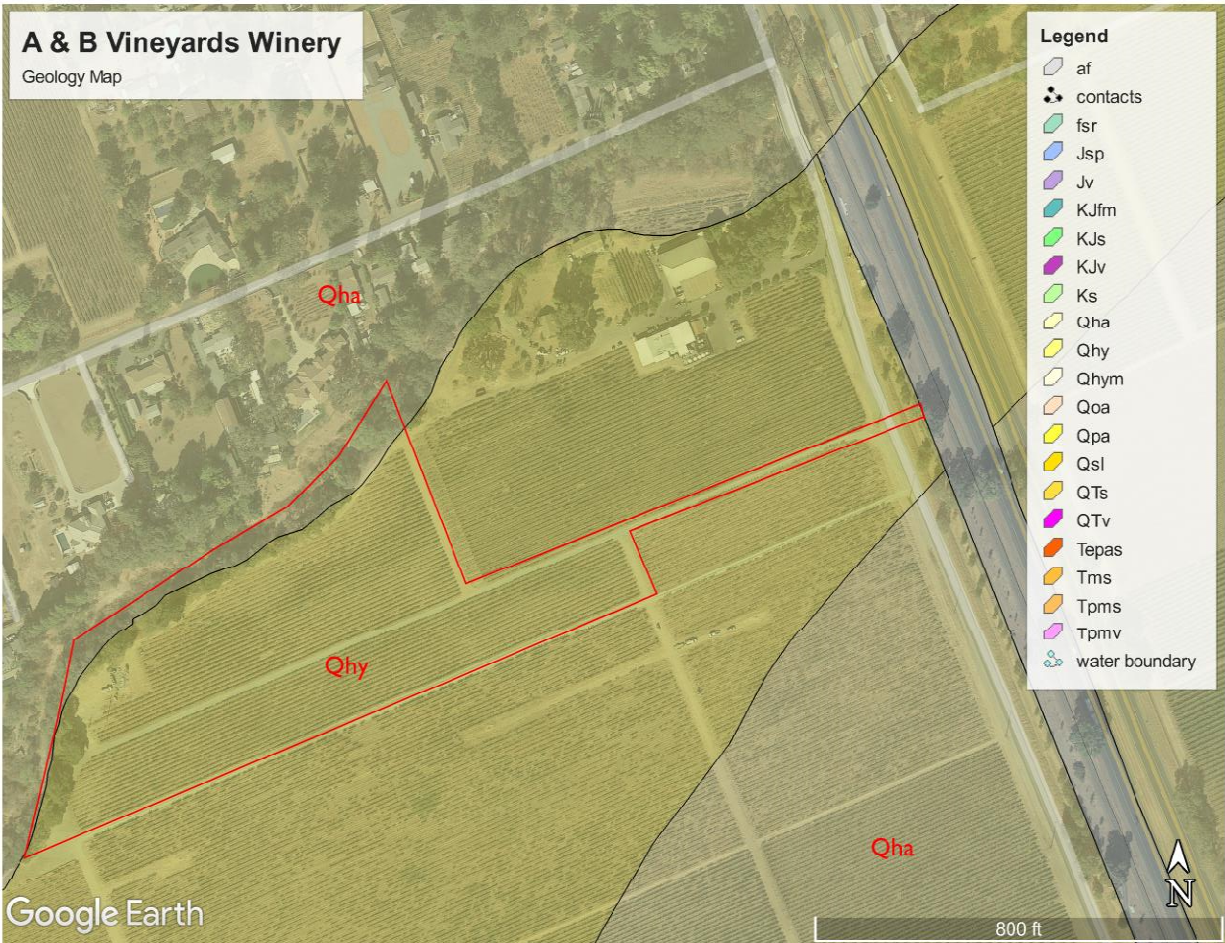


Figure 3: Geology Map Created with Google Earth Pro
(Source USGS Scientific Investigations Map 2918)

Since all groundwater extraction is from the Napa Valley Floor area we have evaluated the screening criteria associated with the Napa Valley Floor.

The parcel size is approximately 10.09 acres and therefore the water use screening criteria is calculated as follows:

WAA Guidance Document Water Use Screening Criteria = 10.09 acres x 1.0 acre-foot per acre per year

WAA Guidance Document Water Use Screening Criteria = 10.09 acre-feet per year

Reduced Water Use Screening Criteria = 10.09 acres x 0.3 acre-feet per acre per year

Reduced Water Use Screening Criteria = 3.03 acre-feet per year

Note that these threshold conservatively exclude any allowance associated with the Silenus Vintners property.

ANALYSIS

The total Estimated Water Use for existing conditions for both parcels combined (9.33 ac-ft/yr) and proposed conditions (9.74 ac-ft/yr) are both less than the WAA Water Use Screening Criteria (10.09 ac-ft/yr) and both are more than the Reduced Water Use Screening Criteria (3.03 ac-ft/yr).

Since the existing property water use is already above the Reduced Water Use Screening Criteria the project must comply with the no net increase criteria and the proposed water use must be the same or less than the current water use (9.33 ac-ft/yr).

RECOMMENDATIONS

In order to comply with the established 9.33 ac-ft/yr threshold the proposed project must reduce water use at the A & B Vineyards LLC Winery from the estimated 4.38 ac-ft/yr by 0.41 ac-ft/yr feet per year to match existing water use conditions. This can be done by implementing a process wastewater treatment and recycling system to offset vineyard and landscaping irrigation demand. Up to 0.97 ac-ft/yr can be reclaimed by this method and only 0.41 ac-ft/yr of offset is needed. The revised water use estimates utilizing a 0.41 ac-ft/yr offset are outlined below:

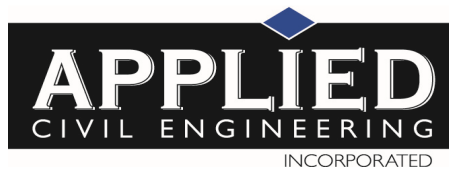
Table 2: Estimated Groundwater Demand With Process Wastewater Recycling

| | Existing (ac-ft/yr) | Proposed (ac-ft/yr) |
|--|---------------------|---------------------|
| Residential | 0 | 0 |
| Winery | 2.77 | 3.18 |
| Vineyard Irrigation | 6.00 | 6.00 |
| Landscape Irrigation | 0.56 | 0.56 |
| Irrigation Offset Using Recycled Process Water | 0 | -0.41 |
| Total | 9.33 | 9.33 |

CONCLUSION

The project complies with the WAA Water Use Screening Criteria of 1.0 acre foot per acre per year of groundwater use but this criteria has been superseded by a new Reduced Water Use Screening Criteria. The groundwater extraction on the property is currently more than the Reduced Water Use Screening Criteria of 0.3 acre-feet per year and therefore the proposed project must not increase water use beyond current levels. By implementing the recommendations outlined above and re-using winery process wastewater for irrigation the proposed project complies with the Napa County's current requirements. A Tier 2 Analysis is not required according to the WAA – Guidance Document and current practice since no increase of groundwater use is associated with this project. A separate Tier 3 Analysis has been prepared by Richard Slade and Associates to address the well's proximity to Dry Creek, a mapped significant stream.

APPENDIX I: Water Use Estimate Supporting Calculations



**A&B Vineyards Winery
Groundwater Use Estimate**

| | Estimated Water Use (Acre-Feet / Year) | | |
|---|---|--|-------------|
| | Existing | | Proposed |
| Residential Water Use | | | |
| Primary Residence ⁽¹⁾ - Not Applicable | 0.000 | | 0.000 |
| Pool ^(1A) - Not Applicable | 0.000 | | 0.000 |
| Second Dwelling Unit - Not Applicable | 0.000 | | 0.000 |
| Guest Cottage - Not Applicable | 0.000 | | 0.000 |
| Total Residential Domestic Water Use | 0.000 | | 0.000 |
| Winery Domestic & Process Water Use | | | |
| Winery - Daily Visitors ⁽²⁾⁽³⁾ | 0.050 | | 0.114 |
| Winery - Events with Meals Prepared Onsite ⁽²⁾⁽⁴⁾ | 0.000 | | 0.000 |
| Winery - Events with Meals Prepared Offsite ⁽²⁾⁽⁵⁾ | 0.003 | | 0.009 |
| Winery - Employees ⁽²⁾⁽⁶⁾ | 0.067 | | 0.084 |
| Winery - Event Staff ⁽²⁾⁽⁶⁾ | 0.001 | | 0.003 |
| Winery - Process ⁽²⁾⁽⁷⁾ | 0.645 | | 0.968 |
| Total Winery Water Use | 0.767 | | 1.178 |
| Irrigation Water Use | | | |
| Lawn ⁽⁸⁾ | 0.000 | | 0.000 |
| Other Landscape ⁽⁹⁾ | 0.200 | | 0.200 |
| Vineyard - Irrigation ⁽¹⁰⁾ | 3.000 | | 3.000 |
| Vineyard - Frost Protection - Not Applicable | 0 | | 0 |
| Vineyard - Heat Protection - Not Applicable | 0 | | 0 |
| Total Irrigation Water Use | 3.200 | | 3.200 |
| Total Combined Water Use | 3.97 | | 4.38 |

Estimates per Napa County Water Availability Analysis - Guidance Document, May 12, 2015 unless noted

⁽¹⁾ 0.5 to 0.75 ac-ft/yr for Primary Residence, includes some landscaping per Napa County WAA Guidance Document

^(1A) 0.1 ac-ft/yr for pool without cover per Napa County WAA Guidance Document

⁽²⁾ See attached Winery Production, Guest, Employee and Event Staff Statistics

⁽³⁾ 3 gallons of water per guest per Napa County WAA Guidance Document

⁽⁴⁾ 15 gallons of water per guest per Napa County WAA - Guidance Document

⁽⁵⁾ 5 gallons of water per guest used because all food preparation, dishwashing, etc. to occur offsite

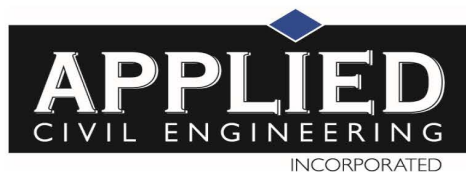
⁽⁶⁾ 15 gallons per shift per Napa County WAA - Guidance Document

⁽⁷⁾ 2.15 ac-ft/yr per 100,000 gallons wine per Napa County WAA - Guidance Document

⁽⁸⁾ 0.1 ac-ft/yr per 1,000 sf of lawn per Napa County WAA - Guidance Document - 0 sf lawn

⁽⁹⁾ Estimate provided by Landscape Architect based on planting design

⁽¹⁰⁾ 0.5 ac-ft/ac/yr per Napa County WAA - Guidance Document - 6+/- acres of vineyard



A&B Vineyards Winery

Existing Winery Production, Visitor, Employee & Event Staff Statistics

| | | |
|--|--------|------------------|
| Winery Production⁽¹⁾ | 30,000 | gallons per year |
|--|--------|------------------|

Tours and Tastings by Appointment⁽¹⁾

| | | |
|------------------------------|-----------------------|--------------|
| Monday through Thursday | 15 guests max per day | |
| Friday through Sunday | 15 guests max per day | |
| Total Guests Per Year | | 5,460 |

Events - Meals Prepared Offsite⁽¹⁾

| | | |
|------------------------------|---------------|------------|
| 7 per year | 30 guests max | 210 |
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guests max | 0 |
| Total Guests Per Year | | 210 |

Events - Meals Prepared Onsite⁽¹⁾

| | | |
|------------------------------|--------------|----------|
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guests max | 0 |
| Total Guests Per Year | | 0 |

Winery Employees⁽²⁾

| | | |
|---------------------------------------|-----------------|--------------|
| 4 employees | 1 shift per day | |
| Total Employee Shifts Per Year | | 1,460 |

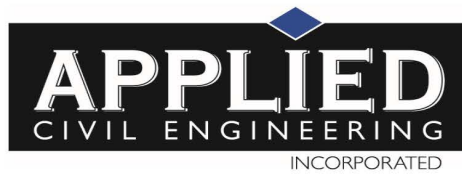
Event Staff⁽³⁾

| | | |
|-----------------------------------|---------------|-----------|
| 7 per year, 30 guests | 3 event staff | 21 |
| 0 per year, 125 guests | 0 event staff | 0 |
| 0 per year, 0 guests | 0 event staff | 0 |
| Total Event Staff Per Year | | 21 |

⁽¹⁾ Winery production, tours and tasting and event guest statistics per Winery Use Permit Modification Application

⁽²⁾ Employee counts per Winery Use Permit Application

⁽³⁾ Assumes 1 event staff per 10 guests (in addition to regular winery employees)



A&B Vineyards Winery

Proposed Winery Production, Visitor, Employee & Event Staff Statistics

| | | |
|--|--------|------------------|
| Winery Production⁽¹⁾ | 45,000 | gallons per year |
|--|--------|------------------|

Tours and Tastings by Appointment⁽¹⁾

| | | |
|------------------------------|-----------------------|---------------|
| Monday through Thursday | 34 guests max per day | |
| Friday through Sunday | 34 guests max per day | |
| Total Guests Per Year | | 12,376 |

Events - Meals Prepared Offsite⁽¹⁾

| | | |
|------------------------------|----------------|------------|
| 12 per year | 30 guests max | 360 |
| 2 per year | 125 guests max | 250 |
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guest max | 0 |
| Total Guests Per Year | | 610 |

Events - Meals Prepared Onsite⁽¹⁾

| | | |
|------------------------------|--------------|----------|
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guests max | 0 |
| Total Guests Per Year | | 0 |

Winery Employees⁽²⁾

| | | |
|---------------------------------------|-----------------|--------------|
| 5 employees | 1 shift per day | |
| Total Employee Shifts Per Year | | 1,825 |

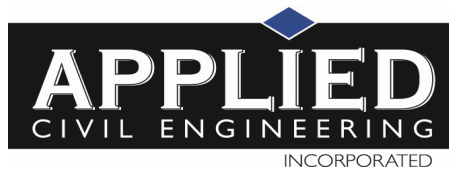
Event Staff⁽³⁾

| | | |
|-----------------------------------|----------------|-----------|
| 12 per year, 30 guests | 3 event staff | 36 |
| 2 per year, 125 guests | 13 event staff | 26 |
| 0 per year, 0 guests | 25 event staff | 0 |
| 0 per year, 0 guests | 50 event staff | 0 |
| Total Event Staff Per Year | | 62 |

⁽¹⁾ Winery production, tours and tasting and event guest statistics per Winery Use Permit Modification Application

⁽²⁾ Employee counts per Winery Use Permit Modification Application

⁽³⁾ Assumes 1 event staff per 10 guests (in addition to regular winery employees)



**Silenus Vintners Winery
Groundwater Use Estimate**

| | Estimated Water Use (Acre-Feet / Year) | | |
|---|---|--|-------------|
| | Existing | | Proposed |
| Residential Water Use | | | |
| Primary Residence ⁽¹⁾ - Not Applicable | 0.000 | | 0.000 |
| Pool ^(1A) - Not Applicable | 0.000 | | 0.000 |
| Second Dwelling Unit - Not Applicable | 0.000 | | 0.000 |
| Guest Cottage - Not Applicable | 0.000 | | 0.000 |
| Total Residential Domestic Water Use | 0.000 | | 0.000 |
| Winery Domestic & Process Water Use | | | |
| Winery - Daily Visitors ⁽²⁾⁽³⁾ | 0.235 | | 0.235 |
| Winery - Events with Meals Prepared Onsite ⁽²⁾⁽⁴⁾ | 0.000 | | 0.000 |
| Winery - Events with Meals Prepared Offsite ⁽²⁾⁽⁵⁾ | 0.026 | | 0.026 |
| Winery - Employees ⁽²⁾⁽⁶⁾ | 0.185 | | 0.185 |
| Winery - Event Staff ⁽²⁾⁽⁶⁾ | 0.008 | | 0.008 |
| Winery - Process ⁽²⁾⁽⁷⁾ | 1.548 | | 1.548 |
| Total Winery Water Use | 2.001 | | 2.001 |
| Irrigation Water Use | | | |
| Lawn ⁽⁸⁾ | 0.000 | | 0.000 |
| Other Landscape ⁽⁸⁾ | 0.360 | | 0.360 |
| Vineyard - Irrigation ⁽⁹⁾ | 3.000 | | 3.000 |
| Vineyard - Frost Protection - Not Applicable | 0 | | 0.000 |
| Vineyard - Heat Protection - Not Applicable | 0 | | 0.000 |
| Total Irrigation Water Use | 3.360 | | 3.360 |
| Total Combined Water Use | 5.36 | | 5.36 |

Estimates per Napa County Water Availability Analysis - Guidance Document, May 12, 2015 unless noted

(1) All residential water supplied by City of Napa according to owner.

(1A) 0.1 ac-ft/yr for pool without cover per Napa County WAA Guidance Document

(2) See attached Winery Production, Guest, Employee and Event Staff Statistics

(3) 3 gallons of water per guest per Napa County WAA Guidance Document

(4) 15 gallons of water per guest per Napa County WAA - Guidance Document

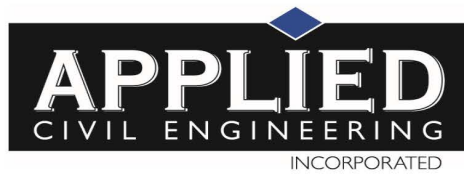
(5) 5 gallons of water per guest used because all food preparation, dishwashing, etc. to occur offsite

(6) 15 gallons per shift per Napa County WAA - Guidance Document

(7) 2.15 ac-ft/yr per 100,000 gallons wine per Napa County WAA - Guidance Document

(8) 0.5 ac-ft/yr per 100,000 gallons wine per Napa County WAA - Guidance Document

(9) 0.5 ac-ft/ac/yr per Napa County WAA - Guidance Document - 6+/- acres of vineyard



Silenus Vintners

Existing Winery Production, Visitor, Employee & Event Staff Statistics (No Change Proposed)

| | | |
|--|--------|------------------|
| Winery Production⁽¹⁾ | 72,000 | gallons per year |
|--|--------|------------------|

Tours and Tastings by Appointment⁽¹⁾

| | | |
|------------------------------|-----------------------|--------|
| Monday through Thursday | 70 guests max per day | |
| Friday through Sunday | 70 guests max per day | |
| Total Guests Per Year | | 25,480 |

Events - Meals Prepared Offsite⁽¹⁾

| | | |
|------------------------------|--|-------|
| Total Guests Per Year | | 1,680 |
|------------------------------|--|-------|

Events - Meals Prepared Onsite⁽¹⁾

| | | |
|------------------------------|--------------|---|
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guests max | 0 |
| 0 per year | 0 guests max | 0 |
| Total Guests Per Year | | 0 |

Winery Employees⁽²⁾

| | | |
|---------------------------------------|-----------------|-------|
| 11 employees | 1 shift per day | |
| Total Employee Shifts Per Year | | 4,015 |

Event Staff⁽³⁾

| | | |
|-----------------------------------|--|-----|
| Total Event Staff Per Year | | 168 |
|-----------------------------------|--|-----|

⁽¹⁾ Winery production, tours and tasting and event guest statistics per Napa County Winery Database

⁽²⁾ Employee counts per Napa County Winery Database

⁽³⁾ Assumes 1 event staff per 10 guests (in addition to regular winery employees)



REVISED MEMORANDUM

July 8, 2025

RCS Job No. 821-NPA01

To: A & B Vineyards LLC
c/o Mr. Steve Contursi
Sent via email: steve@arrowandbranch.com

CC: Mr. Mike Muelrath of Applied Civil Engineering
Sent via email: mike@appliedcivil.com
&
Ms. Donna Olford of Plans4Wine
Sent via email: dboldford@aol.com

From: Anthony Hicke and Edward Linden
Richard C. Slade & Associates LLC (RCS)

Re: Revised Results of Tier 3 Napa County Water Availability Analysis for a
Winery Use Permit Modification at the A & B Vineyards Property
Napa County APN 034-190-040
5125 Solano Avenue, Napa County, CA

Executive Summary

Arrow & Branch Vineyards is applying for a Winery Use Permit Modification for the subject property, and a Tier 3 Water Availability Analysis (WAA) is required for the proposed project. A Tier 3 WAA is required because the subject project is supplied with groundwater from a well (the Project Well) that is within 1,500 feet of a portion of Dry Creek that has been identified by the County as a "Significant Stream". Napa County personnel have also requested that the subject Tier 3 WAA also consider the onsite Easement Well. Groundwater accessible to the Project Well and the Easement Well is not hydraulically connected to the proximal portion of Dry Creek. This lack of connection is demonstrated by several factors, including:

- Recent available groundwater depth measurements in the Project Well and the Easement Well have been much lower in elevation than the bed elevation of Dry Creek near these wells, despite water in the Creek frequently being present.
- The Project Well is constructed with a deep surface seal and a screen depth that begins below the bottom of the entire alluvial aquifer system, whereas the Easement Well is constructed with a shallower surface seal and all of its screens below the shallow alluvial aquifer system. Between the bed of Dry Creek and the deeper aquifer materials accessible to these wells, multiple low permeability strata exist. These low permeability strata provide a natural separation, or impediment, between the creek and the aquifers accessed by the onsite wells; this results in a disconnection of these aquifers from the overlying shallow sediments upon which the creek flows. Pumping of the Project Well for the proposed project or pumping of the Easement Well for the uses of its water will thus not impact surface water flow in the proximal portions of Dry Creek, because surface water in Dry Creek is hydrogeologically disconnected from



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groundwater accessible to the Project Well and the Easement Well in the vicinity of the subject property.

- Pumping of the Project Well and the Easement Well will also not directly influence flows in the proximal portion of Dry Creek because:
 - 1) surface and subsurface data collected by others (LSCE, 2016 & 2022) demonstrate that groundwater in the deeper portion of the alluvial aquifer system and deeper formations is not directly connected to overlying surface water flows in Dry Creek;
 - 2) additional low-permeability strata exist above and below the lowest screened section of a nearby groundwater monitoring well, and above the screened sections of the Project Well and the Easement Well; and
 - 3) the Project Well and the Easement Well, as constructed, can only extract groundwater from earth materials beneath most, if not all, of those additional low-permeability strata.

According to the WAA Guidance document (Napa County, 2015), the Tier 3 analysis has been satisfied because a lack of hydraulic connection has been demonstrated between the Project & Easement Wells and the Significant Stream within 1,500 feet (ft) of these wells.

Introduction

This Memorandum presents the key findings and conclusions by Richard C. Slade & Associates LLC, Consulting Groundwater Geologists (RCS) regarding a Tier 3 Water Availability Analysis (WAA) for a proposed Winery Use Permit Modification at the A & B Vineyards Property, on the parcel identified by Napa County Assessor's Parcel Number (APN) 034-190-040 (referred to herein as the "subject parcel". The parcel boundaries presented herein were derived from publicly available parcel data (Napa County, 2024b). This Memorandum has been prepared to evaluate the effects, if any, that pumping the Project Well or the Easement Well might impart on surface water flows in the nearby Significant Stream.

Background

RCS prepared this document to provide conformance with Napa County Tier 3 WAA requirements (Napa County, 2015 & 2024a) following a 2022 Tier 1 WAA report prepared by the project engineer, Applied Civil Engineering Incorporated (ACE). ACE prepared that Tier 1 WAA to facilitate acquisition of a Winery Use Permit Modification for the permitted onsite winery, titled "Tier 1 Water Availability Analysis for the A & B Vineyards LLC Winery Use Permit Modification", dated January 6, 2022 (ACE, 2022). Although RCS relied on data contained within the Tier 1 WAA by ACE for the subject Tier 3 WAA Memorandum, RCS does not opine herein on that Tier 1 WAA work by ACE, and RCS does not augment or confirm that Tier 1 WAA work.

A Tier 3 WAA is required for the subject Use Permit Modification because the Project Well that will be used to supply groundwater to the subject winery lies within a County-defined Significant Stream 1,500-foot buffer area (PBES & LSCE, 2023b). Another active water well exists onsite, referred to herein as the Easement Well. RCS understands that groundwater extracted from the Easement Well is solely provided to an adjacent parcel. Groundwater pumped from the Easement Well is not currently used to meet any onsite demands, and it will not be used to meet any onsite



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demands in the future. However, Napa County personnel have requested that the Easement Well also be considered in the subject Tier 3 WAA.

Description of Subject Property

Figure 1, “Regional Map” shows the subject property on a small scale basemap of the area. Key features shown in the view of Figure 1 include the boundary of the subject parcel (Napa County, 2024b), the location of the Project Well, the location of the Easement Well, the State Department of Water Resources Bulletin 118 boundary of the local groundwater basin (DWR, 2021a), the locations of County-identified Significant Streams (PBES & LSCE, 2023a), and the 1,500-foot (ft) buffers around County-identified Significant Streams (PBES & LSCE, 2023b). The 1,500-ft Significant Stream buffer that encompasses the subject property was generated by the County around Dry Creek. Surface water in the portion of Dry Creek near the subject property flows, when present, along a northeasterly path towards the confluence with Hopper Creek. Near that junction, Dry Creek gradually curves southward until it ultimately discharges into the Napa River, more than two miles downstream from the Project & Easement Wells.

Figure 2, “Property Map”, and Figure 3, “Geologic Map”, show several of the same data depicted on Figure 1, with some additional features that include: the approximate locations of several known or possible nearby offsite wells owned by others with available driller’s logs; the location of a nested monitoring well associated with the Napa Valley Subbasin GSP (Groundwater Sustainability Plan) (LSCE, 2022); a nearby stream gaging station on Dry Creek for which data are available from Napa OneRain (Contrail, 2024); the alignment of a hydrogeologic cross section prepared by RCS for this Memorandum; and the alignments of two geologic cross sections prepared by others (LSCE & MBK, 2013; LSCE, 2022) that were used for reference, but not reproduced herein. The known and possible offsite wells with driller’s logs shown on these Figures were identified based on various sources, including a search of available records on the Napa County electronic document retrieval website (PBES, 2024). Among the documents used to help locate these known and possible offsite wells were State Well Completion Reports (WCRs, or “driller’s logs”), Napa County driller’s logs, and Napa County well permits.

Creek Flow Characteristics

RCS reviewed detailed data records found on the Napa OneRain website (Contrail, 2024) for flows in Dry Creek that occurred between April 2013 and May 2024. These flows were recorded by a stream gaging station known as “Dry Creek at Hwy 29” that is located about 2,100 ft northeast of the Project Well, where Dry Creek flows under State Highway 29. Twelve years¹ of flow data (May 2013 – April 2024) are summarized on Figure 4, below. The percentages shown atop each data column in Figure 4 represent the proportion of average annual flow that occurred during a given month, on average, during the period of record.

¹ Incomplete months at the beginning (April 2013) and end (May 2024) of the period of record are not included in the summarized data shown on Figure 4.



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Figure 4: Average Monthly Flow in Dry Creek at Highway 29 (May 2013 - April 2024)

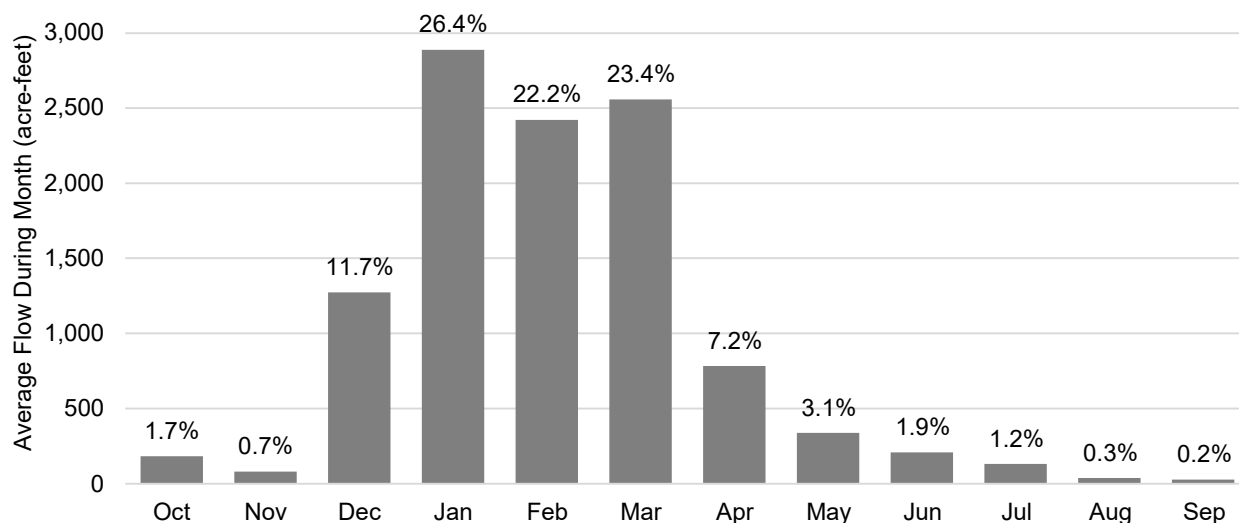


Figure 4 demonstrates that the vast majority of flow (nearly 84%) in Dry Creek near the subject property tends to occur between December and April, coinciding with the strong seasonality of regional precipitation. It is important to note that this section of the creek is shown as “intermittent” in the National Hydrographic Dataset (USGS, 2023). Therefore, while Figure 4 above shows that, on average, minor flows have occurred in Dry Creek in the summer and fall, the Creek is generally expected to be dry (not flowing) during the drier months of any given year. Significant flow was observed in the creek near the Project Well and the Easement Well by an RCS geologist during the March 19, 2024, visit to the subject property. However, only ponded water was reported in the creek near these wells by ACE personnel during their July 7, 2025, visit to the subject property.

Hydrogeology

Hydrogeologic Setting

Groundwater basin boundaries in California are defined and designated by the State Department of Water Resources (DWR) in data found in their Bulletin 118, “California’s Groundwater” (2021a). Those DWR groundwater basin boundaries are the same as those used to define groundwater basin boundaries for the purposes of Groundwater Sustainability Plan (GSP) preparation for basins throughout the State, including for the Napa Valley Subbasin (LSCE, 2022). The entire subject property, including the location of the Project & Easement Wells, is within the boundaries of the Napa-Sonoma Valley Subbasin, which is a subbasin of the Napa-Sonoma Valley Groundwater Basin (see Figure 1).

A regional geologic map by Wagner & Gutierrez (2017) is available from the California Geological Survey (CGS) and was adapted to create Figure 3. As shown on Figure 3, most of the ground surface of the subject property, including the locations of the Project Well and the Easement Well, was mapped by others as younger Alluvial Fan Deposits (Qhfy). The other geologic units at ground surface within the boundary of the subject property are Stream Channel Deposits (Qhc) and older Alluvial Fan Deposits (Qhf). Qhc deposits are often found along the beds of active alluvial stream channels, as they are within the subject property. Qhf are located to the northwest



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of the Qhc deposits at ground surface, horizontally separating the more westerly volcanics within the map area from the Qhc deposits.

Interpreted to underlie the alluvial deposits beneath the subject property, but not shown in the surficial mapping of Wagner & Gutierrez (2017), is a deposit of sands and clays likely derived from reworked volcanic ash (Tss/h) associated with the Sonoma Volcanics (LSCE, 2016). LSCE & MBK (2013) describe Tss/h as a “sedimentary rock” that is comprised of “Sand & Clay”; this unit is shown on Cross Section D-D’ of LSCE & MBK, and on Cross Section 2A-2A’ of LSCE (2022).

In the higher elevation western portion of the Figure 3 map area, various rocks of the Sonoma Volcanics have been mapped at ground surface separated from the subject property by several northerly trending geologic faults associated with the West Napa fault zone. These rocks are shown as Andesite Flow Breccia of Stags Leap (Psvbsl) in the highest-elevation, most western portion of the map area, and Rhyolite to Dacite Flows and Tuff (Tsvr) immediately east of the Psvbsl exposure. Tsvr is interpreted to directly underlie the Tss/h deposits proximal to and beneath the subject property. At great depth beneath Tsvr, geologically ancient basement rocks of Cretaceous to Jurassic age are known to exist. However, none of the boreholes of the wells shown on Figure 5 (discussed further below) are likely to have encountered those basement rocks, and those ancient rocks are not shown on Cross Section D-D’ of LSCE & MBK or on Cross Section 2A-2A’ of LSCE (2022). Therefore, those geologically ancient rocks do not play a direct role in groundwater availability to either the Project Well or the Easement Well, and they are thus not discussed further herein.

Hydrogeologic Cross Section and Well Construction

Figure 5, “Cross Section A-A’”, a scaled schematic illustration, was created to show the subsurface hydrogeologic conditions along the alignment of the section, as interpreted by RCS. The alignment of Cross Section A-A’ can be viewed on Figures 2 & 3; this alignment was configured such that it passes through the Project Well and the mapped location of Dry Creek (LSCE & PBES, 2023a) along the shortest straight-line distance between the two. It was extended beyond these features so that additional information could also be included on Figure 5.

Hydrogeologic interpretations shown on Figure 5 were made, primarily, based on: the geologic mapping by others described above; Cross Section D-D’ in LSCE & MBK (2013; orange line on Figure 3) and Cross Section 2A-2A’ in Section 5 of the local GSP (LSCE, 2022; pink line on Figure 3); and RCS interpretation of the driller’s descriptions of drill cuttings reported on driller’s logs for the wells shown on Figure 5. The driller’s logs for the onsite wells were provided by ACE, whereas the driller’s logs for the offsite wells were acquired from DWR (2021b) and Napa County PBES (2024).

Figure 5 shows the locations and key construction details of several wells along Cross Section A-A’ (referred to as A-A’ herein) for which driller’s logs were available, including the onsite Project Well, the onsite Easement Well, and several nearby offsite wells. The wells shown on Figure 5 that did not directly intersect with the alignment of A-A’ were projected onto A-A’ at their respective ground surface elevations²; the distance and direction of projection are shown for each of those wells, as applicable. Figure 5 is also notated with several surface

² The datum for all of the elevations reported in this document is the North American Vertical Datum of 1988 (NAVD88).



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features that intersect with A-A', including: the nearby Significant Stream location as derived from the Napa County data set (PBES & LSCE, 2023a), the topographic low³ in which Dry Creek actually flows, and the subject property boundaries. The data source for the ground surface elevations on Figure 5 was a high-resolution digital elevation model (DEM) with a one-meter horizontal resolution (USGS, 2020b). Also shown on A-A' are the available water level depth measurements for the wells shown on the section, as derived from measurements shown on the respective driller's logs, from pumping test data for the Project Well, from the March 19, 2024, RCS site visit, and from the July 7, 2025, ACE site visit.

Review of driller's logs for the wells shown on Figure 5 revealed the presence of abundant fine-grained, low-permeability clay-rich deposits between the bed of Dry Creek and the deeper portion of Sonoma Volcanics (Tsvr) along A-A'. Those driller's logs are included in the Appendix to this Memorandum, with the fine-grained material interpretations highlighted thereon. RCS interprets these clay-rich, fine-grained deposits to comprise a substantial portion of the Qhfy, Qhf, and Tss/h deposits beneath the subject property. However, based on review of the driller's logs alone, it is difficult to accurately determine the contact depth between Qhfy, Qhf, and Tss/h for any of the wells shown on Figure 5. The lithologies of these three units are somewhat similar, and driller's log descriptions tend not to provide the detail or consistent descriptions of drill cuttings of the earth materials that are encountered in boreholes that are necessary for accurate interpretation. Fortunately, two nearby geologic cross sections by LSCE & MBK (2013) and LSCE (2022) are available (alignments shown on Figure 3), upon which the subsurface interpretations and subsurface contact patterns on Figure 5 were augmented; these two sections were used to help estimate a contact depth between the finer grained, shallower deposits and the deeper Tsvr materials. Furthermore, a detailed geologic log (LSCE, 2016) for the nearby monitoring well borehole that contains the GSP nested monitoring well completions "216s-swgw2" and "217d-swgw2" also supports the presence of abundant clay-rich deposits between the bed of Dry Creek and the underlying Tsvr materials. For example, in the borehole of the 216s-swgw2 and 217d-swgw2 completions, between the depths of 51 ft and 73.5 ft bgs (below ground surface), the geologic log by others shows the earth materials to be clays that are composed of ">95% medium plastic fines". In that same borehole, clay with at least 80% medium plastic fines was reported over the depth intervals of 7-16 ft bgs, 47-49.5 ft bgs, 73.5-77 ft bgs, 79-79.5 ft bgs, and 81-100 ft bgs. RCS synthesized data presented on those cross sections by others with the driller's logs for the wells shown on Figure 5 and the above-mentioned GSP monitoring well borehole log into the interpretations of subsurface materials by RCS that are discussed herein and shown on Figure 5.

The topmost screened section of the Project Well reportedly begins at a depth of 95 ft bgs (elevation of 17.13 ft NAVD88). This depth is well within the RCS-interpreted depth range of the volcanic materials along Section A-A', and nearly entirely within the deeper portion of the Sonoma

³ The alignment of Dry Creek in the Significant Streams dataset is approximately 56 ft farther from the Project Well along A-A' than the DEM-derived topographic low in which Dry Creek actually flows. Review of aerial imagery generally agrees with the DEM-derived alignment of Dry Creek near the subject property better than it does with the County's Significant Streams alignment of Dry Creek. Furthermore, the ground surface elevation of the Significant Streams location of Dry Creek along A-A' is about 14-ft higher than the elevation of the topographic low along A-A'. If the elevation comparisons presented herein were based on the elevation where A-A' intersects the Significant Streams version of Dry Creek, larger differences would result for these comparisons. To present a more conservative analysis, all elevation comparisons to Dry Creek have been made with respect to the topographic low along A-A', rather than to the elevation of the Significant Streams alignment (PBES & LSCE, 2023a) of Dry Creek along A-A'.



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Volcanics (Tsvr). As noted above, abundant fine-grained materials have been reported in the nearby alluvium and in the shallower portions of the volcanic sedimentary materials (Tss/h). Based on that relatively deep screen top-depth in the Project Well, its 50-ft deep sanitary seal, and the presence of low permeability strata between the bed of Dry Creek and the top of Tsvr beneath the subject property, Dry Creek is geologically “separated” from groundwater accessible to the Project Well.

The topmost screened section of the Easement Well reportedly begins at a depth of 40 ft bgs (elevation of 71.92 ft NAVD88). This depth is immediately above the RCS-interpreted contact between Qhf and Tss/h, but still below significant fine-grained deposits described in the boreholes of both the Easement Well and the nearby GSP monitoring wells. Based on the presence of low permeability sediments that exist between the bed of Dry Creek and the top of the shallowest screened section of the Easement Well, Dry Creek is geologically “separated” from groundwater accessible to the Easement Well.

Abundant fine-grained, clay-rich deposits exist in the Qhfy, Qhf, and Tss/h deposits that provide a separation between the groundwater accessible by the Project & Easement Wells, and any surface water that may be present in Dry Creek near the subject property. Dry Creek is not connected to groundwater accessible to the Project & Easement Wells because these onsite wells are primarily screened against (derive groundwater from) the deeper rocks of the Sonoma Volcanics (Tsvr), far below the overlying, vertically isolated shallow alluvial deposits over which Dry Creek flows. Thus, pumping of the Project Well for the project, or pumping of the Easement Well for the offsite demands that it provides, will not impact surface water flow in the proximal portions of Dry Creek, because surface water in Dry Creek is hydrogeologically disconnected to groundwater accessible to the Project & Easement Wells in the vicinity of the subject property.

Groundwater Levels

Review of the water levels that have been measured in the Project & Easement Wells, and their relationship to the elevation of the nearby creek bed, demonstrates further evidence in support of a hydraulic disconnect between groundwater accessible to these wells and surface flows in Dry Creek (see Figure 5). The water level data shown on Figure 5 were derived from the driller’s logs for the depicted wells, from water levels measured in the onsite wells by an RCS groundwater geologist during the site visit on March 19, 2024, and from water level measurements in the onsite wells by ACE during their July 7, 2025, visit to the subject property.

The elevation of the water level measured in the Project Well in March 2024 was 87 ft below the bed of Dry Creek along A-A’ (the “topographic low”), whereas the water level elevation preceding the post-construction pumping test in the Project Well reported for November 2020 was 72 ft below the bed of Dry Creek along A-A’. These measurements were made at the end of the wet season (March) and at the end of the dry season (November), respectively. ACE attempted to measure an additional water level in the Project Well during their July 2025 site visit, near the middle of the dry season. However, ACE were unable to obtain a measurement because an obstruction was encountered in the well at a depth of approximately 181 ft bgs (168 ft below the elevation of the bed of Dry Creek along A-A’) that prevented their manual water level sounder from contacting the groundwater surface in the well. Therefore, the water level in the Project Well on July 7, 2025, must have been more than 168 ft lower in elevation than the bed of Dry Creek along A-A’. Despite the differing hydrologic conditions under which the three available water level



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depth measurements were obtained, the water surface in the Project Well has consistently been much lower in elevation than the bed of Dry Creek along A-A', by at least 72 ft. If Dry Creek was hydraulically connected to the groundwater accessible to the Project Well, the elevation of the water in the well would be expected to be at or near the elevation of the Creek when the Creek was observed to be flowing, but that is not the case. Dry Creek was indeed observed to be flowing near the Project Well at the time of the March 2024 water level measurement, but only ponded water (i.e., no-flow conditions) was reported in Dry Creek by ACE during their July 2025 site visit. Thus, comparison of available water level data for the Project Well to the bed elevation of Dry Creek where it is intersected by A-A' shows that surface water in this portion of Dry Creek, when present, is disconnected from the groundwater accessible to the Project Well.

The first known water level measured in the Easement Well was obtained shortly after the well was completed, in June 1990, per the corresponding WCR. The elevation of that water level was 7 ft below the bed elevation of Dry Creek where it is intersected by A-A'. Creek flow observations are not available for that time, so a comparison with creek flow conditions is not possible. However, it is the experience of RCS that initial the post-construction water level reported on a WCR can be shallower than the actual static water level in the well, which may only be revealed after initial pumping development operations remove remnant drilling fluids and allow the water column in the well to equilibrate with the screened aquifer system(s). It is also likely that the regional groundwater level was much shallower in 1990 than under present conditions because of the voluminous groundwater extractions that have occurred regionally over the years. In contrast, the water level measured by the RCS geologist in March 2024 in the Easement Well was 154 ft below the bed elevation of Dry Creek. Similarly, the July 2025 water level in the Easement Well by ACE was 150 ft below the bed elevation of Dry Creek.

The elevation of the water level measured by the RCS geologist in March 2024 in the Easement Well was considerably deeper than the water level measured in the Project Well that day, whereas the July 2025 measurements by ACE revealed the opposite relationship between the water level elevations in these onsite wells. The causes for these water level differences between the onsite wells are not immediately apparent, but it is important to note that all of the recent water level measurements in the onsite wells have been far lower in elevation than the nearby bed of Dry Creek. The Project Well is screened from 95-535 ft bgs, whereas the Easement Well is screened over two separate intervals: from 40-50 ft bgs and from 140-340 ft bgs (see Figure 5). One possibility is that the differences in water levels between the onsite wells in both pairs of measurements were caused by recent pumping activity in the wells. For the March 2024 measurements, the Easement Well may have been pumped not long before the measurement was taken, whereas the Project Well may have been pumped not long before the July 2025 measurement was taken. For the July 2025 measurements, it is also possible that both the Project & Easement Wells had been pumped shortly before the measurements were made, thereby lowering the water levels in both wells. However, it is additionally possible that a confined portion of the Tsvr aquifer that is accessible to the Project Well, but not the shallower Easement Well, could produce the observed difference in water levels in March 2024, and that the piezometric surface of the portion of the Tsvr aquifer is penetrated by only the Project Well had fallen by the time of the July 2025 measurements.

Despite the considerable variation between the June 1990 and more recent (i.e., March 2024 and July 2025) water levels in the Easement Well, the Easement Well is effectively hydraulically disconnected from flows in Dry Creek because, as described by the well driller on the Easement



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Well's WCR, the upper 15 ft of the borehole were "clay". Furthermore, the available water level measurements in the Easement Well have consistently been lower in elevation than the nearby bed of Dry Creek; particularly so for the recent March 2024 and July 2025 measurements. Thus, based on water level elevation differences and the presence of fine-grained materials, groundwater accessible to the Easement Well is disconnected from surface water flows in Dry Creek.

Napa Valley Subbasin Groundwater Sustainability Plan

Groundwater/Surface Water Interactions

The Napa Valley Subbasin Groundwater Sustainability Plan (GSP) presents data and analysis regarding interactions between groundwater and surface water, evaluated at various locations along watercourses within and tributary to the Napa Valley (LSCE, 2022). One of the stations used by the local Groundwater Sustainability Agency (GSA) to monitor those interactions is a dual-completion nested monitoring well, referred to therein as "Site 2 at Dry Creek". The location of that nested monitoring well is shown on Figures 2 & 3 of this Memorandum as "216s-swgw2" and "217d-swgw2" for the shallow and deep completions, respectively.

According to the 2022 Napa Valley Subbasin GSP: *"Data collected from Site 2 at Dry Creek show groundwater levels in both the shallow and deep casings are below the stream thalweg elevation during a majority of the monitoring period, indicating this location as a predominantly perennially losing stream (Figure 6-15). The USGS has mapped Dry Creek as an intermittent stream, therefore, recharge to the groundwater system is likely to occur at this location during the periods that water is flowing at this site."* (LSCE, 2022)

The section of Dry Creek proximal to the subject property is reported to be predominantly a losing stream relative to the alluvial aquifer system (LSCE, 2022), and a downward gradient from the shallow to deep completions was always present during the study period within the 80-ft portion of alluvium monitored by the wells at "Site 2 at Dry Creek".

Based on the detailed geologic logging of the borehole into which 216s-swgw2 and 217d-swgw2 were constructed, and on RCS's interpretation of several other driller's logs drilled proximal to the subject property (for wells shown on Figure 5) abundant fine-grained materials are present beneath the subject property. This is true in both the alluvial sediments (Qhfy and Qhf) and the underling Tss/h materials. These fine-grained materials likely act as aquitards, significantly reducing the potential for connectivity and vertical flow between surface water in Dry Creek and groundwater in the aquifer systems beneath the subject property. Monitoring data for the "Site 2 at Dry Creek" well completions in LSCE (2016 & 2022) demonstrates that Dry Creek is predominantly a losing stream, and those data demonstrate clear evidence of a disconnection between groundwater in the deeper alluvium accessed by "217d-swgw2" and groundwater in the shallower alluvium accessed by "216s-swgw2". In particular, temperature data on Figure 6-112 of the GSP show that the temperature of deeper alluvial groundwater does not apparently fluctuate, whereas the temperature of shallow alluvial groundwater appears to fluctuate slightly in response to the influence of surface water. Similarly, specific conductance data on Figure 4.6 of LSCE (2016) show likely influence of shallow alluvial groundwater by surface water, but little to no direct influence on deeper alluvial groundwater due to the effects of surface water.

Furthermore, according to the Napa County Groundwater Sustainability Annual Report – Water Year 2019: *"Given that most groundwater withdrawals in Napa Valley occur from depths greater*



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than 50 feet, the groundwater level data at Site 2 indicate how reductions in groundwater levels in deeper aquifer zones do not always result in equivalent water level reductions at the water table, where stream aquifer interactions can occur. Data collected at Site 2 show that this is true even at times of the year when the streambed is dry and groundwater recharge is not occurring along the stream.” LSCE (2020)

The bottom-depth of the screened section of the deeper nested well completion at “Site 2 at Dry Creek” only extends to a depth of 81 ft (elevation of 22.4 ft NAVD88), which is shallower than the top-elevation of the uppermost screen section of the Project Well (17.1 ft NAVD88), although it is deeper than the top-elevation of the uppermost screened section of the Easement Well (71.9 ft NAVD88). Furthermore, no portion of the screened section of the Project Well is set against alluvial materials (i.e., Qhc, Qhfy, Qhf), and very little, if any, of the screened section of the Easement Well is set against alluvial materials. In contrast, the entire screened section of “217d-swgw2” is reportedly within alluvial materials. Pumping of the Project & Easement Wells will therefore not directly influence flows in the proximal portion of Dry Creek because: 1) the data in LSCE (2016 & 2022) demonstrate that the deeper portion of the alluvial aquifer system is never directly connected to overlying surface water flows in Dry Creek; 2) additional low-permeability strata exist above and below the screened sections of “217d-swgw2”, and above the screened sections of the Project & Easement Wells; and 3) the Project & Easement Wells can only extract groundwater from earth materials beneath most, if not all, of those additional low-permeability strata.

In the Napa Valley GSP (LSCE, 2022), a discussion of the potential hydraulic connection between groundwater and creeks within and tributary to the Napa Valley is presented, as simulated by computer modeling. Figure 6-123b therein shows the “average annual hydraulic connection” of various watercourses in the region. On that Figure, the portion of Dry Creek near the subject property is shown to possibly undergo up to “> 13 weeks – 26 weeks” of average annual hydraulic connectivity, suggesting that surface water flows in this portion of Dry Creek may be connected to underlying shallow groundwater within the alluvial aquifer for up to 50% of the year. However, other evidence and discussion by LSCE in the GSP help to clarify that the connection is to shallower alluvial deposits only, and that a connection does not extend to deeper alluvial and Sonoma Volcanics deposits below the shallow alluvium. As discussed above, the screened sections of the Project & Easement Wells are disconnected from the shallow alluvium that LSCE (2016 & 2022) showed to be seasonally connected to the overlying surface water in Dry Creek. This is yet another piece of evidence that shows how the groundwater accessible to the Project & Easement Wells is disconnected from surface water flows in Dry Creek in the vicinity of the subject property.

As demonstrated above, both water level data and geologic data support the assertion that surface water flow in the portion of Dry Creek that is proximal to the subject property is hydraulically disconnected from the relatively deep groundwater accessible to the Project & Easement Wells. As shown on the Figure F-2 “Decision Tree” in the County’s WAA Guidance Document (Napa County, 2015), and as described in the Guidance Document text, the “Groundwater/Surface Water Evaluation is complete”, because the Project & Easement Wells are not hydraulically connected to surface water(s).



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Conclusion

Groundwater accessible to the Project & Easement Wells is not hydraulically connected to, and will not directly affect surface water flows in, the proximal portion of Dry Creek. This lack of connection is demonstrated by several factors, including:

- Available groundwater depth measurements in the Project Well have been at least 72 ft lower in elevation than the bed of Dry Creek, as measured along Cross Section A-A'. In March 2024, despite flow being present in the proximal portion of Dry Creek, the water level in the Project Well was 89 ft below the bed of the creek. In July 2025, the water level in the Project Well was more than 168 ft lower in elevation than the bed of Dry Creek, and ponded water was present in the nearby portion of the creek.
- Available groundwater depth measurements in the Easement Well have been at least 7 ft lower in elevation than the bed of Dry Creek, as measured along Cross Section A-A', and more recent water levels have been much deeper. In March 2024, despite flows being present in the proximal portion of Dry Creek, the water level in the Easement Well was 153 ft below the bed of the creek. In July 2025, the water level in the Easement Well was 150 ft below the bed of Dry Creek, and ponded water was present in the nearby portion of the creek.
- The Project Well is constructed with a 50-foot-deep surface seal and a screen depth that begins below the bottom of the alluvial aquifer system. Between the bed of Dry Creek and the deeper aquifer materials accessible to the Project & Easement Wells (primarily Tsvr), low permeability strata have been documented in, and inferred from, various data sources. Therefore, Dry Creek is not connected to groundwater accessible to the Project & Easement Wells. Pumping of the Project Well for the proposed project will not impact surface water flow in the proximal portions of Dry Creek because surface water in the creek is hydrogeologically disconnected from groundwater accessible to the Project Well in the vicinity of the subject property. Similarly, pumping of the Easement Well to meet its existing demands will not impact surface water flow in the proximal portions of Dry Creek because surface water in the creek is hydrogeologically disconnected from groundwater accessible to the Easement Well in the vicinity of the subject property.
- Pumping of the Project & Easement Wells will not directly influence flows in the proximal portion of Dry Creek because: 1) surface and subsurface data collected by others (LSCE, 2016 & 2022) demonstrate that groundwater in the deeper portion of the alluvial aquifer system (and therefore also the underlying earth materials) is not directly connected to overlying surface water flows in Dry Creek; 2) additional low-permeability strata exist above and below the screened sections of "217d-swgw2", and above the screened sections of the Project & Easement Wells; and 3) the Project & Easement Wells, as constructed, can only extract groundwater from earth materials beneath most, if not all, of those additional low-permeability strata.

According to the WAA Guidance document (Napa County, 2015), the Tier 3 analysis has been satisfied because a lack of hydraulic connection between the Project & Easement Wells and the Significant Stream within 1,500 feet of these wells has been demonstrated.



REVISED MEMORANDUM

Closure/Disclaimer

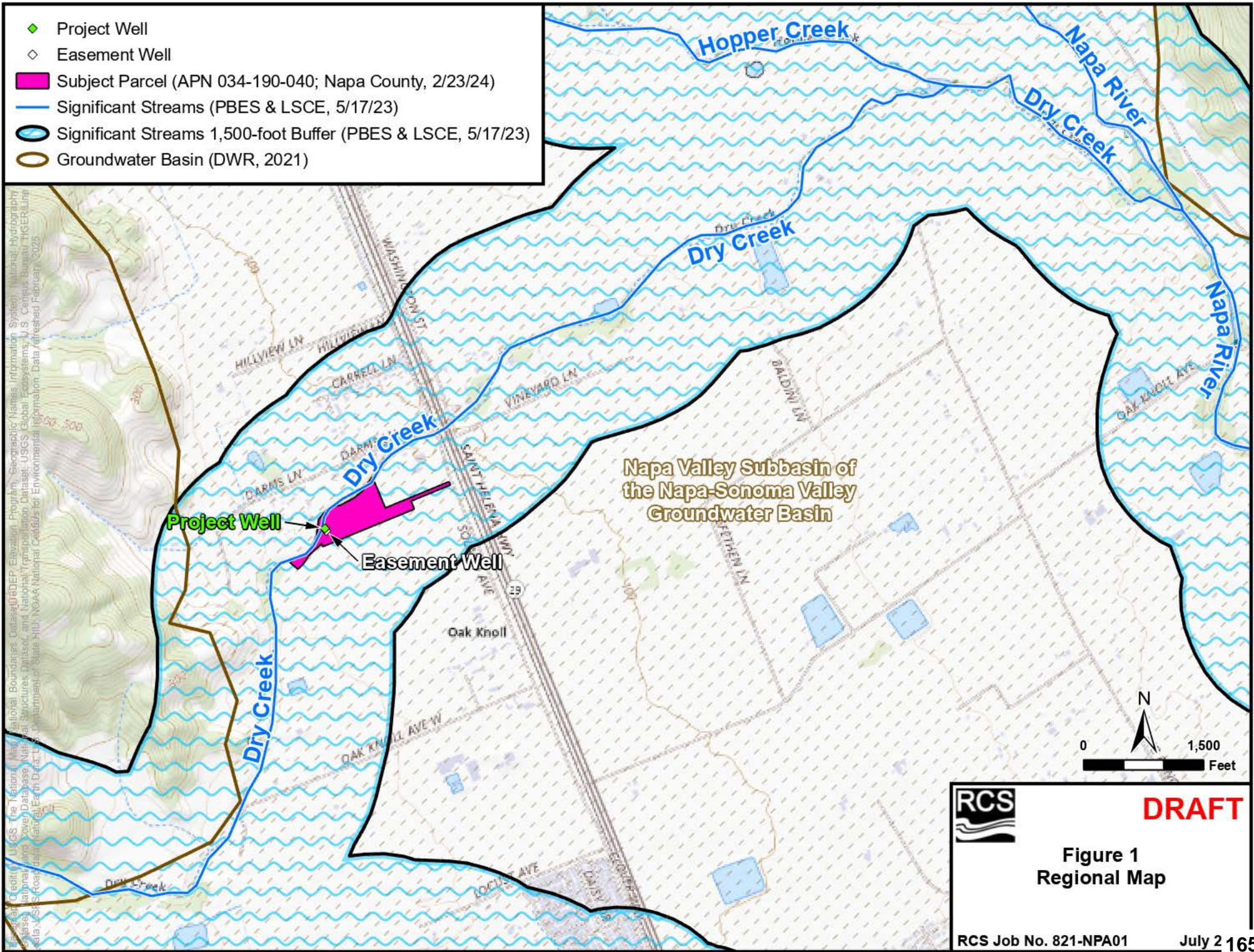
This Memorandum regarding a Tier 3 WAA for a Winery Use Permit Modification at the A & B Vineyards property located at 5125 Solano Avenue, in Napa County, CA (APN 034-190-040) has been prepared for A & B Vineyards and applies only to the evaluation of the subject property for the requirements discussed herein. This Memorandum has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, and in this or similar localities. No other warranty, either express or implied, is made to the calculations, conclusions, or professional advice presented herein.



REVISED MEMORANDUM

References:

- ACE, 2022 (Applied Civil Engineering Inc.). *Tier I Water Availability Analysis for the A & B Vineyards LLC Winery Use Permit Modification*. Located at: 5215 Solano Avenue Napa, CA 94558 Napa County APN 034-190-040. Prepared for: A&B Vineyards LLC. January 6, 2022.
- Contrail, 2024. *Napa OneRain Website*. Stream Flow Measurements for Dry Creek at Hwy 29 (40115) Station. Accessed May 3, 2024.
https://napa.onerain.com/site/?site_id=7011&site=38ef7961-d2fe-4be1-8110-d3130f419ee0
- DWR, 2021a (California Department of Water Resources). *Bulletin 118 California Groundwater Basins*. Version 6.2. Published 12/6/2021. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Bulletin-118-Groundwater-Basin-Boundary-GIS-Data---v6_2.zip
- , 2021b. *Well Completion Reports Webpage*. Accessed in 2021.
<https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Completion-Reports>
- LSCE, 2016 (Luhdorff & Scalmanini Consulting Engineers). *Napa County groundwater-Surface Water Monitoring Facilities Project Report*. October 2016. Prepared for Napa County.
- , 2020. *Napa County Groundwater Sustainability Annual Report – Water Year 2019*. April 2020. Prepared for Napa County Groundwater Sustainability Agency and Napa County Department of Public Works.
- , 2022. *Napa Valley Subbasin Groundwater Sustainability Plan*. January 2022. Prepared For Napa County Groundwater Sustainability Agency.
- LSCE & MBK, 2013 (LSCE & MBK Engineers). *Updated Hydrogeologic Conceptualization and Characterization of Conditions*. January 2013. Prepared for Napa County.
- Napa County, 2015. *Water Availability Analysis (WAA) — Guidance Document*. Prepared for Napa County Board of Supervisors. Adopted May 12, 2015.
- , 2024a. *Interim Napa County Well Permit Standards and WAA Requirements - January 2024*. January 10, 2024. <https://www.countyofnapa.org/DocumentCenter/View/25905/Well-Permit-Standards-and-WAA-Requirements--January-10-2024?bid>.
- , 2024b. *Parcels_public*. Last Updated 2/23/24. Downloaded 3/1/24 from: <https://gisdata.countyofnapa.org/>
- PBES, 2024 (Napa County Planning, Building & Environmental Services). *Electronic Document Retrieval | Napa County, CA*. Accessed in 2024. <https://services.countyofnapa.org/OBPBESPAV/Search/PBESDocs/index.html>
- PBES & LSCE, 2023a. *Significant Streams*. Feature Layer by PBES.Admin. Updated 5/17/2023.
<https://www.arcgis.com/home/item.html?id=3e3a0f5a59f147e1ae99723f8420f096>
- , 2023b. *Significant Streams_1500ft_Buffer*. Feature Layer by PBES.Admin. Updated 5/17/2023.
<https://www.arcgis.com/home/item.html?id=8f3927797b6f490c89a8b07778dfed6f>
- USGS, 2020a (U.S. Geological Survey). *USGS 1/3 arc-second n39w123 1 x 1 degree*. Digital Elevation Model (DEM) raster digital data. 3D Elevation Program (3DEP). Published 3/17/2020.
- , 2020b. *USGS one meter x55y425 CA NoCAL Wildfires B5b 2018*. Digital Elevation Model (DEM) raster digital data. 3D Elevation Program (3DEP). Published 3/18/2020.
- , 2020c. *Quaternary Fault and Fold Database of the United States*. Last updated 9/2/20.
<https://www.sciencebase.gov/catalog/item/589097b1e4b072a7ac0cae23>
- , 2023. *USGS National Hydrography Dataset Best Resolution (NHD) - California*. FileGDB format. Published 12/27/23. U.S. Geological Survey, National Geospatial Program.
- Wagner & Gutierrez, 2017 (Wagner, D.L., and Gutierrez, C.I.). *Preliminary Geologic Map of the Napa and Bodega Bay 30' x 60' Quadrangles, California*. 1:100,000-scale. California Geological Survey.



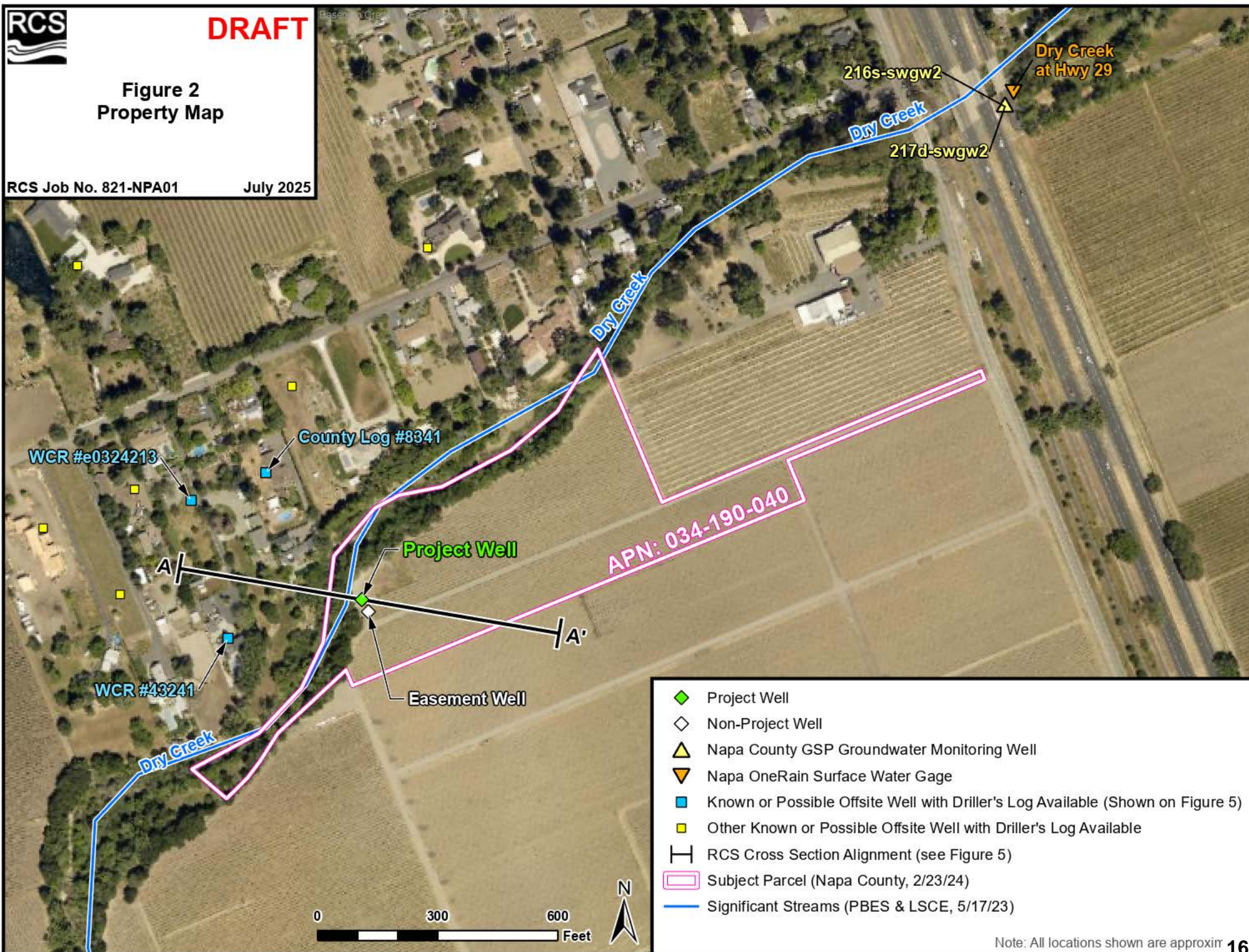


DRAFT

**Figure 2
Property Map**

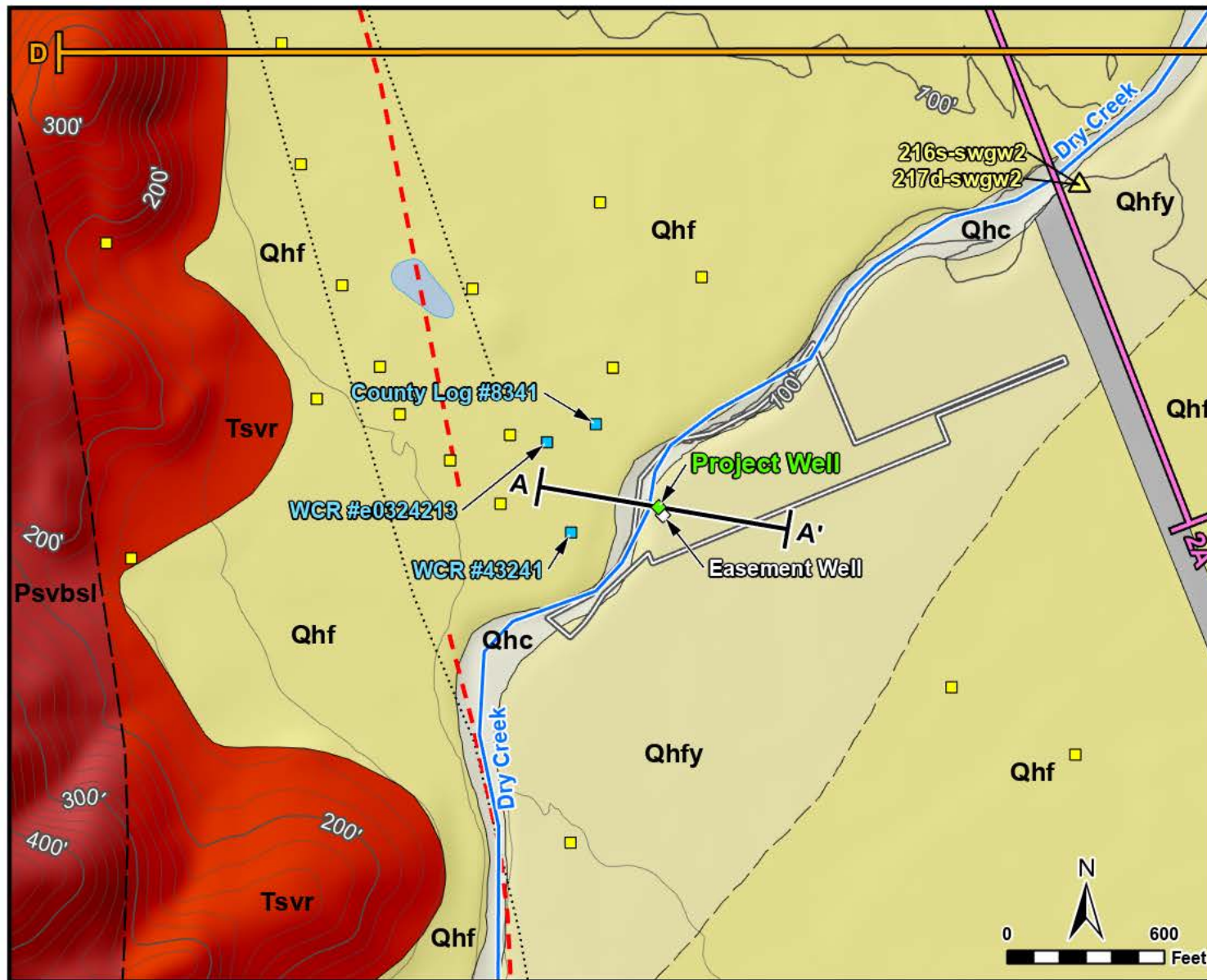
RCS Job No. 821-NPA01

July 2025



- ◆ Project Well
- ◇ Non-Project Well
- ▲ Napa County GSP Groundwater Monitoring Well
- ▼ Napa OneRain Surface Water Gage
- Known or Possible Offsite Well with Driller's Log Available (Shown on Figure 5)
- Other Known or Possible Offsite Well with Driller's Log Available
- RCS Cross Section Alignment (see Figure 5)
- Subject Parcel (Napa County, 2/23/24)
- Significant Streams (PBES & LSCE, 5/17/23)

Note: All locations shown are approximate



GEOLOGIC LEGEND

Alluvial Deposits

| | |
|-------------|---|
| Qhc | Stream channel deposits (late Holocene) |
| Qhfy | Alluvial fan deposits (latest Holocene) |
| Qhf | Alluvial fan deposits (Holocene) |

Sonoma Volcanics

| | |
|---------------|---|
| Psvbsl | Andesite flow breccia of Stags Leap (Pliocene) |
| Tsvr | Rhyolite to dacite flows and tuff (Pliocene, Miocene) |

--- Geologic contact, approximately located

— Geologic contact, certain

--- Fault, approximately located

..... Fault, concealed

Quaternary Faults (USGS, 2020c)

--- Moderately constrained location

Elevation Contours (Derived from USGS DEM, 2020a)

— 100-foot Contour (NAVD 88)

— 20-foot Contour (NAVD 88)

Geologic map adapted from: Wagner, D.L., & Gutierrez, C.I. (2017). Preliminary Geologic Map of the Napa and Bodega Bay 30' x 60' Quadrangles, California. California Geological Survey.

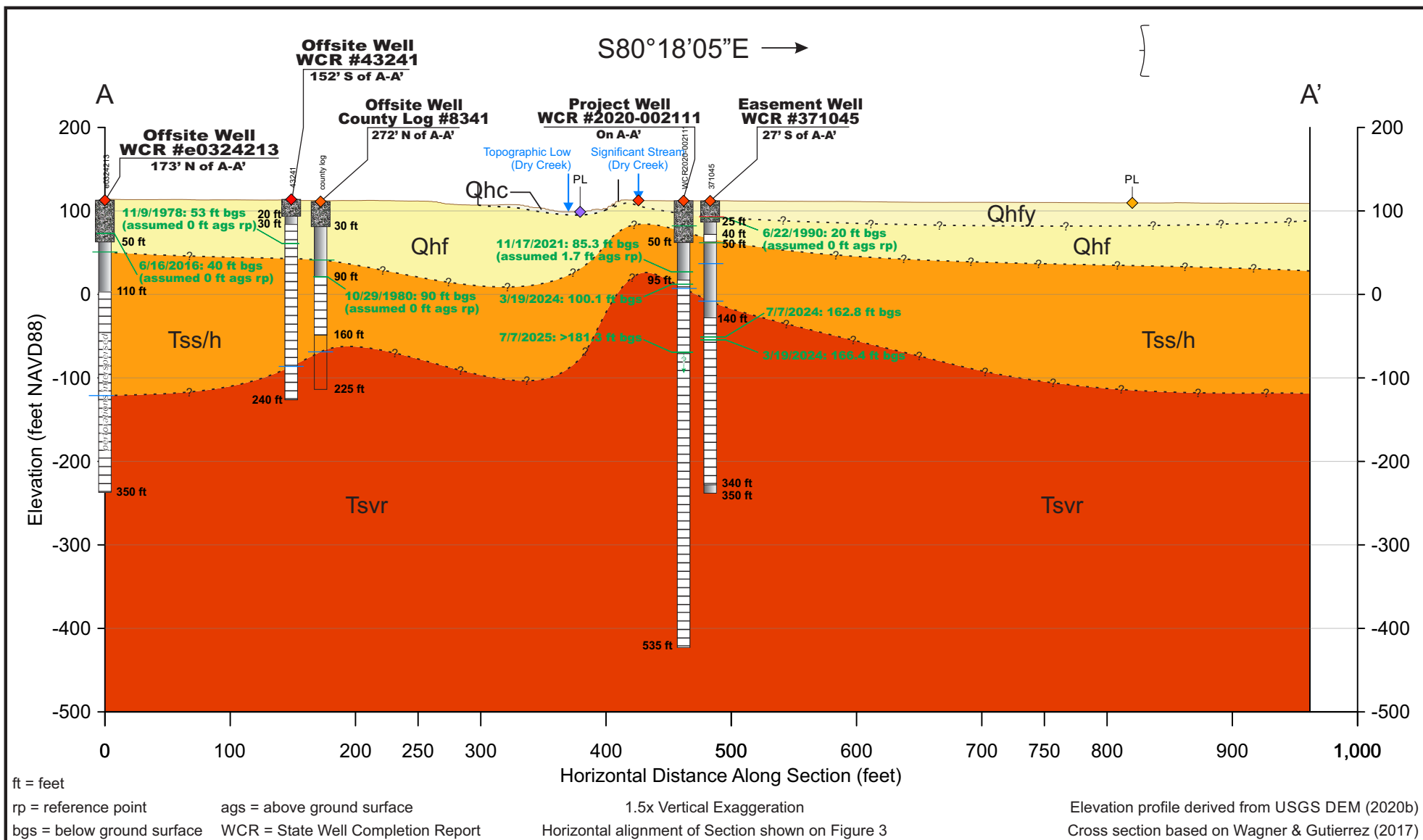
- | | |
|--|---|
| <p>▲ Napa County GSP Groundwater Monitoring Well</p> <p>— Approximate Cross Section Alignment (LSCE & MBK, 2013)</p> <p>— Approximate Cross Section Alignment (LSCE, 2022)</p> <p>◆ Project Well</p> <p>◇ Non-Project Well</p> | <p>■ Known or Possible Offsite Well with Driller's Log Available (Shown on Figure 5)</p> <p>■ Other Known or Possible Offsite Well with Driller's Log Available</p> <p>— RCS Cross Section Alignment (see Figure 5)</p> <p>— Significant Streams (PBES & LSCE, 5/17/23)</p> <p>— Subject Parcel (APN 034-190-040; Napa County, 2/23/24)</p> |
|--|---|



Figure 3
Geologic Map

Notes: Hillshade basemap derived from USGS DEM (2020a). All locations shown are approximate.

Cartographic Presentation by E. Linden. Spatial Reference Name: NAD 1983 StatePlane California II FIPS 0402 Feet.



DRAFT

Figure 5
Cross Section A-A'

Job No. 821-NPA01

July 2025



REVISED MEMORANDUM

APPENDIX

Driller's Logs for Wells on RCS Cross Section A-A' (Figure 5)

State of California
Well Completion Report
Form DWR 188 Submitted 2/13/2020
WCR2020-002111

Owner's Well Number 2020-1 Date Work Began 12/19/2019 Date Work Ended 02/04/2020
Local Permit Agency Napa County Planning Building and Environmental Services
Secondary Permit Agency _____ Permit Number E19-00681 Permit Date 12/16/2019

| Well Owner (must remain confidential pursuant to Water Code 13752) | Planned Use and Activity |
|--|--|
| Name <u>IDEOLOGY CELLARS,</u> | Activity <u>New Well</u> |
| Mailing Address <u>5225 Solano Ave</u> | Planned Use <u>Water Supply Irrigation - Landscape</u> |
| City <u>Napa</u> State <u>CA</u> Zip <u>94558</u> | |

| Well Location | |
|--|---------------------------------------|
| Address <u>5151 Solano AVE</u> | APN <u>034-190-040</u> |
| City <u>Napa</u> Zip <u>94559</u> County <u>Napa</u> | Township <u>06 N</u> |
| Latitude <u>38</u> <u>21</u> <u>41.7974</u> <u>N</u> Longitude <u>-122</u> <u>20</u> <u>11.8352</u> <u>W</u> | Range <u>04 W</u> |
| Deg. Min. Sec. Deg. Min. Sec. | Section <u>18</u> |
| Dec. Lat. <u>38.3616104</u> Dec. Long. <u>-122.3366209</u> | Baseline Meridian <u>Mount Diablo</u> |
| Vertical Datum _____ Horizontal Datum <u>WGS84</u> | Ground Surface Elevation _____ |
| Location Accuracy _____ Location Determination Method _____ | Elevation Accuracy _____ |
| | Elevation Determination Method _____ |

| Borehole Information | Water Level and Yield of Completed Well |
|--|---|
| Orientation <u>Vertical</u> Specify _____ | Depth to first water _____ (Feet below surface) |
| Drilling Method <u>Direct Rotary</u> Drilling Fluid <u>Other - Mud</u> | Depth to Static _____ |
| Total Depth of Boring <u>545</u> Feet | Water Level _____ (Feet) Date Measured <u>02/04/2020</u> |
| Total Depth of Completed Well <u>535</u> Feet | Estimated Yield* <u>150</u> (GPM) Test Type <u>Air Lift</u> |
| | Test Length <u>4</u> (Hours) Total Drawdown <u>525</u> (feet) |
| | *May not be representative of a well's long term yield. |

| Geologic Log - Free Form | | |
|--------------------------|--------------|---|
| Depth from Surface | Feet to Feet | Description |
| 0 | 4 | Top soil rocky |
| 4 | 10 | Gravel |
| 10 | 23 | Clay tan Fine-grained materials |
| 23 | 25 | River rock |
| 25 | 30 | Clay |
| 30 | 35 | Gray clay and sandstone Fine-grained materials |
| 35 | 50 | Clay |
| 50 | 60 | Rock and fractured |
| 60 | 65 | Green clay and gravel mix |
| 65 | 80 | Tan clay Fine-grained materials |
| 80 | 90 | Blue clay and gravel mix |
| 90 | 105 | Cemented gravel |
| 105 | 130 | Rock and clay green |
| 130 | 135 | Rock and clay layers |
| 135 | 143 | Clay and rock layers |

| | | |
|-----|-----|--|
| 143 | 150 | Fractured rock |
| 150 | 153 | Clay |
| 153 | 170 | Clay and rock |
| 170 | 205 | Sandstone layers and clay |
| 205 | 230 | Sandstone and black rock layers |
| 230 | 290 | Sandstone and clay layers |
| 290 | 300 | Clay |
| 300 | 320 | Rock and clay layers |
| 320 | 325 | Clay and rock layers |
| 325 | 340 | Fractured greenstone |
| 340 | 347 | Greenstone and clay |
| 347 | 360 | Fractured greenstone |
| 360 | 363 | Clay and rock |
| 363 | 370 | Fractured rock black |
| 370 | 400 | Fractured rock and clay layers |
| 400 | 410 | Black rock and clay layers |
| 410 | 430 | Clay and rock layers |
| 430 | 450 | Fractured sandstone with clay layers |
| 450 | 470 | Multi color volcanic rock fractured up |
| 470 | 490 | Black rock and red clay layers |
| 490 | 507 | Rock and clay layers |
| 507 | 515 | Fractured black rock |
| 515 | 530 | Clay and rock layers |
| 530 | 545 | Rock and clay layers |

| Casings | | | | | | | | | | |
|----------|------------------------------------|-----|-------------|----------|--|----------------------------|------------------------------|--------------|------------------------------|-------------|
| Casing # | Depth from Surface Feet to Feet | | Casing Type | Material | Casings Specificatons | Wall Thickness (inches) | Outside Diameter (inches) | Screen Type | Slot Size if any (inches) | Description |
| 1 | 0 | 95 | Blank | PVC | OD: 8.625 in. SDR: 17 Thickness: 0.508 in. | 0.508 | 8.625 | | | |
| 1 | 95 | 535 | Screen | PVC | OD: 8.625 in. SDR: 17 Thickness: 0.508 in. | 0.508 | 8.625 | Milled Slots | 0.032 | |

| Annular Material | | | | | |
|------------------------------------|-----|-------------|-------------------|------------------|-------------|
| Depth from Surface Feet to Feet | | Fill | Fill Type Details | Filter Pack Size | Description |
| 0 | 3 | Cement | Other Cement | | |
| 3 | 50 | Bentonite | Other Bentonite | | |
| 50 | 545 | Filter Pack | 8 x 16 | | |

| |
|----------------------------|
| Other Observations: |
|----------------------------|

parcel # 34-212-30

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in

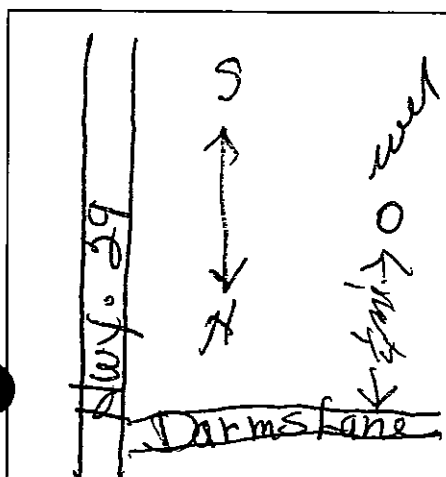
No. 371045

Notice of Intent No. _____
Local Permit No. or Date 26445

State Well No. _____
Other Well No. 06NOADW18

(2) LOCATION OF WELL (See instructions):

County 28 Owner's Well Number _____
Well address if different from above Same
Township _____ Range _____ Section _____
Distance from cities, roads, railroads, fences, etc. 14 mi. So. of Dams Lane on Hwy 29



WELL LOCATION SKETCH

(3) TYPE OF WORK:

New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:

Domestic ☒
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐ (Describe)

(12) WELL LOG: Total depth 410 ft. Completed depth 350 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

0 - 15' clay Fine-grained materials

15 - 19' sandy clay, boulders
- and gravel

19 - 40' clay Fine-grained materials

40 - 50' sandy clay, boulders
- and gravel

50 - 75' clay Fine-grained materials

75 - 120' hard clay & rock

120 - 340' hard volcanic ash & rock

340 - 410' hard volcanic

(5) EQUIPMENT:

Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:

Yes ☒ No ☐ Size 25-40
Diameter of bore 10 1/2
Packed from 25 to 350

(7) CASING INSTALLED:

Steel ☐ Plastic ☒ Concrete ☐

(8) PERFORATIONS:

Type of perforation or size of screen

| From ft. | To ft. | Dia. in. | Gage or Wall | From ft. | To ft. | Slot size |
|----------|--------|----------|--------------|----------|--------|-----------|
| 0 | 350 | 6 | 160 | 40 | 140 | 5/8" |
| | | | | 140 | 350 | SCREEN |

(9) WELL SEAL:

Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 25 ft.
Were strata sealed against pollution? Yes ☒ No ☐ Interval 15-19 ft.
Method of sealing Cement

(10) WATER LEVELS:

Depth of first water, if known 15 ft.
Standing level after well completion 20 ft.

(11) WELL TESTS:

Was well test made? Yes ☒ No ☐ If yes, by whom? Driller
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test 30 ft. At end of test 200 ft.
Discharge 120 gal/min after 5 hours Water temperature _____
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? _____
Was electric log made Yes ☐ No ☒ If yes, attach copy to this report

Work started 5-25-90 Completed 6-22-90

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed B.W. Pulliam (Well Driller)

NAME Pulliam Well Drilling

Address 2877 Piedmont Ave

City Rocky ZIP 94558

License No. 548677 Date of this report 7-3-90

Environmental

Cover Sheet

| | |
|-------------|-----------------------|
| APN | 034 - 212 - 006 - 000 |
| Permit # | |
| Program | Well |
| DocType | WL |
| Street # | 1123 |
| Street Name | Darms Ln |
| Year | |



TRIPlicate
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

TRS 6-4-18
8-35-240 Do not fill in
No. 43241

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. _____

(1) OWNER: Name [REDACTED]
Address 1122 [REDACTED]
City [REDACTED] Zip [REDACTED]
(2) LOCATION OF WELL (See instructions)
County Napa Owner's Well Number _____
Well address if different from above _____
Township _____ Range _____ Section _____
Distance from cities, roads, railroads, fences, etc. _____

(12) WELL LOG: Total depth 240 ft. Depth of completed well 240 ft.
from ft. to ft. Formation (Describe by color, character, size or material)
0 - 100 Original well
100 - 140 Blue clay
140 - 170 Blue clay w/cemented gravel
170 - 200 Blue clay
200 - 240 Hard volcanic rock

A.P. # 34-212-06

(3) TYPE OF WORK:
New Well ☐ Deepening ☒
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)
(4) PROPOSED USE:
Domestic ☒
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary ☒ Reverse ☐ Cable ☐ Air ☐ Other ☐ Bucket ☐
(6) GRAVEL PACK:
Yes ☒ No ☐ Size Birds Eye
Diameter of bore 6"
Packed from 20 to 240 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐
(8) PERFORATIONS:
Type of perforation or size of screen

| From ft. | To ft. | Dia. in. | Gage or Wall | From ft. | To ft. | Slot size |
|----------|--------|----------|--------------|----------|--------|-----------|
| 0 | 240 | 4" | 12 ga. | 30 | 240 | 1/8 x 3 |

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval _____ ft.
Method of sealing neat cement

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion 53 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? driller
Type of test Pump ☐ Bailor ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge 35 gal/min after 4 hours Water temperature _____
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? _____
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

Work started 11-6 19 78 Completed 11-9 19 78
WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED Erwin C. Brown (Well Driller)
NAME American Well & Pump Service
(Person, firm, or corporation) (Typed or printed)
Address 23002 Arnold Dr.
City Sonoma Zip 95476
License No. 246342 Date of this report 11-20-78

HEALTH DEPT. USE ONLY

FEE _____

DATE _____

RECEIPT NO. _____

BY _____

NAPA COUNTY HEALTH DEPARTMENT
DIVISION OF ENVIRONMENTAL HEALTHRECEIVED
DEC 15 1978APPLICATION & PERMIT TO CONSTRUCT
A WATER WELLDIVISION OF
ENVIRONMENTAL HEALTHNAME _____ ADDRESS _____ DATE _____
(OWNER) (JOB LOCATION)NAME _____ ADDRESS _____
(WELL DRILLER)TYPE OF WORK NEW WELL _____ RECONDITIONING _____ DEEPENING _____
TEST HOLES _____ DESTROYING _____ OTHER _____
TYPE I PERMIT _____ TYPE II PERMIT _____ FEE _____PROPOSED USE DOMESTIC _____ IRRIGATION _____ INDUSTRIAL _____ MUNICIPAL _____
TEST WELL _____ OTHER _____Sewage disposal on site (existing or proposed) Public _____ Individual _____ Private _____
Distance from well to any part of nearest sewage disposal system _____ feet
(Sketch of site to accompany application.)TYPE OF EQUIPMENT TO BE USED Rotary ☒ Cable _____ Hand Dug _____ Other _____CONSTRUCTION PROPOSED Diameter of casing 4" Material steel Annular Space: Size 2"
Sealed with: Concrete _____ Grout _____ Neat Cement ☒ Puddled Clay _____ Other _____
Conductor Casing: Yes _____ No ☒ Material _____
Chlorination by: Owner _____ Pump Co. _____ Driller _____
Gravel Pack: Yes _____ No _____
(SIGNATURE OF APPLICANT) _____ (DATE) _____

CASING

CONSTRUCTION:

Total Depth 240 Ft.Surface Seal to 20 Ft.Any stratas sealed: Yes _____ No ☒

If yes, depth of stratas:

From _____ Ft. to _____ Feet

From _____ Ft. to _____ Feet

Perforations:

From 30 Ft. to 240 Feet

From _____ Ft. to _____ Feet

From _____ Ft. to _____ Feet

WATER LEVELS

First water at ? FeetStatic level at 53 Feet

WELL TESTS

How performed Air LiftYield 35 GPM with _____ FeetDrawdown _____ Ft. after 4 Hrs.

WELL LOG

(Formation; describe by color, size of material, structure)

Ft. to Ft.

Existing seal Repair job - had existing seal
Annular Space Depth [20'] thickness [2"]
Own seal to 20' (neat cement)

0-100' Original Well
100-140' Blue Clay
140-170' Blue clay w/cemented gravel
170-200' Blue clay
200-240' Hard volcanic rock

Signed Erwin C. Gross 10.9.License No. 246342

176

I, Erwin C. Gross

, as a contractor for the above work,

hereby certify that the above was installed according to all applicable rules and regulations covered by this permit, and that the information is true and correct to the best of my knowledge.

Erwin C. Gross / c.g.

Contractor's Signature

Environmental

Cover Sheet

| | |
|-------------|-----------------------|
| APN | 034 - 212 - 009 - 000 |
| Permit # | |
| Program | Well |
| DocType | WL |
| Street # | 1107 |
| Street Name | Darms Ln |
| Year | 1980 |



FEE 110 DATE 11-30-80
RECEIPT NO. 1341 BY W

TRS 6-4-18
B-20-225

A.P. NO. 34-112-09

NAPA COUNTY HEALTH DEPARTMENT
DIVISION OF ENVIRONMENTAL HEALTH

APPLICATION & PERMIT TO CONSTRUCT A WATER WELL

NAME [Redacted] ADDRESS [Redacted]
NAME Bill Pulliam (Owner) ADDRESS 3877 Piedmont Ave (Job Location) DATE 10-29-80
(Well Driller)

TYPE OF WORK NEW WELL X RECONDITIONING _____ DEEPENING _____
TYPE I PERMIT X DESTROY _____ OTHER _____
TYPE II PERMIT _____

PROPOSED USE DOMESTIC X IRRIGATION _____ INDUSTRIAL _____ MUNICIPAL _____
TEST WELL _____ OTHER _____

Sewage Disposal on site (existing or proposed) Public _____ Individual _____ Private X
Distance from well to any part of nearest sewage disposal system 100 feet.
(Sketch of site to accompany application) County road setback 50 feet from centerline.

TYPE OF EQUIPMENT TO BE USED: Rotary X Cable _____ Hand Dug _____ Other _____

WORKER'S COMPENSATION COVERAGE: (Check one of the following)

- ☐ A certificate of current Worker's Compensation Insurance coverage is presently on file with this office.
☐ A certificate of current Worker's Compensation Insurance is being filed with this application.
☒ I certify that in the performance of the work for which this permit is issued I shall not employ any person in any manner so as to become subject to the Worker's Compensation laws in California.

Bill Pulliam
Signature of Applicant

10-29-80
Date

CASING

CONSTRUCTION:

Total Depth 225 Ft. Depth of Casing 160

Surface Seal to 30

Any Stratas Sealed: Yes _____ No X

If yes, depth of stratas: _____

From _____ Ft. to _____ Ft. / From 160 Ft. to 160 Ft.

Perforations:

From 90 Ft. to 160 Ft. / From _____ Ft. to _____ Ft.

From _____ Ft. to _____ Ft.

WATER LEVELS

First Water at _____ Ft. Static level at 90 Ft.

WELL TESTS

How performed Bail

Yield 30 GPM with 90 Ft. Drawdown after 1 1/2

Hrs. Annular space depth 27 Ft. / Thickness 3

_____ in. Diameter of casing 6 Material PLASTIC

Gravel Pack: Yes X No _____ Conductor Casing:

Yes _____ No X Sealed with: Concrete X

Grout _____ Neat Cement _____ Pudd. Clay _____

Other _____ Chlorination by: Owner X

Pump Co. _____ Driller _____

WELL LOG

(Formation; described by color, size of material, structure)

| Ft. | to | Ft. |
|---------|-----------------------|-----|
| 0-35 | clay | |
| 35-38 | clay, gravel | |
| 38-53 | clay | |
| 53-56 | clay, gravel | |
| 56-70 | clay | |
| 70-180 | green ash, black rock | |
| 180-225 | black rock | |

Fine-grained materials

CONTRACTOR'S STATEMENT: I, Bill Pulliam, contractor for the above work, hereby certify that the above was installed according to all applicable rules and regulations covered by this permit, and that the information is true and correct to the best of my knowledge.

Bill Pulliam

Contractor's Signature

E-69

034-212-008

Well Completion Report

Page 1 of 3

Owner's Well Number #2

No. e0324213

Date Work Began 06/09/2016

Date Work Ended 6/16/2016

Local Permit Agency Napa County Environmental Health

Permit Number E15-00963

Permit Date 12/15/15

DWR Use Only - Do Not Fill In

State Well Number/Site Number

Latitude

Longitude

APN/TRS/Other

Geologic Log

Orientation ☒ Vertical ☐ Horizontal ☐ Angle Specify

Drilling Method Direct Rotary

Drilling Fluid Fresh Water

Depth from Surface

Description

Feet to Feet

Describe material, grain size, color, etc.

| | | |
|-----|-----|--|
| 0 | 7 | Clay and gravel |
| 7 | 32 | Big gravel |
| 32 | 54 | Brown clay and gravel |
| 54 | 62 | Gravel, some clay |
| 62 | 120 | Green volcanics with streaks of ash and clay |
| 120 | 150 | Harder volcanics green |
| 150 | 186 | Clayey volcanics and ash |
| 186 | 201 | Green clay embedded volcanics |
| 201 | 234 | Ashy volcanics, some clay |
| 234 | 243 | Volcanics |
| 243 | 257 | White clay and volcanics |
| 257 | 270 | Harder volcanics |
| 270 | 336 | Clay and volcanic rock ashy |
| 336 | 346 | Fractured volcanics |
| 346 | 350 | Clayey volcanics |

Fine-grained materials

RECEIVED
JUN 16 2016
Napa County
& Environmental Health

Total Depth of Boring 350 Feet

Total Depth of Completed Well 350 Feet

Well Owner

Name Gail Conrads

Mailing Address 1125 Darms Lane

City Napa State Ca Zip 94558

Well Location

Address 1125 Darms Lane

City Napa

County Napa

Latitude 38 21 45 N Longitude 122 20 41 W

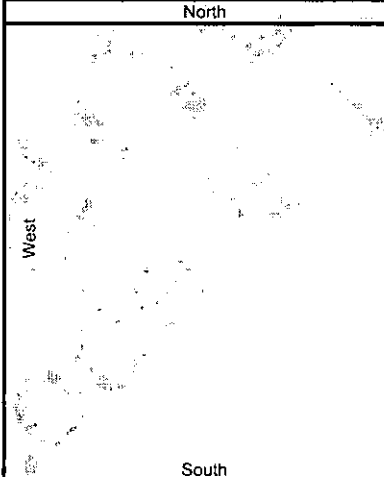
Datum Decimal Lat. Decimal Long.

APN Book 034 Page 212 Parcel 005

Township 6N Range 4W Section 18

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

- ☒ New Well
☐ Modification/Repair
☐ Deepen
☐ Other
☐ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

- ☒ Water Supply
☒ Domestic ☐ Public
☐ Irrigation ☐ Industrial
☐ Cathodic Protection
☐ Dewatering
☐ Heat Exchange
☐ Injection
☐ Monitoring
☐ Remediation
☐ Sparging
☐ Test Well
☐ Vapor Extraction
☐ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static

Water Level 40 (Feet) Date Measured 06/16/2016

Estimated Yield * 150 (GPM) Test Type Air Lift

Test Length 1.0 (Hours) Total Drawdown 260 (Feet)

*May not be representative of a well's long term yield.

Casings

| Depth from Surface Feet to Feet | Borehole Diameter (Inches) | Type | Material | Wall Thickness (Inches) | Outside Diameter (Inches) | Screen Type | Slot Size If Any (Inches) |
|------------------------------------|-------------------------------|--------|-------------|----------------------------|------------------------------|--------------|---------------------------------|
| 0 | 50 | 11 | | | | | |
| 50 | 120 | 9 7/8 | | | | | |
| 120 | 350 | 8 | | | | | |
| 0 | 110 | Blank | PVC Sch. 40 | SDR21 | 5 | | |
| 110 | 130 | Screen | PVC Sch. 40 | SDR21 | 5 | Milled Slots | 0.032 |
| 130 | 150 | Blank | PVC Sch. 40 | SDR21 | 5 | | |

Annular Material

| Depth from Surface Feet to Feet | Fill | Description |
|------------------------------------|------|---------------------|
| 0 | 50 | Cement |
| 50 | 350 | Filter Pack #6 Sand |

Attachments

- ☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☒ Other Site Map

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Weeks Drilling & Pump Company

Person, Firm or Corporation

P.O. Box 176

Sebastopol

CA 95473

Signed

Address

City

State

Zip

C-57 Licensed Water Well Contractor

Date Signed

177681

C-57 License Number

Attach additional information, if it exists.

| | | | | | | | | | | | | |
|--------------------------------------|--|--|--|--|--|---|-----------|--|--|--|--|---|
| DWR Use Only – Do Not Fill In | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| State Well Number/Site Number | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Latitude | | | | | | N | Longitude | | | | | W |
| | | | | | | | | | | | | |
| APN/TRS/Other | | | | | | | | | | | | |
| | | | | | | | | | | | | |

[illegible]

Well Owner
Name Gail Conrads
Mailing Address 1125 Darms Lane
City Napa State Ca Zip 94558

Well Location

Address 1125 Darms Lane

City Napa County Napa

Latitude 38 21 45 N. Longitude 122 20 41 W
Dec. Min. Sec. Dec. Min. Sec.

Datum _____ Decimal Lat. _____ Decimal Long. _____

APN Book 034 Page 212 Parcel 005

Township 6N Range 4W Section 18

| | | |
|--|---|--|
| Location Sketch (Sketch must be drawn by hand after form is printed.) | | Activity <input checked="" type="radio"/> New Well <input type="radio"/> Modification/Repair <input type="radio"/> Deepen <input type="radio"/> Other _____ <input type="radio"/> Destroy <small>Describe procedures and materials under "GEOLOGIC LOG"</small> |
| North | Planned Uses <input checked="" type="radio"/> Water Supply <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="radio"/> Cathodic Protection <input type="radio"/> Dewatering <input type="radio"/> Heat Exchange <input type="radio"/> Injection <input type="radio"/> Monitoring <input type="radio"/> Remediation <input type="radio"/> Sparging <input type="radio"/> Test Well <input type="radio"/> Vapor Extraction <input type="radio"/> Other _____ | |
| West | South | East |
| Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete. | | |

Water Level and Yield of Completed Well

| | |
|------------------------------|--|
| Depth to first water _____ | (Feet below surface) |
| Depth to Static _____ | |
| Water Level <u>40</u> | (Feet) Date Measured <u>06/16/2016</u> |
| Estimated Yield * <u>150</u> | (GPM) Test Type <u>Air Lift</u> |
| Test Length <u>1.0</u> | (Hours) Total Drawdown <u>260</u> (Feet) |

*May not be representative of a well's long term yield.

| Casings | | | | | | | | Annular Material | | | |
|------------------------------------|-------------------------------|--------|-------------|----------------------------|------------------------------|--------------|---------------------------------|------------------------------------|------|-------------|--|
| Depth from Surface Feet to Feet | Borehole Diameter (Inches) | Type | Material | Wall Thickness (Inches) | Outside Diameter (Inches) | Screen Type | Slot Size If Any (Inches) | Depth from Surface Feet to Feet | Fill | Description | |
| 150 | 170 | Screen | PVC Sch. 40 | SDR21 | 5 | Milled Slots | 0.032 | 0 | 50 | Cement | |
| 170 | 190 | Blank | PVC Sch. 40 | SDR21 | 5 | | | 50 | 350 | Filter Pack | |
| 190 | 210 | Screen | PVC Sch. 40 | SDR21 | 5 | Milled Slots | 0.032 | | | | |
| 210 | 230 | Blank | PVC Sch. 40 | SDR21 | 5 | | | | | | |
| 230 | 250 | Screen | PVC Sch. 40 | SDR21 | 5 | Milled Slots | 0.032 | | | | |
| 250 | 270 | Blank | PVC Sch. 40 | SDR21 | 5 | | | | | | |

| | | | |
|--|--|---|--|
| Attachments <input type="checkbox"/> Geologic Log <input type="checkbox"/> Well Construction Diagram <input type="checkbox"/> Geophysical Log(s) <input type="checkbox"/> Soil/Water Chemical Analyses <input checked="" type="checkbox"/> Other <u>Site Map</u> Attach additional information, if it exists. | | Certification Statement I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief Name <u>Weeks Drilling & Pump Company</u> Person, Firm or Corporation <u>P.O. Box 176</u> <u>Sebastopol</u> <u>CA</u> <u>95473</u> Address City State Zip Signed <u>[Signature]</u> <u>9/26/16</u> <u>177681</u> C-57 Licensed Water Well Contractor Date Signed C-57 License Number | |
|--|--|---|--|

State of California
Well Completion ReportPage 3 of 3Owner's Well Number #2No. e0324213Date Work Began 06/09/2016Date Work Ended 6/16/2016Local Permit Agency Napa County Environmental HealthPermit Number E15-00963Permit Date 12/15/15

DWR Use Only - Do Not Fill In

State Well Number/Site Number

N

Latitude

Longitude

APN/TRS/Other

Geologic LogOrientation ☒ Vertical ☐ Horizontal ☐ Angle Specify _____Drilling Method Direct Rotary Drilling Fluid Fresh WaterDepth from Surface _____ Description _____
Feet to Feet Describe material, grain size, color, etc

| | | |
|-----|-----|--|
| 0 | 7 | Clay and gravel |
| 7 | 32 | Big gravel |
| 32 | 54 | Brown clay and gravel |
| 54 | 62 | Gravel, some clay |
| 62 | 120 | Green volcanics with streaks of ash and clay |
| 120 | 150 | Harder volcanics green |
| 150 | 186 | Clayey volcanics and ash |
| 186 | 201 | Green clay embedded volcanics |
| 201 | 234 | Ashy volcanics, some clay |
| 234 | 243 | Volcanics |
| 243 | 257 | White clay and volcanics |
| 257 | 270 | Harder volcanics |
| 270 | 336 | Clay and volcanic rock ashy |
| 336 | 346 | Fractured volcanics |
| 346 | 350 | Clayey volcanics |

Total Depth of Boring 350 FeetTotal Depth of Completed Well 350 Feet**Well Owner**Name Gail ConradsMailing Address 1125 Darms LaneCity Napa State Ca Zip 94558**Well Location**Address 1125 Darms LaneCity Napa County NapaLatitude 38 21 45 N Longitude 122 20 41 W
Deg. Min. Sec. Deg. Min. Sec.

Datum _____ Decimal Lat. _____ Decimal Long. _____

APN Book 034 Page 212 Parcel 005Township 6N Range 4W Section 18**Location Sketch**

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

- ☒ New Well
☐ Modification/Repair
☐ Deepen
☐ Other _____
☐ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

- ☒ Water Supply
☒ Domestic ☐ Public
☐ Irrigation ☐ Industrial
☐ Cathodic Protection
☐ Dewatering
☐ Heat Exchange
☐ Injection
☐ Monitoring
☐ Remediation
☐ Sparging
☐ Test Well
☐ Vapor Extraction
☐ Other _____

Water Level and Yield of Completed Well

Depth to first water _____ (Feet below surface)

Depth to Static _____

Water Level 40 (Feet) Date Measured 06/16/2016Estimated Yield * 150 (GPM) Test Type Air LiftTest Length 1.0 (Hours) Total Drawdown 260 (Feet)

*May not be representative of a well's long term yield.

Casings

| Depth from Surface Feet to Feet | Borehole Diameter (Inches) | Type | Material | Wall Thickness (Inches) | Outside Diameter (Inches) | Screen Type | Slot Size If Any (Inches) |
|------------------------------------|-------------------------------|--------|-------------|----------------------------|------------------------------|--------------|---------------------------------|
| 270 | 290 | Screen | PVC Sch. 40 | SDR21 | 5 | Milled Slots | 0.032 |
| 290 | 310 | Blank | PVC Sch. 40 | SDR21 | 5 | | |
| 310 | 350 | Screen | PVC Sch. 40 | SDR21 | 5 | Milled Slots | 0.032 |

Annular Material

| Depth from Surface Feet to Feet | Fill | Description |
|------------------------------------|------|---------------------|
| 0 | 50 | Cement |
| 50 | 350 | Filter Pack #6 Sand |

Attachments

- ☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☒ Other Site Map

Attach additional information, if it exists.

Certification Statement:

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Weeks Drilling & Pump Company

Person, Firm or Corporation

P.O. Box 176

Address _____

City SebastopolState CA Zip 95473Signed June Angiolini

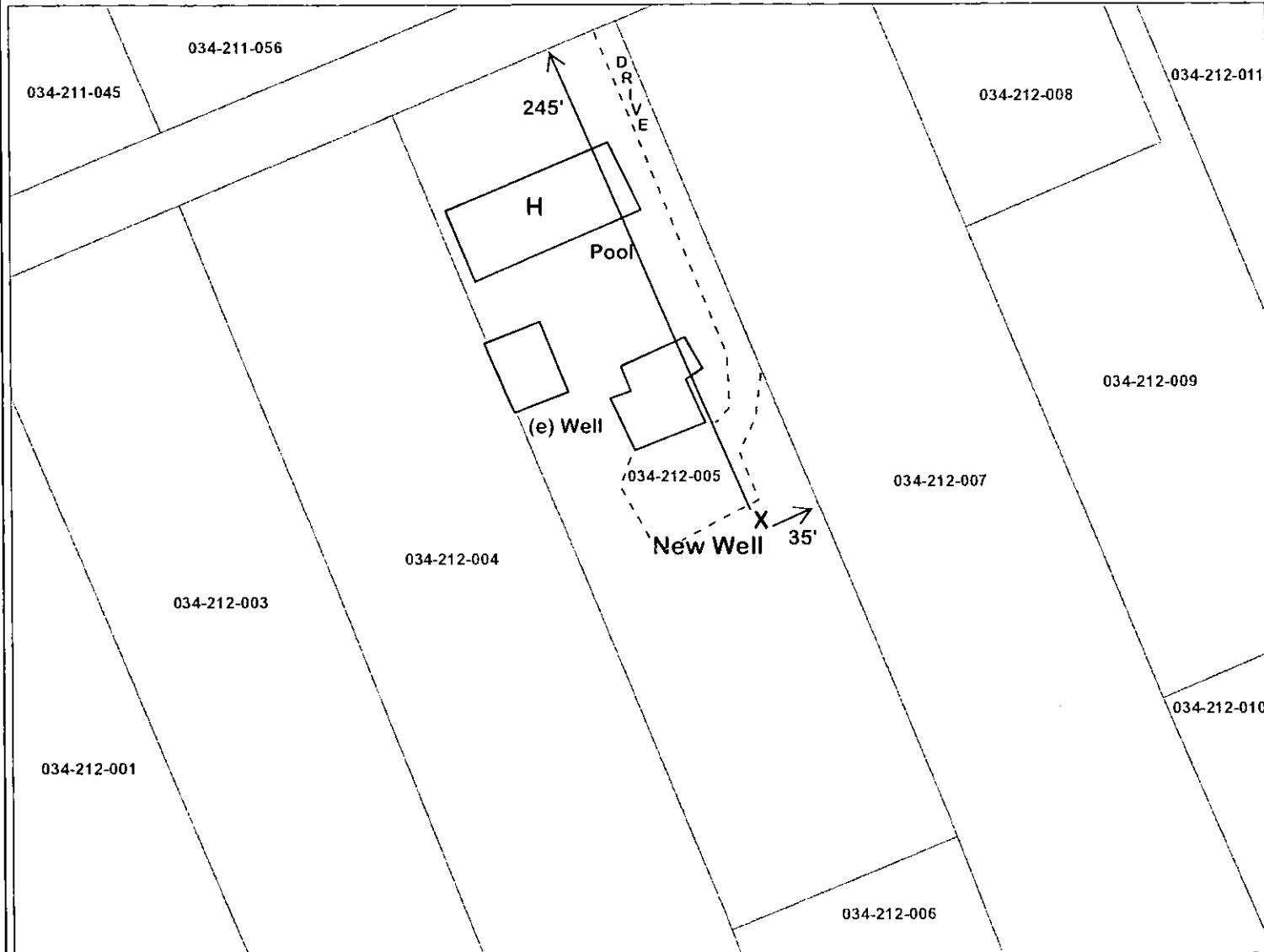
C-57 Licensed Water Well Contractor

Date Signed 9/26/16C-57 License Number 177681



1125 Darms Lane, Napa

APN #034-212-005



Legend

- ☐ Parcels
- ☐ County Boundary

188.1 0 94.04 188.1 Feet

Disclaimer: This map was prepared for informational purposes only.
No liability is assumed for the accuracy of the data delineated hereon.

This map was printed on 9/27/2016

Notes

“G”

Biological Resources Studies

| | |
|---------|---|
| Page 2 | Biological Report – August 11, 2021 |
| Page 9 | Updated Biological Report – November 5, 2023 |
| Page 18 | Northern Spotted Owl Assessment – July 28, 2021 |



Forest Ecosystem Management, pllc

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(406) 490-7427 * Pamtown30@gmail.com

In Cooperation with:

Salix Natural Resource Management

PO Box 684 * Ukiah, CA 95482
(530) 913-0490 * heatherkamille@comcast.net



August 11, 2021

RE: Arrow & Branch Winery (P21-00087)

This is in response to Napa County Planning, Building & Environmental Services' Application status letter dated May 19, 2021 for the Arrow & Branch Winery (Formerly Ideology) listed as P21-00087. The County was requesting clarification to: "Confirm that the proposed physical improvements will not impact nearby riparian woodland or sensitive biotic vegetation."

Arrow & Branch Winery General Information

Project Location: nkn Solano Avenue; Napa, California (Attachment #1)

Legal of Project Area: Portions of Section 18, T06N, R04W MDB&M

APN: 034-190-040-000

County: Napa County

Proposed Project: Building a Winery including structure, parking area, driveway, and landscaping within an existing vineyard.

Property Description: The Arrow & Branch Winery Project is located off Solano Avenue, which travels parallel to St Helena Highway (HWY 29) in Oak Knoll, California. A portion of the parcel boundary is Dry Creek on the northern end, with agricultural land surrounding the remaining parcel boundaries (Attachment #2). Vineyards is the primary agricultural product. The northern side of Dry Creek is Urban and includes houses, wineries, and commercial properties. There is a strip of trees/shrubs approximately 100' to 250' wide along Dry Creek throughout this area.

The vegetation types described by CDFW within ¼ mile of the Project Area includes a strip of Mixed Riparian Hardwoods along Dry Creek, Urban, and Agricultural (Vineyards); with a small amount of Annual Grasses and Forbes, and Valley Oak to the east (Attachment #3). Mixed Riparian Hardwoods

(CalVeg Classification) or Montane Riparian Zones (CWHR Type) is often quite variable and often structurally diverse. Usually, the montane riparian zone occurs as a narrow, often dense grove of broad-leaved, winter deciduous trees up to 98' tall with a sparse understory. In the southern Coast Range and Transverse and Peninsular ranges, bigleaf maple and California bay are typical dominant trees; however, cottonwood, alder, willow, and dogwood may also be present. The transition between montane riparian zones and adjacent non-riparian vegetation is often abrupt.

Current Conditions: A site visit was conducted on 28JUL21 by Heather Morrison. Dry Creek, a perennial stream, flows along the northern boundary of the property. The channel of this watercourse is located approximately ten feet below the upland area, where the proposed winery and current vineyards are located.

There is a lack of aquatic vegetation such as bulrush, alisma, or duckweed because of perpetually dry summers prohibiting the establishment and long-term survival of these species. Within the riparian area, the predominant tree species is dusky willow (*Salix melanopsis*) and Oregon ash (*Fraxinus latifolius*). Herbaceous species include torrent sedge (*Carex nudatum*), Smilo grass (*Stipa milliaceae*), mugwort (*Artemisia douglasiana*) and tall flatsedge (*Cyperus eragrostis*). Within the transitional zone and upland area, common shrubs and herbaceous species include upright snowberry (*Symphoricarpos albus*) and wild grape (*Vitis californica*). Oaks, specifically coastal live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*) are found generally at the edge of the upland area and above the transitional zone which extends down into the main creek zone.

Figure #1: Edge of Upland Area – Immediately above the transitional zone down into riparian area.





Figure #2: The main channel of Dry Creek (July 2021). Dusky willow can be seen in the immediate area of the channel. Larger, mature oaks are located at the top of the bank and adjacent to the vineyards.

There are vineyard avenues/roads located immediately adjacent to the transitional zone, within the upland vegetation area. These roads are rocky and are located on flat gradients, thus decreasing the chance for erosion into the riparian area. A small informal parking lot is also located near the creek.



Evidence of dumping vegetation trimmings from vineyard maintenance can be found in various areas below the main bank.

Figure #3: Vegetative material thrown over the edge of the bank.

Riparian Area Benefits: Historically, dense riparian vegetation grew along virtually all of Napa County's rivers, creeks, and streams; however, they have declined significantly due to human land-use activities. Today they cover a relatively small portion of Napa County's watersheds, but their ecosystem functions are important to maintaining biological diversity, water quality, and water reliability.

Riparian areas are distinctly different from surrounding lands because of unique soil and vegetation characteristics that are strongly influenced by the presence of water. Riparian habitat can range from dense thickets of shrubs to a closed canopy of large mature trees; while providing riverbank protection, erosion control and improved water quality, recreational and aesthetic values, as well as provide wildlife habitat. The riparian vegetation stabilizes streambanks and resists the flow of floodwaters, while increasing the time available for water to infiltrate into the soil recharging groundwater and alluvial aquifers.

The signs of a healthy riparian area include a well-vegetated area with a diversity of native plants overhanging water channels. Other indications include stable streambanks, well-defined stream channels, and a high diversity and abundance of wildlife. Unhealthy riparian areas are characterized by sparse vegetation, infestations of invasive plant species, eroded banks, poorly defined stream channels, and low wildlife diversity and abundance.

There is not a single figure of how wide the Riparian zone needs to be to keep water clean, stabilize banks, protect fish and wildlife, and satisfy human demands. Widths can range from 35' to well over 300' depending on slopes, surrounding land-use, and type of vegetation (vertical structure and density). Wider widths are needed for wildlife habitat than for erosion control and water quality purposes. The Project plans include a minimum of 35' stream setback from the top of the bank on slopes less than 1%. The overall width of the riparian vegetation along Dry Creek is relatively narrow and abrupt with the surrounding area being urbanized and/or agricultural; therefore, the species currently using the vegetated area, either as a corridor or residential home would be adapted to disturbance.

Sensitive Species: The cnddb does not have any known listed plant or animal species detections within the Property Parcel (Attachment #4). The closest known listed species that depend upon riparian areas include:

- Western Pond Turtles (*Emys marmorata*) – California Species of Special Concern. There are known western pond turtles approximately 1.7 air-miles to the south of this Project located within private agricultural ponds. Western pond turtles are aquatic turtles of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Basking sites and sandy banks or grassy open fields within 2,000' from water is needed for egg-laying.

There are no known detections of western pond turtles in Dry Creek; however, the habitat is suitable, during normal climatic years. No western pond turtles were identified during a field visit to the Project Area. There was no water within this stretch of Dry Creek during the July site visit, recognizing the area is currently under drought conditions.

- Foothill Yellow-Legged Frogs (*Rana boylei*) – California Species of Special Concern. There are known foothill yellow-legged frogs approximately 1.6 air-miles to the north of this project located within Hooper Creek, a downstream tributary to Dry Creek. Foothill yellow-legged frogs are frogs are rarely far from permanent rocky streams. Tadpoles need water for at least 3 to 4 months for development.

There are no known detections of foothill yellow-legged frogs in the segment of Dry Creek within 5 miles of the Project Area. No foothill yellow-legged frogs were identified during a field visit to the Project Area. There was no water within this stretch of Dry Creek during the July site visit, recognizing the area is currently under drought conditions.

The National Oceanic & Atmospheric Administration's Essential Fish Habitat (EFH) mapper (NOAA 2021), does not list any Habitat Areas of Particular Concern (HAPC) or Areas Protected from Fishing (EFHA) for the Project Area.

Riparian habitats have an exceptionally high value for many wildlife species, both protected and common. These areas provide water, thermal cover, migratory corridors, as well as diverse nesting and foraging opportunities.

Invasive/Non-Native Species: While non-native species are present in great abundance within the riparian area up into the upland area, a few species are characteristically considered invasive including Himalayan berry (*Rubus armeniacus*), French broom (*Genista monspessulana*), mustard (*Brassica nigra*) and Madagascar periwinkle (*Vinca major*).

Potential Impacts to Dry Creek & Associated Vegetative Communities

The primary threats to riparian areas are hydrological modifications, land conversion, invasive species, and overgrazing or direct disturbances by livestock. The following are potential issues that may arise and recommendations on how this Project can avoid or reduce impacts to the riparian area around Dry Creek and the native vegetative community within the Property Boundary.

Direct Disturbance of Native Vegetation:

- There will be no removing, downgrading, or alteration of the existing native vegetation. Existing vineyards will be the only vegetation disturbed/removed as a result of this project.
- There will be no livestock grazing on the Arrow & Branch Winery property, without proper fencing to keep livestock outside the riparian area. Livestock grazing is not anticipated.
- Temporary orange construction fences shall be installed along the edge of the native vegetative zone prior to Project construction and will be maintained throughout Project construction to assist in keeping equipment outside the native vegetation (including riparian area) zone.
- Leftover material from vineyard/property maintenance has been thrown over the edge of the bank. This material can be a fire hazard and hinder growth of native vegetation. Non-organic material can also contribute to degradation of the watercourse.
 - Existing non-organic material should be manually removed and disposed of property.
 - Existing organic material can be left and allowed to decomposed.
 - Future organic vineyard material can be mulched, removed from the property, or piled outside the native vegetation zone.
 - Storage drums/containers should be stored within a way so potential spills can be properly cleaned up, and located well away from the native vegetation zone.

Invasive Species:

- During Project Construction, heavy equipment shall be cleaned prior to coming onto the property and cleaned again if they are removed from the property and brought back.
- Avoid planting invasive non-native plants. Non-native plants that particularly threaten riparian areas in Napa County include: giant reed; Himalayan blackberry; periwinkle; German and English ivy; black locust; French, Scotch and Spanish broom; tamarisk; acacia; eucalyptus; and tree of heaven. **Planting of local, native vegetation is encouraged when landscaping.**
- Monitor and remove invasive non-native plants.

Hydrological/Land-Use:

- Existing vineyards will be the only vegetation disturbed/removed as a result of this project.
- Stormwater control, flood hazard, septic, and plumbing will all adhere to the standards set forth by Federal, State, County, and Local requirements, codes, and permits.
- Vegetative Receiving Areas and Bioretention Areas are anticipated between the Project and the vegetative strip along Dry Creek (Attachment #5).
- There will be no new road crossings across Dry Creek installed or completed as a result of this Project.
- There will be no new water withdrawal from Dry Creek as a result of this Project.

Direct Disturbance to Wildlife:

- The native vegetation along Dry Creek is not expected to change; therefore, no change in habitat is anticipated.
- The native vegetative width along Dry Creek is not expected to change. Species currently using this area are used to disturbance issues.

Monitoring:

Adaptive Management Practices should be utilized. The Landowner should monitor the Riparian Area at least once a year. Photographs can help monitoring efforts by showing any changes over time. Some issues that may need addressing include:

- Trampling of native vegetation by humans may require installing fencing to block human access to the riparian area, but still allow for wildlife passage (i.e., decorative post and pole fences can be used).
 - If public access is desirable, further consulting with someone familiar with landscaping/recreational issues should be consulted regarding design of trails that encourages people to stay on designated trails (i.e. boardwalks). Public Access is not anticipated.
- Invasive plant eradication may have to be completed in multiple years.
- Vineyard workers should be educated on the importance of vegetated Riparian Areas. Informational signs can be posted ("Leave No Trace" or other educational signs can be purchased or specifically made).
- Trash removal – make sure organic (i.e., vineyard waste) or non-organic material is not being dumped within the riparian area.

Attachments:

Attachment #1 = Topographic Project Location
Attachment #2 = Aerial Project Area
Attachment #3 = Vegetation Types Around Project Area
Attachment #4 = Map cnddb Around Project Area
Attachment #5 = Project Plans supplied by Applied

This Report was prepared by:

Pamela Town
Consulting Wildlife Biologist
Forest Ecosystem Management
(406) 490-7427
Pamtown@30@gmail.com

Heather Morrison
Consulting Botanist & RPF
Salix Natural Resource Management
(530) 913-0490
heatherkamille@comcast.net

References:

California Department Fish & Wildlife. California Natural Diversity Database (CNDDDB). California Department of Fish and Wildlife, Biogeographic Data Branch. RareFind Version 5. Accessed 2021.

California Department Fish & Wildlife. California Vegetation Classification and Mapping Program (vegCAMP). California Department of Fish and Wildlife. Accessed 2021.

California Natural Diversity Database (cnddb). April 2021. Special Animal List. California Department of Fish & Wildlife. Sacramento, CA.

National Oceanic & Atmospheric Administration (NOAA). United States Department of Commerce. NOAA Essential Fish Habitat Mapper. www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper. Accessed July 2021.

San Francisco Estuary Institute (SFEI). 2017. California Aquatic Resource Inventory (CARI). Version 0.3. Accessed July 2021. <https://www.sfei.org/data/california-aquatic-resource-inventory-cari>



Forest Ecosystem Management, pllc

1692 East Road * Deary, ID 83823
(406) 490-7427 * Pamtown30@gmail.com

In Cooperation with:

Salix Natural Resource Management

PO Box 684 * Ukiah, CA 95482
(530) 913-0490 * heatherkamille@comcast.net



November 5, 2023

RE: P23-00057 - Arrow & Branch Winery Major Modification

This is in response to Napa County Planning, Building & Environmental Services' Application status letter dated 27JUL23, for the Arrow & Branch Winery. The County was requesting an addendum to the 11AUG21 Biological Report to ensure the conclusions are still valid for the updated project scope.

Arrow & Branch Winery General Information

Project Location: 5215 Solano Avenue; Napa, California (Attachment #1)
Legal of Project Area: Portions of Section 18, T06N, R04W MDB&M
APN: 034-190-040-000
County: Napa County
Proposed Project: Phase 2 of Project (Attachment #2 – Engineer's Map)

Addendum to 11AUG21 Biological Information

Sensitive Species:

The California Department of Fish & Wildlife's cnddb database does not have any new known listed plant or animal species detections within the Property Parcel (Attachment #3).

The National Oceanic & Atmospheric Administration's Essential Fish Habitat (EFH) mapper (Attachment #4), does not list any Habitat Areas of Particular Concern (HAPC) or Areas Protected from Fishing (EFHA) within the Project Area.

Newly Identified Listed Species (*Bombus spp.*): There are 30 bumble bee species (*Bombus spp.*) present in western North America; with 4 bumble bee species recently listed for candidacy under the California State Fish and Wildlife Endangered Species Act. Of the 4 protected species, 2 have historically been located within Napa County (Western Bumble Bee and Crotch Bumble Bee). The following summarizes the habitat requirements and life history of the newly protected bumble bees.

Life History: Bumble bees are primitively eusocial insects that live in colonies made up of one queen, female workers, and near the end of the season reproductive members of the colony (new queens, and males). New colonies are initiated by solitary queens, in the early spring. This process includes locating a suitable nest site; collecting pollen and nectar from flowers; building a wax structure to store nectar; forming a mass of pollen to lay eggs; and building a wax structure to enclose the eggs and pollen.

Habitat: Bumble bees are generalist foragers and have been reported visiting a wide variety of flowering plants. Bumble bees inhabit a wide variety of natural, agricultural, urban, and rural habitats; with species richness tending to peak in flower-rich meadows of forests and subalpine zones; but will be found in riparian areas, grassland, and coastal shrub habitats containing sufficient floral resources. Basic habitat requirements include suitable nesting sites for colonies, nectar and pollen from floral resources available throughout the duration of the colony period, and suitable overwintering sites for the queens.

Crotch Bumble Bees often select food plant genera including Snapdragon (*Antirrhinum*), *Phacelia*, *Clarkia*, bush poppy (*Dendromecon*), California poppy (*Eschscholzia*), and buckwheat (*Eriogonum*). A floral preference appears to be: Milkweed (*Asclepias*), California Cleome, Larkspur, Yerba, *Phacelia*, and Blue Curls. The Crotch Bumble Bee is often found within grassland and shrubland in hotter/drier conditions.

Western Bumble Bees often select food plant genera including Sweet clover (*Melilotus*), thistle (*Cirsium*), clover (*Trifolium*), star thistle (*Centaurea*), rabbitbrush (*Chrysothamnus*), and buckwheat (*Eriogonum*). A floral preference appears to be: Glacier Lily, Alpine Sweetvetch, Scarlet Gillia, Capitata Lousewort, and Snowberry. The Western Bumble Bee is often found within flower-rich meadows of forests and subalpine zones.

It is worth noting that floral associations do not necessarily represent bee preference for these plants over other flower plants, but may represent the abundance of these flowers within the bee surveyed landscape.

Breeding Season: Flight period of queens in CA is from early February to late November, peaking in late June and late September. The flight period for workers and males in CA is early April to early November, with worker abundance peaking in early August and male abundance in early September.

Potential Threats: Pesticide use, fire, agricultural intensification, urban development, and climate change.

Project Area: The Parcel does possess snowberry (*Symphoricarpos albus*), a floral preference for Western Bumble bees; however, that is the only floral resource within the select food plant genera for bumble bees. The open areas are primarily vineyards and structures which do not possess the necessary habitat for bumble bees. The area proposed for this Project Scope has been graded in the first phase of

the project or within the footprint of the vineyards; therefore, is not considered bumble bee habitat due to a lack of floral resources.

Recommendations set forth under 11AUG21 Biological Information:

Potential Impacts to Dry Creek & Associated Vegetative Communities

The primary threats to riparian areas are hydrological modifications, land conversion, invasive species, and overgrazing or direct disturbances by livestock. The following are potential issues that may arise and recommendations on how this Project can avoid or reduce impacts on the riparian area around Dry Creek and the native vegetative community within the Property Boundary.

Direct Disturbance of Native Vegetation (from 11AUG21):

- There will be no removal, downgrading, or alteration of the existing native vegetation. Existing vineyards will be the only vegetation disturbed/removed as a result of this project.
- There will be no livestock grazing on the Arrow & Branch Winery property, without proper fencing to keep livestock outside the riparian area. Livestock grazing is not anticipated.
- Temporary orange construction fences shall be installed along the edge of the native vegetative zone prior to Project construction and will be maintained throughout Project construction to assist in keeping equipment outside the native vegetation (including riparian area) zone.
- Leftover material from vineyard/property maintenance has been thrown over the edge of the bank (noted in 2021). This material can be a fire hazard and hinder the growth of native vegetation. Non-organic materials can also contribute to the degradation of the watercourse.
 - Existing non-organic material should be manually removed and disposed of property.
 - Existing organic material can be left and allowed to decompose.
 - Future organic vineyard material can be mulched, removed from the property, or piled outside the native vegetation zone.
 - Storage drums/containers should be stored within a way so potential spills can be properly cleaned up and located well away from the native vegetation zone.

The above conclusions are still valid for the updated project scope for the Direct Disturbance of Native Vegetation.

Invasive Species (from 11AUG21):

- During Project Construction, heavy equipment shall be cleaned prior to coming onto the property and cleaned again if they are removed from the property and brought back.
- Avoid planting invasive non-native plants. Non-native plants that particularly threaten riparian areas in Napa County include giant reed; Himalayan blackberry; periwinkle; German and English ivy; black locust; French, Scotch, and Spanish broom; tamarisk; acacia; eucalyptus; and tree of heaven. **Planting of local, native vegetation is encouraged when landscaping.**
- Monitor and remove invasive non-native plants.

The above conclusions are still valid for the updated project scope for Invasive Species.

Hydrological/Land-Use (from 11AUG21):

- Existing vineyards will be the only vegetation disturbed/removed as a result of this project.
- Stormwater control, flood hazard, septic, and plumbing will all adhere to the standards set forth by Federal, State, County, and Local requirements, codes, and permits.
- Vegetative Receiving Areas and Bioretention Areas are anticipated between the Project and the vegetative strip along Dry Creek
- There will be no new road crossings across Dry Creek installed or completed as a result of this Project.
- There will be no new water withdrawal from Dry Creek as a result of this Project.

The above conclusions are still valid for the updated project scope for Hydrological/Land-Use.

Direct Disturbance to Wildlife (from 11AUG21):

- The native vegetation along Dry Creek is not expected to change; therefore, no change in habitat is anticipated.
- The native vegetative width along Dry Creek is not expected to change. Species currently using this area are used to disturbance issues.

The above conclusions are still valid for the updated project scope for Direct Disturbance to Wildlife. A new addition to Direct Disturbance to Wildlife includes:

- Pre-Project vegetation does not include bumble bee habitat; therefore, there will be no impact on bumble bee candidate species.

Monitoring (from 11AUG21):

Adaptive Management Practices should be utilized. The Landowner should monitor the Riparian Area at least once a year. Photographs can help monitor efforts by showing any changes over time. Some issues that may need addressing include:

- Trampling of native vegetation by humans may require installing fencing to block human access to the riparian area but still allow for wildlife passage (i.e., decorative posts and pole fences can be used).
 - If public access is desirable, someone familiar with landscaping/recreational issues should be consulted regarding the design of trails that encourage people to stay on designated trails (i.e., boardwalks). Public Access is not anticipated.
- Invasive plant eradication may have to be completed in multiple years.
- Vineyard workers should be educated on the importance of vegetated Riparian Areas. Informational signs can be posted (“Leave No Trace” or other educational signs can be purchased or specifically made).
- Trash removal – make sure organic (i.e., vineyard waste) or non-organic material is not being dumped within the riparian area.

The above conclusions are still valid for the updated project scope for Monitoring.

Attachments:

Attachment #1 = Project Location
Attachment #2 = Engineer's Map
Attachment #3 = cnddb Around Project Area (2023)
Attachment #4 = E-FISH Report

This Report was prepared by:

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References:

California Department Fish & Wildlife. California Natural Diversity Database (CNDDDB). California Department of Fish and Wildlife, Biogeographic Data Branch. RareFind Version 5. Accessed 2023.

California Natural Diversity Database (cnddb). October 2023. Special Animal List. California Department of Fish & Wildlife. Sacramento, CA.

National Oceanic & Atmospheric Administration (NOAA). United States Department of Commerce. NOAA Essential Fish Habitat Mapper. www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper. Accessed 2023.

Arrow & Branch Winery Project



Legend



Property Boundary



Project Area - Winery



1/4 Mile Assessment Area

Portions Sec. 18 T06N, R04W MDB&M
APN: 034-190-040-000
Napa County

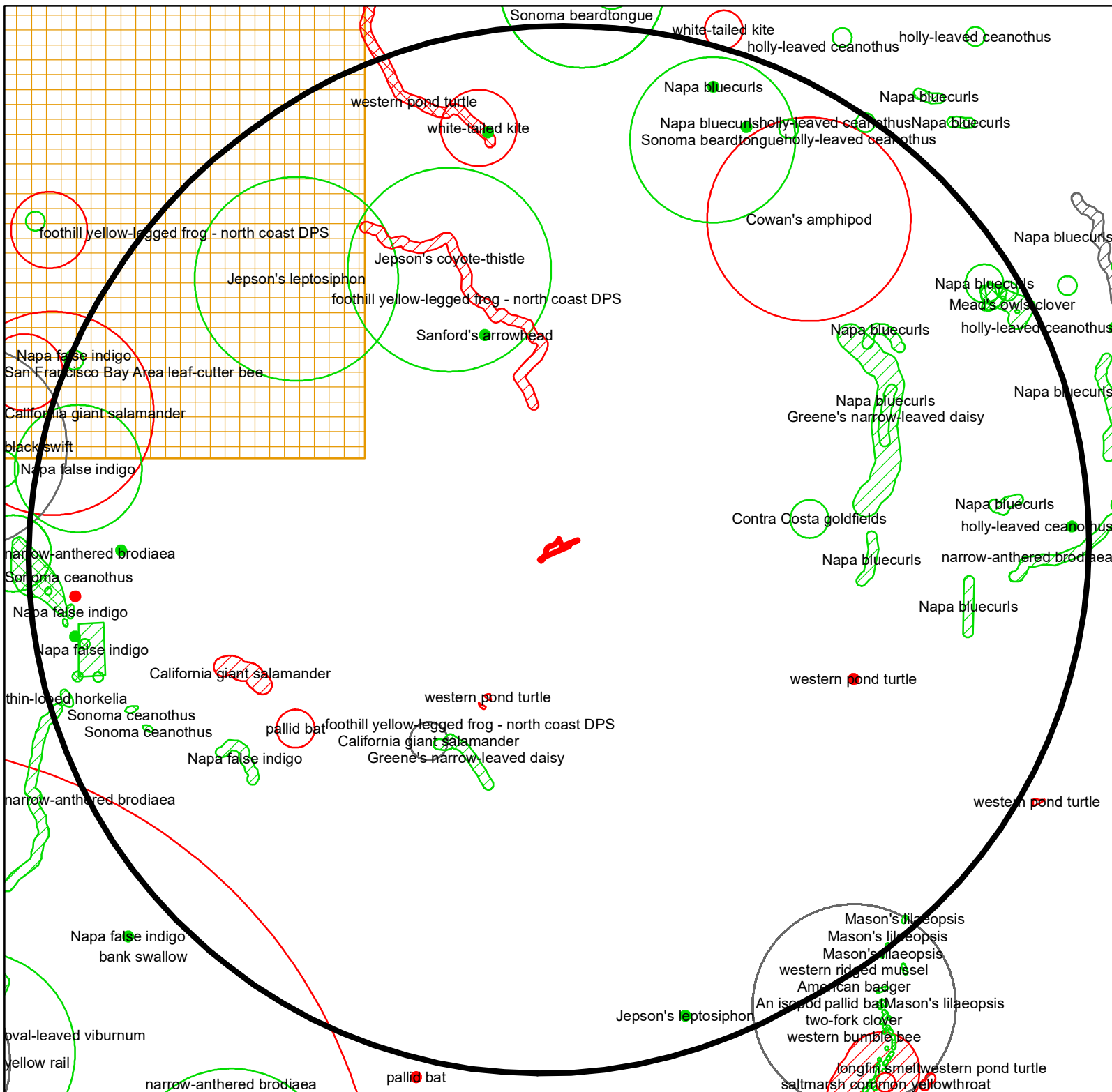


1 in = 1,250 ft

Date: 8/9/2021

Forest Ecosystem Management

Arrow & Branch Winery Project - CNDDDB



Legend

- Property Boundary
- 5 Mile Assessment Area

Portions Sec. 18 T06N, R04W MDB&M
APN: 034-190-040-000
Napa County



1 in = 8,818 ft

Date: 11/4/2023

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

EFH

No additional Essential Fish Habitats (EFH) were identified at the report location.

Pacific Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

Atlantic Salmon

No Atlantic Salmon were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.



Forest Ecosystem Management, pllc

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Northern Spotted Owl Assessment

Arrow & Branch Winery

Napa County

Report Completed by: Pamela Town, Consulting
Wildlife Biologist on July 28, 2021

Northern Spotted Owls (*Strix occidentalis caurina*)

Northern Spotted Owls (NSO) are listed as Threatened under both the Federal Endangered Species Act (ESA) and California State Endangered Species Act (CESA), as well as Sensitive under California Department of Forestry and Fire Protection (CalFire). They are a common to uncommon owl in the coniferous forest of the Pacific Northwest (PNW), ranging from southern British Columbia south to Marin County in northwestern California.

The northern spotted owl is a subspecies of spotted owl (*Strix occidentalis*) found in western North America. They are a medium-sized (16 to 20 inches) dark brown owl with a barred tail, white spots on their head and breast; and dark brown eyes surrounded by a prominent facial disk. The northern spotted owl is a permanent resident in suitable habitat residing in dense, old-growth, and multi-layered second-growth stands of mixed conifer, redwood, and Douglas-fir habitats.

Northern Spotted Owls are rodent specialists, primarily feeding on woodrats (*Neotoma fuscipes*), deer mice (*Peromyscus spp.*), Sonoma tree voles (*Arborimus pomo*), voles (*Microtus spp.*) and northern flying squirrels (*Glaucomys sabrinus*); but has been known to consume small birds, bats, amphibians, and large arthropods. Foraging is completed by searching for prey from a perch and swooping/pouncing on the prey. NSOs usually nest in stick nests (mistletoe clump, abandoned raptor or squirrel nest), in a cavity tree or snag, or in the broken top of a large tree. In the interior region of their range (as seen in Napa County), there appears to be a preference to well-shaded habitat in narrow, steep-sided canyons with north or east-facing slopes to assist in thermoregulatory needs, as they are intolerant of high temperatures.

Spotted owl life-history traits suggest coevolution with late-seral, old growth forests, and second growth forest with scattered late-seral characteristics. They are relatively long-lived and have high adult survival, low reproductive output, and high parental investment in offspring.

Threats to the northern spotted owl include increased competition, and perhaps predation, from the barred owl (*Strix varia*). In addition to the threats from the barred owls, spotted owl populations may also be negatively impacted by unregulated activities that modify habitat and introduce toxic substances into the environment and food chain (i.e. illegal logging, development, marijuana cultivation, etc.).

The Arrow & Branch Winery Project, located off Solano Avenue in Napa California, is located within the range of the Northern Spotted Owl. To reduce potential impact to NSOs, the standard survey methods and take-avoidance measures advocated by the trustee agencies for the spotted owl in California (CalFire 2008 and USFWS 2012 & 2019) were adapted for used for this Project.

Arrow & Branch Winery General Information

Project Location: nkn Solano Avenue; Napa, California (Attachment #1)

Legal of Project Area: Portions of Section 18, T06N, R04W MDB&M

APN: 034-190-040-000

County: Napa County

Proposed Project: Building Winery including structure, parking area, driveway, and landscaping.

Known Northern Spotted Owl Territories

There are no known northern spotted owl territories within 1.3-miles of this Parcel (Attachment #2). The 1.3-mile assessment area was created by USFWS for a Take Avoidance of northern spotted owls within the California Interior (outside the coastal redwood zone). Although the County does have redwoods, the environmental conditions in the area are hotter/drier than the coastal redwood zone; therefore, the 1.3-mile assessment area was used for this Project.

The closest known territory (NAP0016) is located approximately 1.8 miles southwest from this Project (shown on Attachment #1), with this territory being established with only a single detection of a northern spotted owl in June of 1990.

Northern Spotted Owl Habitat

The general attributes for northern spotted owl habitat include a forest with:

- Dense, multi-layered canopy of several tree species.
- Trees of varying sizes and ages.
- Abundant logs, snags/cavity trees, and trees with broken tops or platform-like substrates (i.e., broken tops, mistletoe, debris piles, or old raptor/squirrel nests).
- Open spaces among lower branches to allow flight under the canopy.

USFWS Northern Spotted Owl Take Avoidance Analysis – Interior (Attachment B) dated 27FEB08 further defines NSO habitat as follows:

- High Quality Nesting/Roosting Habitat: Mixed tree species with basal area of 210+ ft² and $\geq 15''$ quadratic mean diameter, and ≥ 8 trees per acre of trees $\geq 26''$ in diameter at breast height, and $\geq 60\%$ canopy closure.

- Suitable Nesting/Roosting Habitat: Mixed tree species with basal area ranging from 150 - 180+ ft² and $\geq 15''$ quadratic mean diameter, and ≥ 8 trees per acre of trees $\geq 26''$ in diameter at breast height, and $\geq 60\%$ canopy closure.
- Suitable Foraging Habitat: Mixed tree species with basal area ranging from 120 - 180+ ft² and $\geq 13''$ quadratic mean diameter, and ≥ 5 trees per acre of trees $\geq 26''$ in diameter at breast height, and a mix of $\geq 40\%$ to 100% canopy closure.
- Low Quality Foraging Habitat: Mixed tree species with basal area ranging from 80 - 120+ ft² and $\geq 11''$ quadratic mean diameter, and $\geq 40\%$ canopy closure.

Recent Wildfire (Last 10-Years): To my knowledge, this Parcel does not fall within the perimeter of any known recent wildfires. The closest recent wildfires were the 2017 Nuns Fire to the West and the 2017 Atlas Fire across the Valley to the East. No recent scorching was noted on the property.

Parcel & Project Area: The Parcel and Project area is primarily existing agriculture (vineyards) with a strip of trees along Dry Creek along the northern boundary of the parcel (Attachment #3). The strip of trees along Dry Creek is approximately 100' to no more than 250' wide. USFWS states that watercourses as well as other narrow habitat strips are not wide enough by themselves to provide functional nesting/roosting habitat (should be at least 300' wide). If the narrow strip is bordered on both sides by unsuitable habitat, then it might be considered functionally foraging habitat at best. As the strip of forest along Dry Creek is so narrow and is surrounded by residential houses, commercial businesses, major highway, and agricultural land (vineyards and hay fields) for well over ¼ mile in all directions (Attachment #3), the strip of forest along Dry Creek is not considered suitable NSO habitat and would not support resident NSOs.

The Proposed Project will not be removing any trees. The Proposed Project will not be altering any vegetation along Dry Creek. Only existing vines will be altered.

Northern Spotted Owl Surveys

Northern Spotted Owl Take Avoidance Scenarios: For the purpose of review of this Project, the following scenario could be used by USFWS to determine whether a take is likely to occur for spotted owls.

Scenario 1:

- A. No Suitable Habitat within harvest units, and
- B. No Suitable Habitat within 0.25 miles of timber operations

Northern Spotted Owl Surveys: As there is no suitable NSO habitat within the Project Area and no suitable NSO habitat within 0.25 mile; no NSO surveys are required.

Northern Spotted Owl Project Protection Measures

- No Trees will be removed.
- No vegetation along Dry Creek will be altered.
- There is no suitable NSO habitat within the Project Area or within 0.25 mile of the Project.
- There are no known NSO territories within 1.3 miles of the Project Area.
- No northern spotted owl surveys are required.
- No operations, other than the use and maintenance of existing roads, will occur within 1,000' of any occupied spotted owl activity center. ***At this time, there are no known NSO activity centers within 1.3 miles of this Project.***
- Seasonal disturbance buffers (1/4 mile) will be observed for occupied sites during the breeding season (01FEB – 31AUG) or at least until protocol surveys support probable absence, non-nesting, nest failure, or fledgling flight can be determined. ***At this time, there are no known NSO activity centers within 1.3 miles of this Project.***
- If Project Description changes from that listed within this Assessment, a new NSO Assessment may be required.

Attachments

Attachment #1 – Topographical Map – Project Location and NSOs within 1.3 Miles (1 page)

Attachment #2 – CA Fish & Wildlife Spotted Owl Sites Found – Report #1 (1 page)

Attachment #3 – Aerial Photo of Project Area and ¼ Mile Assessment Area (1 page)

Northern Spotted Owl Contact Information

Questions or comments regarding this NSO information can be directed to:

Pamela Town
Consulting Wildlife Biologist & SOE
Forest Ecosystem Management, PLLC
(406) 490-7427
Pamtown30@gmail.com

Other Information

Definitions:

- Activity Center: Area of concentrated activity of either a pair of NSOs or a single territorial NSO, represented by a mapped location (usually a nest tree) that occurs within, but not necessarily in the exact center of, the core area. Where clusters of site centers exist in a core area a geographic centroid or nearest neighbor calculation may be used as a designated activity center for habitat analysis purposes. A single territory may also have more than one designated activity center.
- Territory: A spatial area of landscape that is defended by a single resident or pair of northern spotted owls. Specific NSO territories generally refer to a fixed geographic area. Over time, individual spotted owls may occupy different territories (i.e. breeding dispersal, interference competition with barred owls, changes in habitat or prey availability, etc.).

- Home Range: In the absence of site-specific data, the home range is a 1.3-mile radius circle centered on the activity center.
- Territory Identification Number (NAP0005): A number generated by the California Department of Fish & Wildlife assigned to a geographic area currently and/or historically occupied by northern spotted owls.
- Suitable Habitat: Areas meeting the criteria for high quality nesting/roosting habitat, suitable nesting/roosting habitat, suitable foraging habitat, and low-quality foraging habitat.
- Unsuitable Habitat: Areas not meeting the criteria for high quality nesting/roosting habitat, suitable nesting/roosting habitat, suitable foraging habitat, and low-quality foraging habitat.
- NSO Breeding Season: February 1 to August 31st within the inland ecotype.
- Degrade Habitat: Signifies when treatments have a negative influence on the quality of habitat due to the removal or reduction of NSO habitat elements but not to the degree where the existing habitat function is changed.
- Downgrade Habitat: Treatments that reduce habitat elements to the degree the habitat will not function in the capacity that exists pre-treatment, but the activities will not remove habitat entirely.
- Assessment Area: The area used to address northern spotted owls includes 1) Project Footprint; 2) Area within ¼ mile of Project Footprint; 3) 1.3 miles from Project Footprint.

References:

CalFire FRAP Fire Perimeters. <https://frap.fire.ca.gov/frap-projects/fire-perimeters/> Website accessed 2021.

CalFire. 2008. Important Information for Timber Operations Proposed within the Range of the Northern Spotted Owl. California Department of Forestry & Fire Protection. February 2008.

Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California. Attachment B: Take Avoidance Analysis – Interior. United States Department of Interior Fish & Wildlife Service. February 2008.

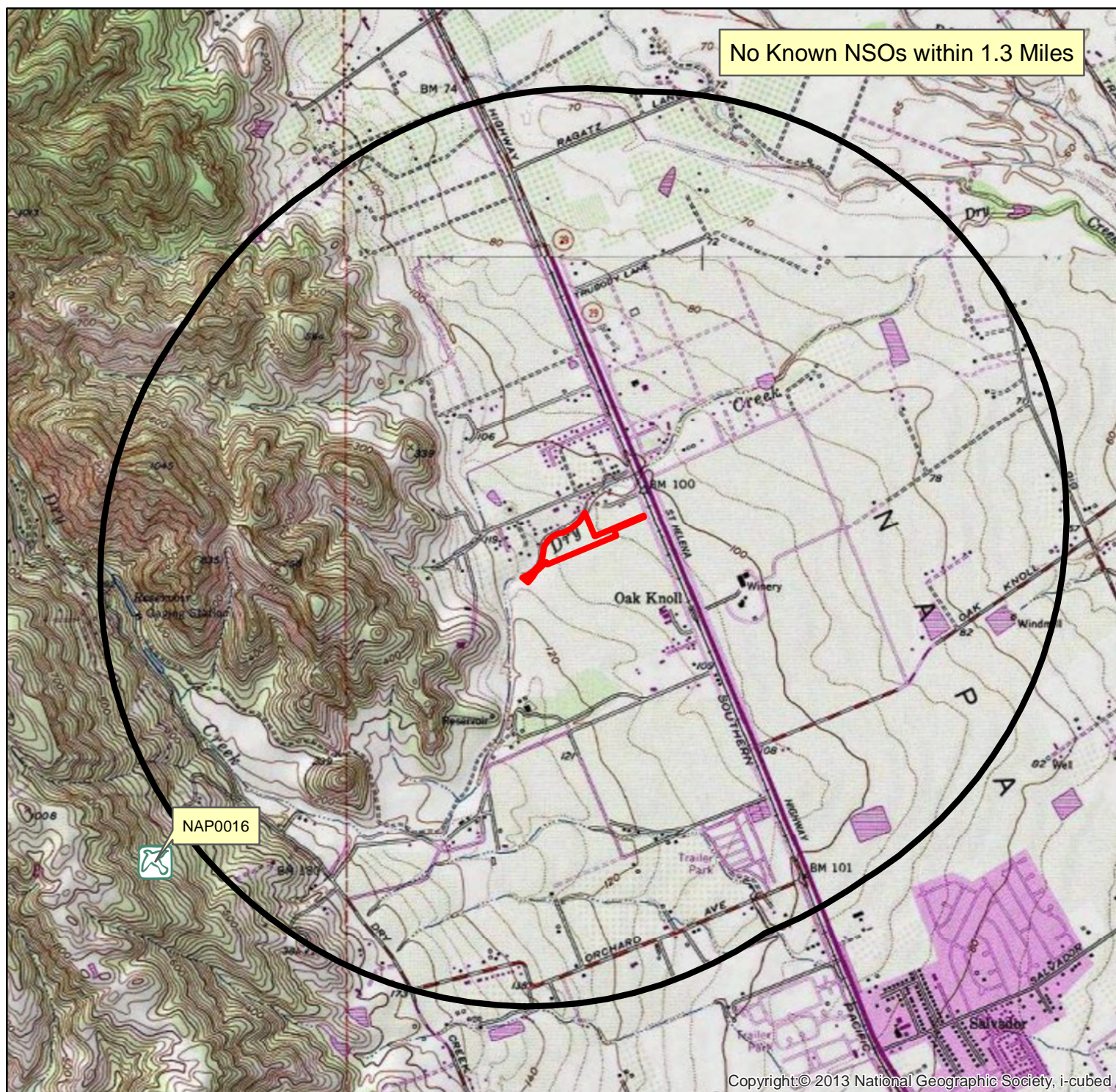
Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California. Attachment B: Take Avoidance Analysis – Interior. United States Department of Interior Fish & Wildlife Service. Updated November 2019.

Northern Spotted Owl Viewer (BIOS CA Natural Diversity Database). Managed by California Department of Fish & Wildlife.

Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls. Endorsed by the U.S. Fish & Wildlife Service. February 2, 2011 and Revised January 9, 2012.

Zeiner, D.C., W.F. Laudenslayer, K.E. Mayer, and M. White, eds. 1988 – 1990. California's Wildlife. Vol. I – III. California Department of Fish & Game, Sacramento, CA.

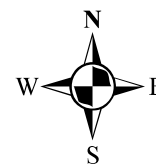
Arrow & Branch Winery Project Location



Legend

- Property Boundary
- 1.3 Mile Assessment Area
- ✕ NSO

Portions Sec. 18 T06N, R04W MDB&M
 APN: 034-190-040-000
 Napa County



1 in = 2,917 ft

Date: 7/22/2021

Data Version Date:
06/29/2020
Report Generation Date:
7/22/2021

Report #1 - Spotted Owl Sites Found
Known Spotted Owl sites having observations
within the search area.



Meridian, Township, Range, Section (MTRS) searched:

M_06N_04W Sections(07,08,09,16,17,18,19,20,21,28,29,30);

M_06N_05W Sections(11,12,13,14,23,24,25,26);

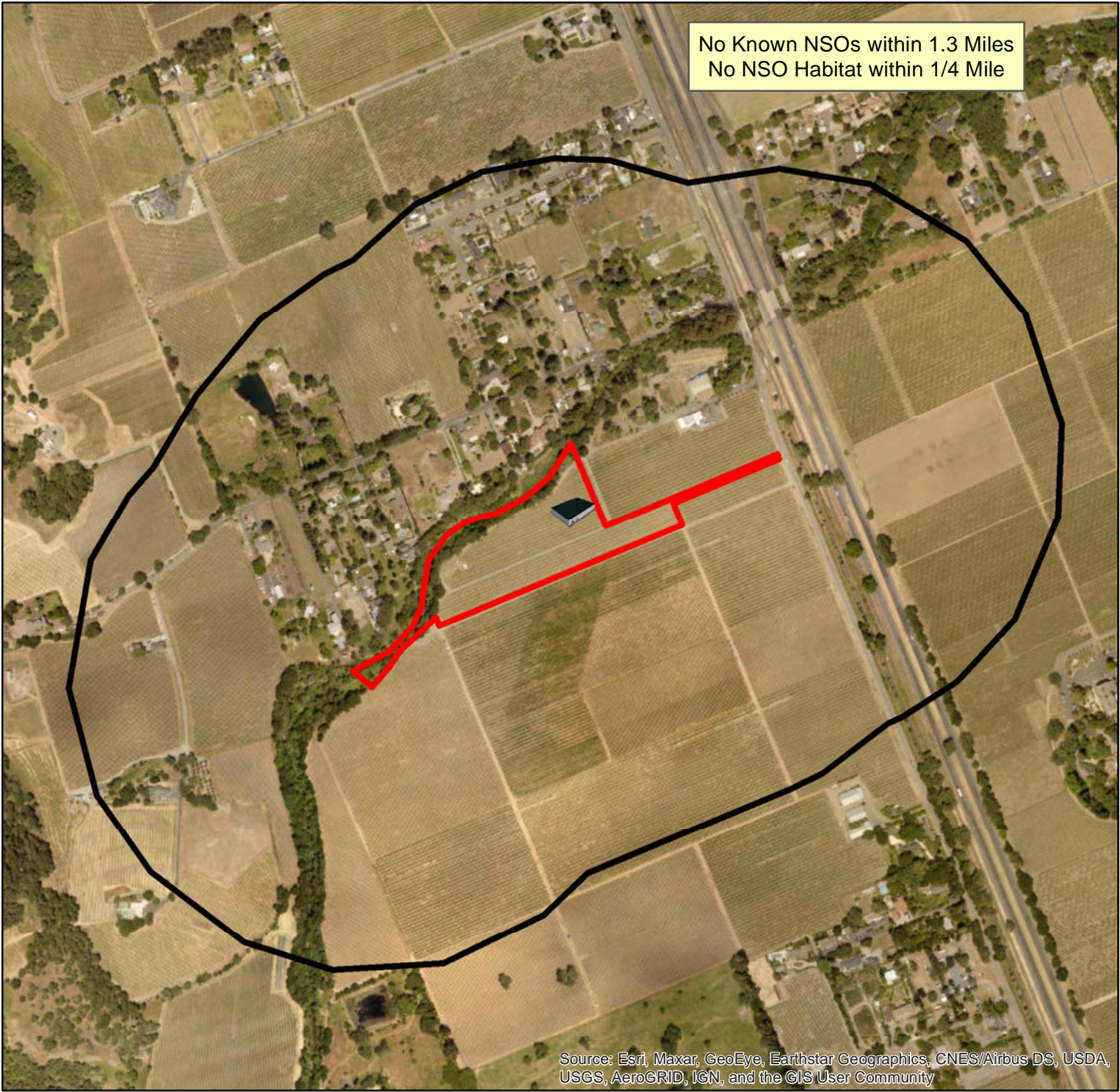
NOTES:

Arrow & Branch Winery


| Masterowl | Subspecies | LatDD NAD83 | LonDD NAD83 | MTRS | AC Coordinate Source |
|-----------|------------|-------------|-------------|--------------|-----------------------|
| NAP0010 | NORTHERN | 38.343553 | -122.396663 | M 06N 05W 27 | Contributor 3.9 Miles |
| NAP0016 | NORTHERN | 38.347983 | -122.365383 | M 06N 05W 24 | Contributor 1.8 Miles |
| NAP0020 | NORTHERN | 38.337498 | -122.376345 | M 06N 05W 26 | Contributor 3+ Miles |
| NAP0031 | NORTHERN | 38.371590 | -122.391900 | M 06N 05W 15 | Contributor 3.4 Miles |
| NAP0038 | NORTHERN | 38.355946 | -122.405716 | M 06N 05W 22 | Contributor 4+ Miles |


Owls in
1.3 Miles:
NONE


Arrow & Branch Winery Project



Legend

 Property Boundary

 Project Area - Winery

 1/4 Mile Assessment Area

Portions Sec. 18 T06N, R04W MDB&M
APN: 034-190-040-000
Napa County



1 in = 833 ft
Date: 8/2/2021

“H”

Environmental Noise Assessment

ARROW AND BRANCH WINERY USE PERMIT MODIFICATION ENVIRONMENTAL NOISE ASSESSMENT

Napa County, California

October 18, 2023

Prepared for:

**Arrow and Branch Winery
C/O: Ms. Donna Oldford
Plans4Wine**

Prepared by:

Fred Svinth, INCE, Assoc. AIA
ILLINGWORTH & RODKIN, INC.
/// Acoustics • Air Quality ///
429 East Cotati Avenue
Cotati, CA 94931
(707) 794-0400

Job No.: 23-127

EXECUTIVE SUMMARY

This Environmental Noise Analysis evaluates the potential for increased noise as a result of the proposed use permit modification of the Arrow and Branch Winery. The permit modification will result in increased square footage of production and accessory uses along with an increase in wine production, on-site employment, the maximum number of visitors and the number of marketing events allowed. Noise attributable to project operations with the permit modification, such as parking lot noise, truck deliveries, winery operations, and marketing events were evaluated and potential impacts to nearby residences were identified. Based on the noise standards presented in the Napa County General Plan, except for outdoor marketing events with music performances and indoor marketing events with open windows and/or doors all noise generated at the project site is expected to meet the Napa County noise thresholds at the nearest residential property lines. Recommendations to mitigate the impact of noise from marketing events at the adjacent residences are included.

INTRODUCTION

This Environmental Noise Assessment evaluates the potential for increased noise as a result of the proposed use permit modification of the Arrow and Branch Winery located at 5210 Solano Avenue in unincorporated Napa County in terms of the regulatory criteria established by the Noise Policy of the Napa County General Plan. This report includes a summary of applicable noise regulations, the results of a noise monitoring survey conducted for the project, and an assessment of noise impacts and the need for noise mitigation measures to meet the applicable County standards at adjacent noise sensitive land uses. Persons not familiar with environmental noise analysis are referred to Appendix A for additional discussion.

PROJECT DESCRIPTION

The Arrow and Branch Winery is in current operation and is requesting to modify its current use permit as follows:

1. An increase in production from 30,000 gallons per year to 45,000 gallons of wine per year,
2. An increase in on-site employment from 2 to 9 full-time and 1 to 2 part-time positions,
3. An increase in visitors from a maximum of 15 to a maximum of 40 per day, and
4. An increase in approved annual events from 6 events with 30 guests and 1 event with 125 guests to a maximum of 12 events with 30 visitors and 2 events with 125 guests.

To support the increased production the project also proposes to increase the Production facility¹ from 10,268 sq.ft. to 13,797 sq.ft. and increase the footprint of Accessory uses² from 379 sq.ft. to 4,308 sq.ft.

The project site is situated west of Hwy 29 and Solano Avenue and south of Darms Lane and an unnamed creek, north of the City of Napa in un-incorporated Napa County. The Winery is bordered on the north by an unnamed creek and residential uses, and by vineyards to the south, west and east. Figure 1 shows the site extents, development boundaries and vicinity.



Figure 1: Project Site and Vicinity

¹ The proposed production area increase provide for a second fermentation room and second barrel storage area.

² The proposed include accessory area increases provide for a Hospitality Addition which will include winery offices, mixed-use conference and tasting rooms, winery storage, a catering staging area, and visitor restrooms.

NAPA COUNTY NOISE REGULATIONS

The Arrow and Branch Winery lies north of the Napa City Limits and is contained entirely within Napa County and as a result, the following Napa County noise standards apply.

2008 Napa County General Plan

The Community Character Element of the 2008 Napa County General Plan sets forth goals and policies to protect people from exposure to excessive noise. Goals and policies contained in this document that are relevant to this project are as follows:

Goal CC-7: Accept those sounds which are part of the County's agricultural character while protecting the people of Napa County from exposure to excessive noise.

Goal CC-8: Place compatible land uses where high noise levels already exist and minimize noise impacts by placing new noise-generating uses in appropriate areas.

Policy CC-35: The noises associated with agriculture, including agricultural processing, are considered an acceptable and necessary part of the community character of Napa County, and are not considered to be undesirable provided that normal and reasonable measures are taken to avoid significantly impacting adjacent uses.

Policy CC-37: The County shall seek to limit excessive noise impacts of recreational uses—including motorboats, shooting ranges, motorcycles, and other noise-producing equipment—through the enforcement of applicable laws (such as requirements for mufflers) and limits on the location and/or extent of such uses.

Policy CC-38: The following are the County's standards for maximum exterior noise levels for various types of land uses established in the County's Noise Ordinance. Additional standards are provided in the Noise Ordinance for construction activities (i.e., intermittent or temporary noise).

Exterior Noise Level Standards (Levels not to be exceeded more than 30 minutes in any hour)

| Land Use Type | Time Period | Noise Level (dBA) by Noise Zone Classification | | |
|--|---------------|--|----------|-------|
| | | Rural | Suburban | Urban |
| Single Family Homes and Duplexes | 10 pm to 7 am | 45 | 45 | 50 |
| | 7 am to 10 pm | 50 | 55 | 60 |
| Multiple Residential 3 or More Units Per Building (Triplex+) | 10 pm to 7 am | 45 | 50 | 55 |
| | 7 am to 10 pm | 50 | 55 | 60 |
| Office and Retail | 10 pm to 7 am | 60 | | |
| | 7 am to 10 pm | 65 | | |
| Industrial and Wineries | Anytime | 75 | | |

- For the purposes of implementing this policy, standards for residential uses shall be measured at the housing unit in areas subject to noise levels in excess of the desired levels shown above.
- Industrial noise limits are intended primarily for use at the boundary of industrial zones rather than for noise reduction at the industrial use.
- Where projected noise levels for a given location are not included in this Element, site-specific noise modeling may need to be conducted in order to apply the County's Noise policies.
- For further information, see the County Noise Ordinance.

Policy CC-48: Where proposed commercial or industrial land uses are likely to produce noise levels exceeding the standards contained in this Element at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy CC-49: Consistent with the County's Noise Ordinance, ensure that reasonable measures are taken such that temporary and intermittent noise associated with construction and other activities does not become intolerable to those in the area. Construction hours shall be limited per the requirements of the Noise Ordinance. Maximum acceptable noise limits at the sensitive receptor are defined in Policies CC-35, CC-36, and CC-37.

Napa County Noise Ordinance

Section 8.16.070 of the Napa County Noise Ordinance regulates exterior noise levels within the unincorporated area of the county due to operational related noise as follows;

No person shall operate, or cause to be operated, any source of sound at any location within the unincorporated area of the county, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level, when measured on any other property, either incorporated or unincorporated, to exceed:

- a. The noise standard for that land use as specified in Table 8.16.070 for a cumulative period of more than thirty minutes in any hour [equivalent to the L₅₀ noise metric]; or
- b. The noise standard plus five dB for a cumulative period of more than fifteen minutes in any hour [equivalent to the L₂₅ noise metric]; or
- c. The noise standard plus ten dB for a cumulative period of more than five minutes in any hour [equivalent to the L₀₈ noise metric]; or
- d. The noise standard plus fifteen dB for a cumulative period of more than one minute in any hour [equivalent to the L₀₂ noise metric];
- e. The noise standard plus twenty dB or the maximum measured ambient level, for any period of time [equivalent to the L_{max} noise metric].

Table 8.16.070: EXTERIOR NOISE LIMITS
(Levels not to be exceeded more than 30 minutes in any hour)

| Receiving Land Use Category | Time Period | Noise Level (dBA) Noise Zone Classification | | |
|-----------------------------------|-------------------|---|----------|-------|
| | | Rural | Suburban | Urban |
| Residential: Single and double | 10 p.m. to 7 a.m. | 45 | 45 | 50 |
| | 7 a.m. to 10 p.m. | 50 | 55 | 60 |
| Residential: multiple and country | 10 p.m. to 7 a.m. | 45 | 50 | 55 |
| | 7 a.m. to 10 p.m. | 50 | 55 | 60 |
| Commercial | 10 p.m. to 7 a.m. | 60 | | |
| | 7 a.m. to 10 p.m. | 65 | | |
| Industrial, including wineries | 10 p.m. to 7 a.m. | 75 | | |
| | 7 a.m. to 10 p.m. | 45 | | |

Based on the exterior noise limits shown in Table 8.16.070 and the cumulative hourly noise levels described above for rural residential and commercial uses are as shown in Table 1, following:

Table 1: County Noise Ordinance Standards

| Hourly Noise Metric | Rural Residential | | Commercial | |
|---------------------------|-------------------|-----------------|---------------|-----------------|
| | Daytime Level | Nighttime Level | Daytime Level | Nighttime Level |
| L ₅₀ (30 Min.) | 50 dBA | 45 dBA | 65 dBA | 60 dBA |
| L ₂₅ (15 Min.) | 55 dBA | 50 dBA | 70 dBA | 65 dBA |
| L ₀₈ (5 Min.) | 60 dBA | 55 dBA | 75 dBA | 70 dBA |
| L ₀₂ (1 Min.) | 65 dBA | 60 dBA | 80 dBA | 75 dBA |
| L _{max} | 70 dBA | 65 dBA | 85 dBA | 80 dBA |

If the measured ambient noise level differs from that permissible within any of the first four noise categories (L₅₀, L₂₅, L₀₈, L₀₂), the allowable noise exposure standard shall be the ambient noise level.

Another provision is included to correct the allowable noise standard for the character of the sound as follows,

“In the event the alleged offensive noise, as judged by the noise control officer, contains a steady, audible tone such as a whine, screech or hum, or is a repetitive noise such as hammering or riveting, or contains music or speech, the standard limits set forth in Tables 8.16.060 and 8.16.070 shall be reduced by five dB, but not lower than forty-five.”

EXISTING NOISE ENVIRONMENT

To quantify the existing noise levels near the property lines of the closest noise sensitive (residential) uses, an ambient noise monitoring survey consisting of one short term and two long-term noise measurements was conducted between 12pm on Friday, August 25th and 12pm on Wednesday, August 30th, 2023. The noise measurements were made using Larson-Davis Laboratories (LDL) precision Type 1 model meters fitted with a ½-inch pre-polarized condenser microphones and windscreens. The meters were calibrated before and after installation with an LDL acoustical calibrator. During the measurement period the weather was clear with no precipitation. The noise monitoring locations are identified in Figure 2.

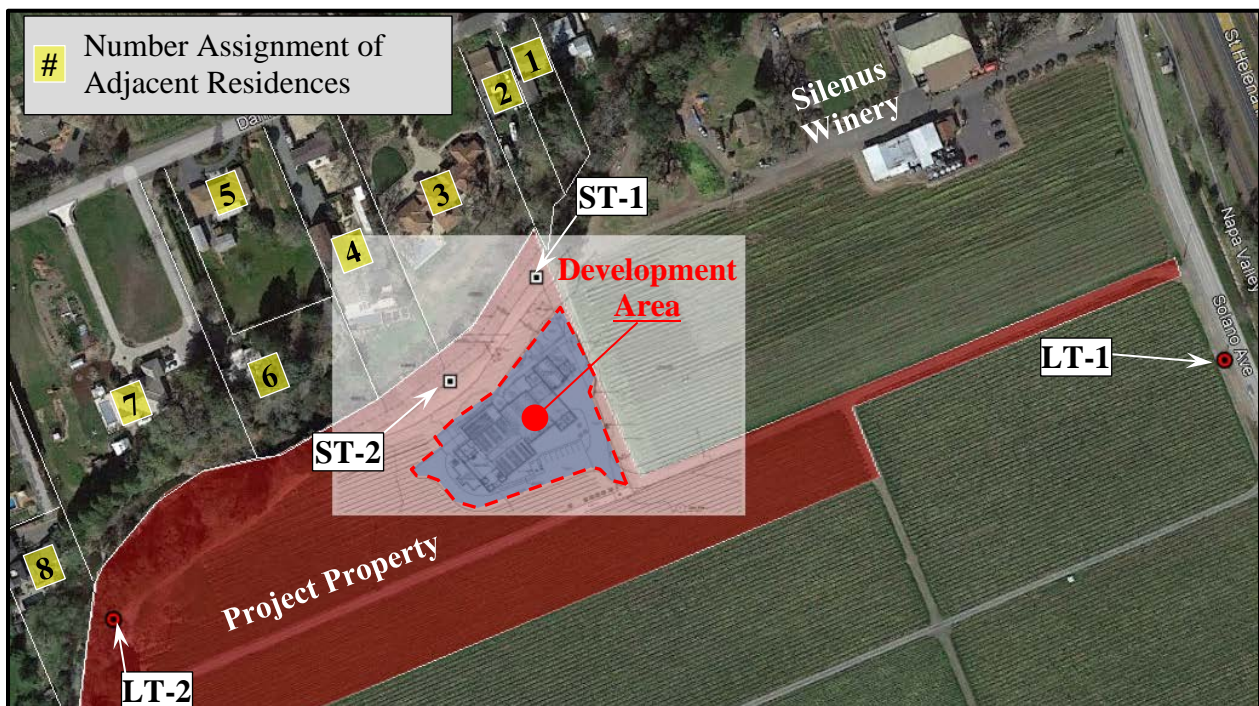


Figure 2: Site, Noise Measurement Locations and Adjacent Residences

The first long-term sound level measurement (LT-1) was made on the Hwy 29/ Solano Avenue project property line as shown in Figure 2. The monitoring equipment was installed on a utility pole on the west side of Solano Avenue adjacent to the eastern project property line. The monitor was about 25 feet, 130 feet and 215 feet from the respective centerlines of Solano Avenue, the Wine Train rail line, Hwy 29. Noise from Hwy 29 dominated the noise environment, while occasional traffic on Solano Avenue and train passbys, contributed occasional higher noise levels emissions to the ambient noise environment at LT-1. The hourly trend in noise levels at this location, including the energy equivalent noise level (L_{eq}), maximum (L_{max}), minimum (L_{min}), and the noise levels exceeded 2, 8, 25, and 50 percent of the time (indicated as L_2 , L_8 , L_{25} , and L_{50}) are shown on Chart 1.

A review of Chart 1 shows that the average weekday noise levels ranged from 61 to 70 dBA L_{eq} during the day, and 48 to 69 dBA L_{eq} at night, and average weekend noise levels ranged from 60 to 70 dBA L_{eq} during the day and 48 to 67 dBA L_{eq} at night. The calculated average day/night noise level (L_{dn}) at this location was 68 dBA on weekdays and 69 dBA on the weekend. The overall L_{dn} at this location was found to be 69 dBA. The average, maximum, minimum levels measured for the daytime and nighttime periods for the entire LT-1 measurement along with the corresponding Napa County Noise Standard Limits are shown in Table 2, following.

Table 2: Comparison of LT-1 Noise Measurements Results and Napa County Standards

| Type of Level | | Noise Level, dBA | | | | |
|------------------|------------------------|------------------|-----------|-----------|-----------|-----------|
| | | L_{50} | L_{25} | L_8 | L_2 | L_{max} |
| Daytime Levels | County Noise Standard | 50 | 55 | 60 | 65 | 70 |
| | Average Level Measured | 60 | 64 | 72 | 77 | 85 |
| | Range (Max/Min) | 57/64 | 60/70 | 62/76 | 68/79 | 57/97 |
| Nighttime Levels | County Noise Standard | 45 | 50 | 55 | 60 | 65 |
| | Average Level Measured | 52 | 57 | 61 | 66 | 80 |
| | Range (Max/Min) | 39/65 | 45/68 | 53/74 | 57/78 | 70/92 |

The second long-term sound level measurement (LT-2) was made on the project property line near the western extent of the property and the adjacent residential properties to the northwest across the creek as shown in Figure 2. The monitoring equipment was installed on the trunk of a tree at a height of 10 feet above grade. Noise levels measured at this site were primarily produced by distant traffic and winery noise sources along with sounds produced by insects and other noise associated woodland areas and bird chirps. The hourly trend in noise levels at this location, including the energy equivalent noise level (L_{eq}), maximum (L_{max}), minimum (L_{min}), and the noise levels exceeded 2, 8, 25, and 50 percent of the are shown on Chart 2.

The average weekday noise levels at LT-2 ranged from 36 to 56 dBA L_{eq} during the day, and 30 to 52 dBA L_{eq} at night, and average weekend noise levels ranged from 37 to 55 dBA L_{eq} during the day and 30 to 51 dBA L_{eq} at night. The calculated average day/night noise level (L_{dn}) at this location was 47 dBA on weekdays and 52 dBA on the weekend. The overall L_{dn} at this location was found to be 51 dBA. The average, maximum, minimum levels for the daytime and nighttime levels for the entire LT-2 measurement period are shown in Table 3, along with the Napa County Noise Standards.

Table 3: Comparison of LT-2 noise measurements results and Napa County Standards

| Type of Level | | Noise Level, dBA | | | | |
|------------------|------------------------|------------------|-----------------|----------------|----------------|------------------|
| | | L ₅₀ | L ₂₅ | L ₈ | L ₂ | L _{max} |
| Daytime Levels | County Noise Standard | 50 | 55 | 60 | 65 | 70 |
| | Average Level Measured | 42 | 44 | 47 | 50 | 60 |
| | Range (Max/Min) | 32/56 | 36/57 | 36/65 | 41/60 | 49/73 |
| Nighttime Levels | County Noise Standard | 45 | 50 | 55 | 60 | 65 |
| | Average Level Measured | 40 | 41 | 43 | 45 | 52 |
| | Range (Max/Min) | 28/51 | 30/52 | 33/53 | 35/53 | 41/68 |

Two short-term, 15-minute duration, noise measurements (ST-1 and ST-2 in Figure 2) were made on the northern property line opposite the creek from the property lines of the nearest residences to the north (Residences 3 and 4) as shown in Figure 2. The average day-night noise level (L_{dn}) at the short-term measurement locations were estimated at this site by correlating the short-term measurement data to the data gathered during the corresponding time period at the long-term sites. Noise levels measured at the short-term measurement locations were produced by distant traffic and winery noise sources along with sounds produced by insects and other noise associated woodland/ riparian areas and bird chirps. The measurement results and estimated L_{dn} levels at these locations are shown in Table 4, following.

Table 4: Summary of Short-Term Noise Measurement Data, dBA

| Noise Measurement Location | L ₅₀ | L ₂₅ | L ₀₈ | L ₀₂ | L _{max} | L _{dn} |
|--|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|
| ST-1: Near Property line of Residence 3 to project site. | 48 | 49 | 50 | 51 | 56 | 57 |
| ST-2: Near Property line of Residence 4 to project site. | 43 | 45 | 47 | 54 | 59 | 53 |
| County Daytime Noise Standard | 50 | 55 | 60 | 65 | 70 | |
| County Nighttime Noise Standard | 45 | 50 | 55 | 60 | 65 | |

Note: L_{dn} is approximated by correlation to the corresponding measurement period at the long-term sites.

PROJECT SPECIFIC NOISE LEVEL CRITERIA

Based on the results of the noise measurements, the existing levels at the property lines shared with the nearest residences north of the creek (Residences 1 through 8 as shown in Figure 2) do not exceed the Napa County Noise Limits for L_{max}, L₂, L₈, L₂₅, and L₅₀ during the daytime or nighttime. The average measured levels at the residences is expected to be between 5 and 10 dBA (or more) below the County noise limits. Therefore, the standard County Daytime and Nighttime noise standards are used in this analysis.

Chart 1: Measured Noise Levels at LT-1

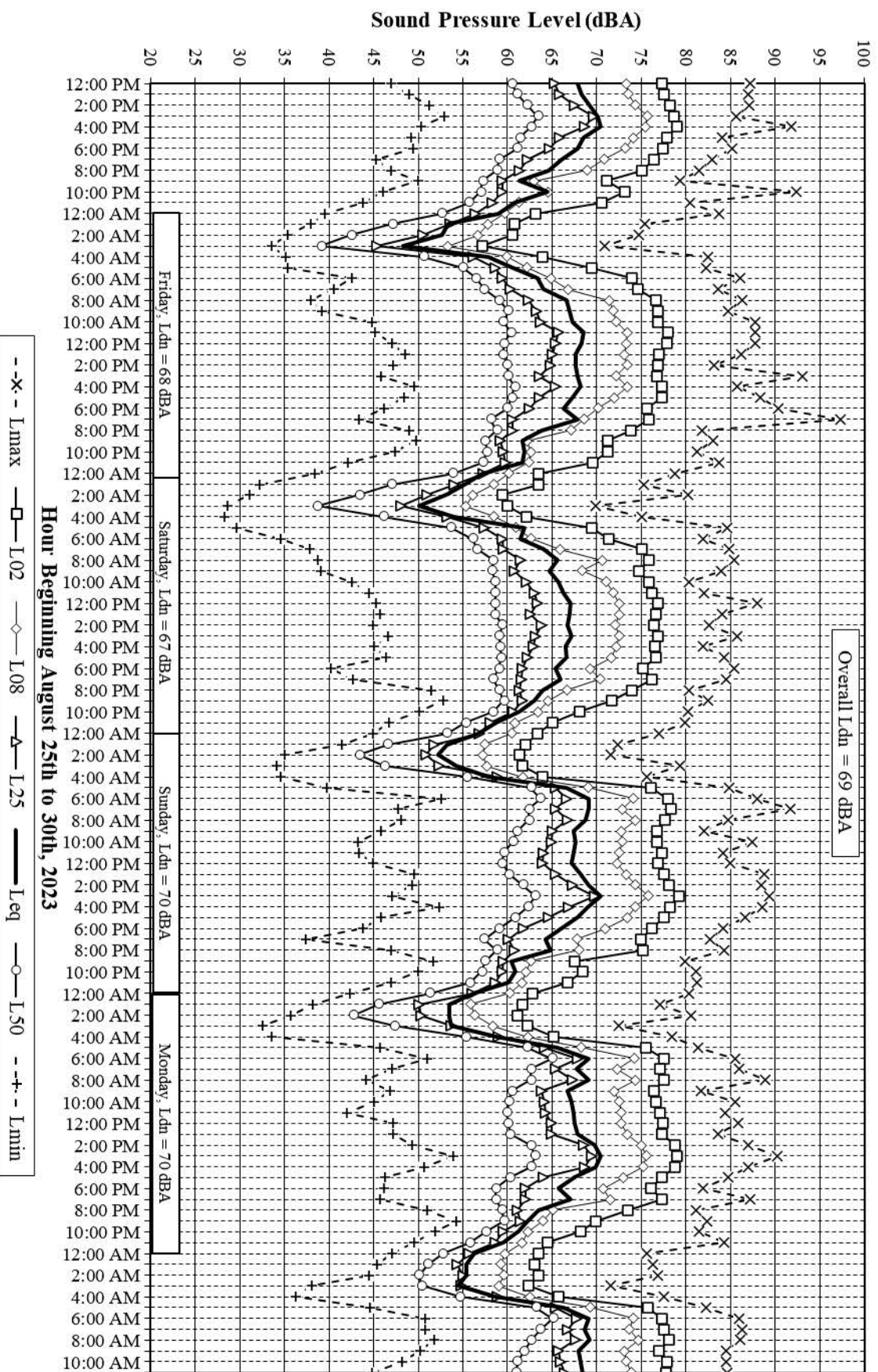
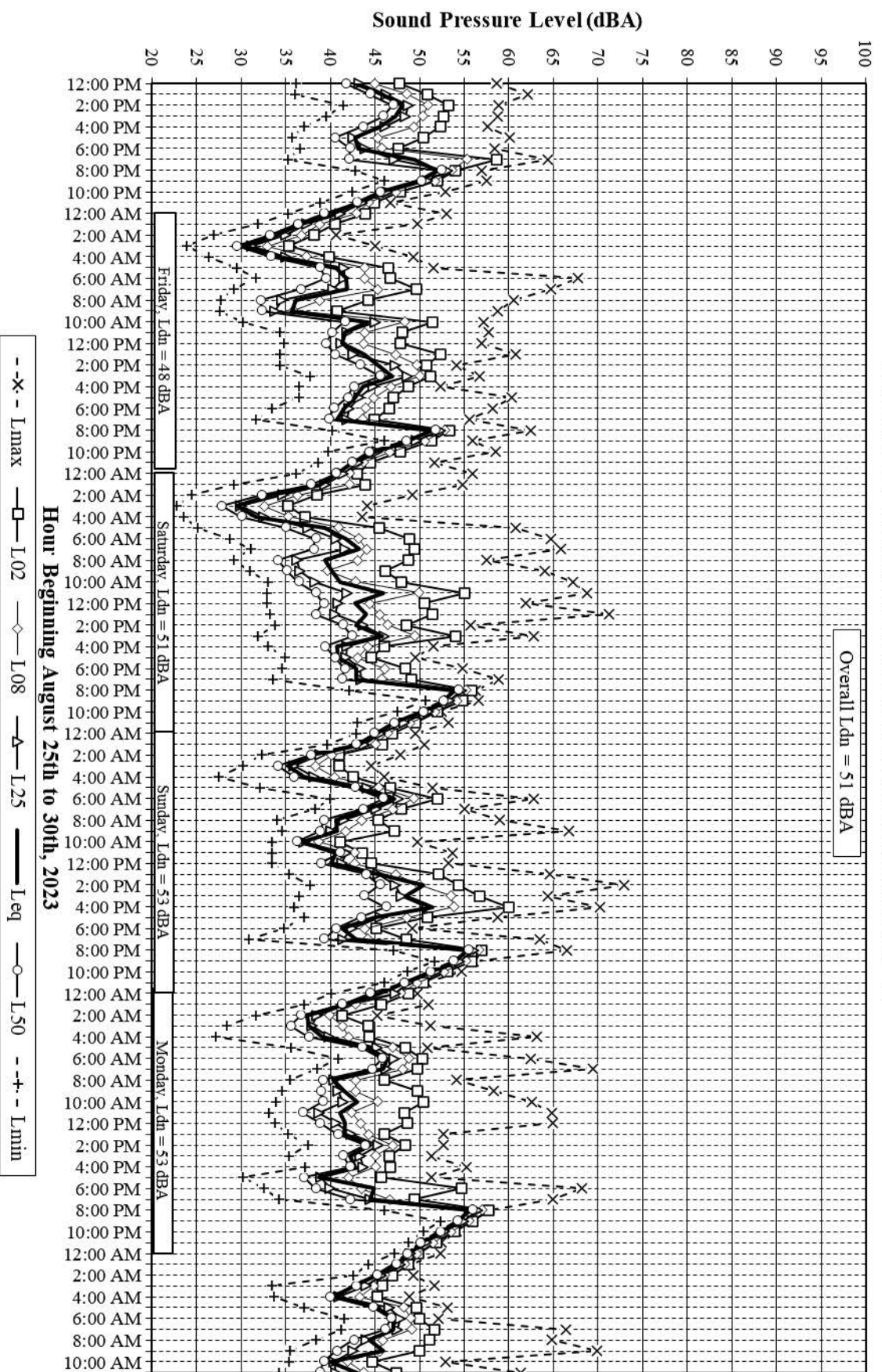


Chart 2: Measured Noise Levels at LT-2



NOISE ASSESSMENT

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

I. Identification of Noise Producing operations/uses

There are a number of operations associated with wine production and events at the facility that will produce noise. These include:

1. Project Traffic,
2. Winery operations and seasonal production activities,
3. Maintenance and forklift operations, and
4. Marketing Event noise.

II. Typical Noise Source Levels

To estimate the noise levels associated with project operations, some attention must be given to the temporal nature of the noise produced. Below each of the major winery related noise producing operations outlined above are discussed:

Project Traffic would produce the following type and range of traffic noise levels:

- Automobile and light vehicle traffic accessing the tasting room would occur during the daytime hours and noise produced is expected to include the sounds of vehicles traveling on the access road maneuvering in parking areas, engine starts, door slams. Automobile and other light vehicle traveling at 25 to 35 mph typically produce sound levels of between 59 to 65 dBA at 50 feet. Parking lot activities such as engine starts, door slams and low speed vehicle movements typically produce maximum sounds levels ranging from 53 dBA to 63 dBA at 50 feet.
- Truck traffic on the project site will continue to access the winery off of Solano Avenue via the project access road. Noise levels generated by truck traffic are dependent on the size and speed of trucks, typical noise levels generated by heavy duty (semi-tractor trailer type) trucks would be expected to range from 70 to 75 dBA when traveling at constant speeds to 75 to 80 dBA when stopping/starting and maneuvering at a distance of 50 feet. Typical maximum noise levels generated by medium (box type and delivery) trucks would be expected to range from 60 to 65 dBA when traveling at constant speeds to 65 to 70 dBA when stopping/starting and maneuvering at a distance of 50 feet.

Winery and seasonal production operations typically produce the following type and range of noise levels³:

- Refrigeration equipment, as a maximum condition, is assumed operate under constant conditions day and night. Though the model, type and capacities of the existing or any additional cooling compressors are not known, field measurements of such equipment shows that sound from such equipment can produce levels of between 50 dBA to 65 dBA at 50 feet, with average (L_{eq}) noise levels of 60 dBA at 50 feet.
- Air compressors, used for various processes in the facility, typically cycle on and off based on the need for compressed air. Though the model, type and capacities of existing or any additional cooling compressors for the facility are not specified, from field measurements of cooling

³ The Use permit modification requests an increase in production from 30,000 gallons per year (~12,500 cases) to 45,000 gallons (~18,750 cases) of wine per year.

compressors at other wineries, we expect this equipment to produce average (L_{eq}) sound levels of 62 dBA at 50 feet.

- Bottling would be constant on an hourly basis although it is likely to occur for only a few weeks each year. Based on sound level measurements of mobile (truck based) and fixed bottling lines at other wineries, we would expect bottling operations to produce average (L_{eq}) sound levels of between 65 and 70 dBA at 50 feet.
- Crush activities typically occur for about two weeks each year. The majority of the noise sources associated with the crush include the operation of hoppers, presses, destemmers, separators, crushers, air compressors, forklifts, conveyors, etc. Average noise levels resulting from the crush are typically constant on an hourly basis. Individual pieces of crush-specific equipment such as the separators and destemmers are relatively quiet with sound levels of around 50 dBA L_{eq} at about 50 feet, however the composite crush activities at a small sized winery, such as the proposed 45,000 Gallon (~16,750 case) capacity facility, typically generate noise levels of about 62 dBA L_{eq} , at a distance of 50 feet from the center of operations. During the crush, discrete maximum noise events, such as the setting of empty bins, may reach 70 to 80 dBA L_{max} at 50 feet from the center of operations.

Maintenance and forklift operations typically produce intermittent noise depending on the exact nature of the operation. These would likely occur at a much less than a daily rate although operations may span several hours once initiated. Backup alarms (or beepers), which are repetitive and irritating by design, also produce noise during these activities, and as with forklift operations themselves are expected to be intermittent by nature. Based on experience with other winery operations, we estimate that noise levels from these operations may reach levels of between 66 and 67 dBA at 50 feet.

Marketing Event Noise

The Use permit modification requests an increase in approved events from 6 events with 30 guests and 1 event with 125 guests to a maximum of 12 events with 30 visitors and 2 events with 125 guests. The project description states that no amplified outdoor music will occur at the project outdoor spaces. However, considering the proposed event sizes, outdoor or indoor events may have background music, outdoor events may include non-amplified (acoustic) music performance and indoor events may have amplified music performances. Table 5 lists typical average noise levels at distances of 50 feet from the source generated by the types of events which may occur at the project.

Table 5: Typical Noise Source Levels for Events (A-Weighted L_{eq} Levels)

| Event or Activity | Typical Noise Level @ 50 ft. |
|---|------------------------------|
| Amplified Music Performances | 72 dBA ¹ |
| Amplified Speech | 70 dBA |
| Non-amplified (acoustic) Music Performances | 67 dBA ¹ |
| 30 Guests in Raised Conversation with Background Music | 56 dBA |
| 125 Guests in Raised Conversation with Background Music | 62 dBA |

¹ Based on the results of measurements conducted at wineries and other event venues, I&R has found that Music performances are louder than multiple (100 person) guests with background music. In general, we have found that when music is only used as a background for dinner, tasting, and similar events it is played at a lower level to encourage conversation. Conversely, where Music performances are a focal point of an event, they typically produce higher sound levels than simple background music.

Considering our review of the project plans and experience with other wineries, events may occur inside the Existing Winery Building, the Hospitality Addition, or the previously approved covered terrace as identified in Figure 3.

III. Propagation of sound

The final step in estimating the project noise levels is assessing the propagation of sound to the sensitive receptors. To do this, it is necessary to assume some rate of sound attenuation between the operations and receiver locations. The most dominant physical effect is due to the spreading out of sound waves with distance. Depending on ground absorption conditions noise from traffic noise sources can be considered to attenuate at 3 to 4.5 dB per doubling of distance from the source while noise from fixed project source can be considered to attenuate at a rate of 6 to 7.5 dB per doubling of distance from the source. Considering the vineyard and other vegetative over much of the site, distance attenuation rates of 4.5 dB per distance doubling for traffic noise sources and 7.5 dB per distance doubling for fixed noise sources are used in this analysis. Other effects can modify these fall-off rates such as partial shielding from buildings or topography, atmospheric attenuation of sound, and meteorological effects. These effects almost always reduce the noise in addition to that due to sound divergence. As most of these effects will vary with time due to changing environmental conditions, it is most conservative to assume only attenuation due to divergence for outdoor activities, minimum terrain or building shielding factors (6 dBA) where intervening terrain or structures break the line of sight from source to receiver, and structural attenuation rates of 12 dBA for indoor event/operations with open windows and doors, or 20 dBA with closed windows and doors.

The closest noise sensitive uses to the Winery are the residences to the north of the site across the creek identified as Residences 2, 3, 4 and 6 in Figure 2.

IMPACT ASSESSMENT

As stated in the project description, to support the increased production the project proposes to increase the size of the Production facility from 10,268 sq.ft. to 13,797 sq.ft. with the addition of secondary fermentation and barrel storage areas and to increase the footprint of Accessory uses from 379 sq.ft. to 4,308 sq.ft. with the addition a Hospitality area with will include a great room, winery offices, mixed-use conference and tasting rooms, winery storage, a catering staging area, and visitor restrooms, and an exterior cover terrace. Figure 3 shows the orientation of the new and previously approved building areas in relation to the immediate winery development area.

Impact 1: Increased Vehicular Noise on Winery Access Road.

Automobile parking and traffic

Autos and passenger vehicles would continue to use the existing driveway from Solano Avenue and the parking areas south of the winery building. A review of the project site plan and information from Google Earth indicates that:

- The property line of Residence 1 is approximately 375 feet from the closest winery visitor parking area and 390 feet from the site driveway,
- The property line of Residence 2 is partially shielded by the winery buildings at approximately 300 feet from the closest winery visitor parking area and 320 feet from the site driveway,
- The property line of Residence 3 is shielded by the winery buildings at approximately 230 feet from the closest winery visitor parking area and 260 feet from the site driveway,
- The property line of Residence 4 is shielded by the winery buildings at approximately 220 feet from the closest winery visitor parking area and 270 feet from the site driveway, and
- The property line of Residence 6 is shielded by the winery buildings at approximately 260 feet from the closest winery visitor parking area and 280 feet from the site driveway.

Given the expected visitor and employee use information provided with the Use Permit Application, these activities are expected to occur for more than 5 but less than 15 minutes out of

an hour on a typical day and fall in the L₀₈ daytime category of 60 dBA (see Table 1). However, during events, on busy weekends, or during harvest season such activities may occur more frequently and occur for more than 15 but less than 30 minutes out of an hour and fall in the Napa County L₂₅ daytime category of 55 dBA. Considering these activity durations and the distances, Table 6, following, summarizes the assessment of automobile noise on the driveway and in the parking lots at the closest residences.

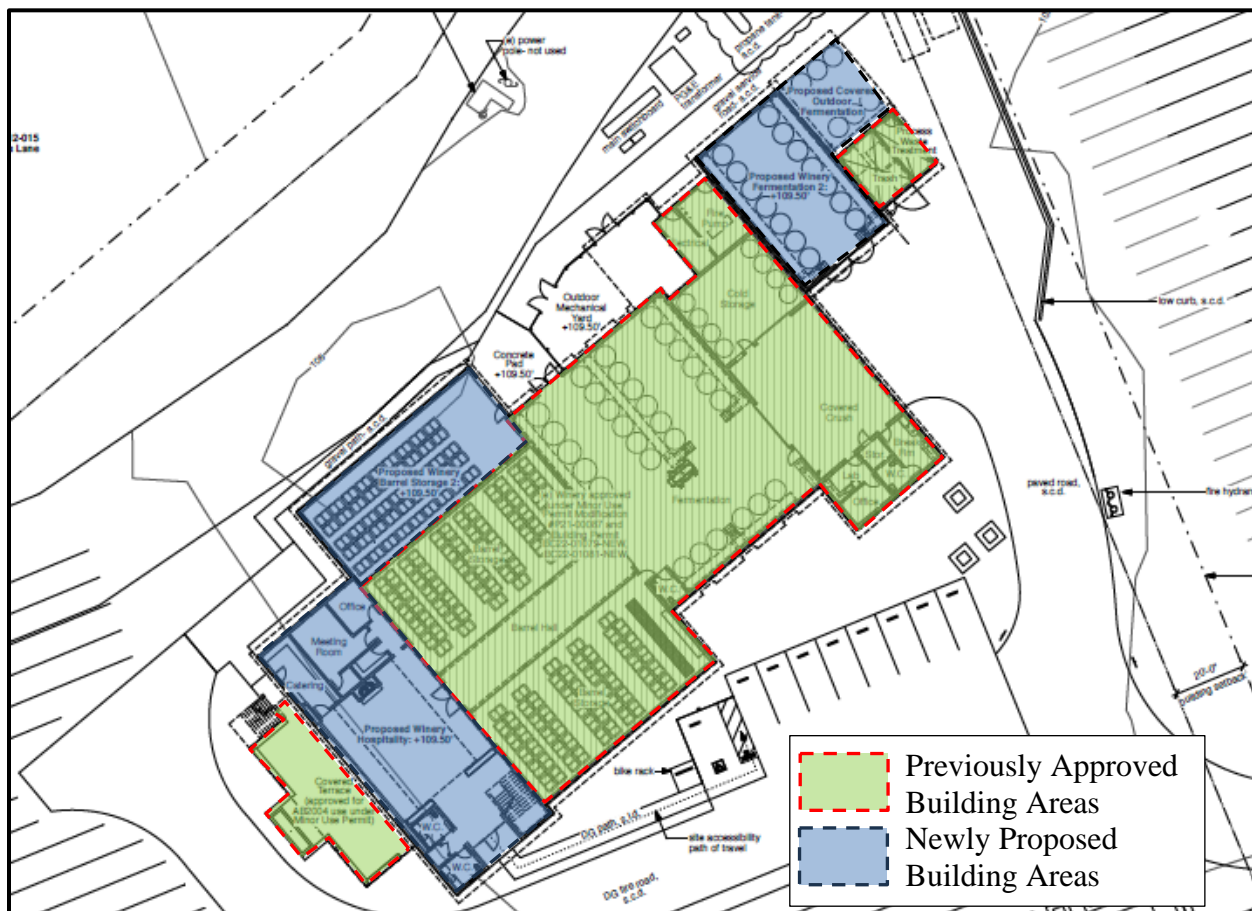


Figure 3: Newly Proposed and Previously Approved Winery Building Areas

Table 6: Driveway and Parking Lot Automobile Noise Levels

| | Noise Levels, dBA | | | | |
|---|-------------------|-----------|-----------|-----------|-----------|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₀₈ Noise Limit | 60 | 60 | 60 | 60 | 60 |
| Noise levels due to Autos on Winery Access Roads and in parking lot at Adj. Residences | 43 | 42 | 41 | 41 | 40 |
| <i>Driveway Noise Exceeds Daytime L₀₈ Limit?</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |
| Daytime L ₂₅ Noise Limit | 65 | 65 | 65 | 65 | 65 |
| Noise levels due to Autos in parking areas at Adj. Residences | 41 | 41 | 40 | 41 | 39 |
| <i>Parking Noise Exceeds Daytime L₂₅ Limit?</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |

Based on this finding, noise associated with auto traffic at the winery would comply with Napa County noise standards at all adjacent residences.

Truck Traffic

Trucks entering the Winery site currently enter the site off of Solano Avenue and travel on the access road on the site. A review of the project site plan and information from Google Earth indicates that trucks traveling on this drive path drive would come as close as approximately 330, 260, 230, 250, and 320 feet from the property lines of adjacent Residences 1, 2, 3, 4 and 6 as identified in Figure 2. Based on these distances, the maximum noise levels generated by medium and heavy-duty trucks traveling at constant speeds on the winery driveways would, respectively, be 45 & 55 dBA at Residence 1, 44 & 54 dBA at Residence 2, 42 & 52 dBA at Residences 3 and 4, and 39 & 49 dBA at Residence 6.

Further review of the project site plan and information from Google Earth indicates that trucks maneuvering in the winery shipping/receiving area would be as close as approximately 300, 225, 175, 200, and 280 feet from the property lines of adjacent Residences 1, 2, 3, 4 and 6 as identified in Figure 2. Based on these distances, the maximum noise levels generated by medium and heavy-duty trucks maneuvering in the winery shipping/receiving area would, respectively, be 48 & 58 dBA at Residence 1, 51 & 61 dBA at Residence 2, 50 & 60 dBA at Residence 3, 49 & 59 dBA at Residence 4, and 45 & 55 dBA at Residence 6.

Given the expected truck trip information provided, we expect that the winery will have one truck trip per day during non-harvest season, with an expected increase in truck trips to 4 truck trips per day during harvest season. Based on this usage, maximum noise levels due to on-site Truck traffic is expected to occur for more than 1 but less than 5 minutes out of an hour during the highest use (harvest season) periods and fall in the Napa County L₀₂ daytime category of 65 dBA. Considering this activity duration and sound levels, Table 7 summarizes the assessment of truck traffic noise at the closest residences.

Table 7: On-site Truck Noise Levels

| | | Noise Levels dBA | | | | |
|--|-----------------------------------|------------------|-----------|-----------|-----------|-----------|
| | | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₀₂ Noise Limit | | 65 | 65 | 65 | 65 | 65 |
| Medium Trucks | On site access drives | 45 | 44 | 42 | 42 | 39 |
| | In shipping/receiving area | 48 | 51 | 50 | 49 | 45 |
| Heavy Trucks | On site access drives | 55 | 54 | 52 | 52 | 49 |
| | In shipping/receiving area | 58 | 61 | 60 | 59 | 55 |
| <i>Truck Noise Exceeds Daytime L₀₂ Limit?</i> | | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |

Based on this finding, noise associated with truck use at the winery would comply with the Napa County noise standards at all adjacent residences.

Mitigation 1: None required.

Impact 2: Mechanical Equipment Noise

The winery operations currently, and will continue to, use noise-generating mechanical equipment such as air-cooled condensing units, pumps, and compressors as well as less significant sources of noise, such as air-conditioning systems and exhaust fans. The project drawings show the location of the enclosed project mechanical yard on the northern side to the winery building (see Figure 3). Considering that most or all of the outdoor mechanical equipment to be in this yard and using distance information obtained via Google Earth, this equipment may be as close as approximately 310, 230, 110, 130, and 200 feet from the property lines of adjacent Residences 1, 2, 3, 4 and 6 as identified in Figure 2. Thus, under the worst-case condition with the equipment located outside in

the enclosed project mechanical , constant L₅₀ noise levels from mechanical equipment could produce respective L₅₀ levels of 39,42, 50, 49, and 44 dBA at adjacent Residences 1, 2, 3, 4, and 6 as identified in Figure 2. Table 8, below, presents and summarizes the assessment of this worst-case mechanical equipment noise versus the Napa County L₅₀ daytime criterion of 50 dBA at the property lines of the closest noise sensitive uses.

Table 8: Mechanical Equipment Noise Levels

| | Noise Levels dBA | | | | |
|---|------------------|-----------|-----------|-----------|-----------|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₅₀ Noise Limit | 50 | 50 | 50 | 50 | 50 |
| Mechanical Noise Levels at Residence | 39 | 42 | 50 | 49 | 44 |
| <i>Mechanical Noise Exceeds L₅₀ Limit?</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |

Considering the findings shown in Table 9, noise levels associated with worst-case winery mechanical equipment would not exceed the project specific noise standards at the closest noise sensitive uses.

Mitigation 2: None required.

Impact 3: Crush Related Noise

Under the modified use permit annual crush related activities would continue to take place in the covered crush pad of the winery building. Crush activities occurring in these areas will receive some noise shielding from building structures. Based on a review of project plans and distance information obtained via Goggle Earth, crush activities may be as close as approximately 320, 240, 180, 200, and 270 feet from the property lines of adjacent Residences 1, 2, 3, 4 and 6 as identified in Figure 2. As discussed previously, noise from crush activities are largely made up of relatively constant noise, with occasional discrete maximum noise events, such as the setting of empty bins. Noise from crush activities would therefore fall in the Napa County noise criteria of 50 dBA L₅₀ and 70 dBA L_{max}. Table 9, below, presents and summarizes the assessment of crush noise against these L₅₀ and L_{max} noise criteria noise standard and maximum noise events, such as the setting of empty bins.

Table 9: Crush Noise Levels

| | Noise Levels dBA | | | | |
|---|------------------|-----------|-----------|-----------|-----------|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₅₀ Noise Limit | 50 | 50 | 50 | 50 | 50 |
| L₅₀ Crush Noise Levels at Residence | 30 | 33 | 36 | 35 | 32 |
| <i>Crush Noise Exceeds Daytime L₅₀ Limit?</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |
| Daytime L _{max} Noise Limit | 70 | 70 | 70 | 70 | 70 |
| L_{max} Crush Noise Levels at Residence | 48 | 51 | 54 | 53 | 50 |
| <i>Crush Noise Exceeds Daytime L_{max} Limit?</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |

Considering the findings shown in Table 10, noise levels associated with annual crush activities would not exceed the project specific noise standards at the property lines of the closest noise sensitive uses.

Mitigation 3: None required.

Impact 4: Bottling Noise

The project description and drawings do not indicate whether bottling occurs within buildings or in the crush area or shipping/receiving area between the Winery and Production Buildings. However, in keeping with the practice of many similar sized wineries this report assumes that, under worst case conditions, bottling will be done with a mobile bottling truck in the closest areas to the adjacent residences of the covered crush pad. Based on this consideration, and distance information obtained via Goggle Earth, bottling noise is therefore analyzed at respective distances of approximately 320, 240, 175, 200, and 265 feet from the property lines of adjacent Residences 1, 2, 3, 4 and 6 as identified in Figure 2. . As discussed previously, noise from bottling is relatively constant noise and would therefore fall in the Napa County Noise Criteria of 50 dBA L₅₀ at the adjacent residential uses. Table 10, below, presents and summarizes the assessment of indoor bottling noise against the L₅₀ project specific noise criterion.

Table 10: Bottling Noise Levels

| | Noise Levels, dBA | | | | |
|---|-------------------|-----------|-----------|-----------|-----------|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₅₀ Noise Limit | 50 | 50 | 50 | 50 | 50 |
| Bottling Noise Levels at Residence | 38 | 41 | 44 | 43 | 40 |
| <i>Bottling Noise Exceeds L₅₀ Limit?</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |

Considering the findings shown in Table 10, noise levels associated with bottling activities would not exceed the project specific noise standards at the closest noise sensitive uses.

Mitigation 4: None required.

Impact 5: Maintenance and Forklift Operations

Forklift and maintenance operations are expected to take place in the covered crush/receiving areas and within the winery and production/barrel buildings. Such activities within buildings would receive significant noise shielding from the building and are not analyzed here. Outdoor forklift and maintenance operations are considered a worst-case condition and are analyzed. Such outdoor operations could therefore occur as close as approximately, 300, 225, 175, 200, and 280 feet from the property lines of Residences 1, 2, 3, 4 and 6. Based on experience with other winery operations, during high activity periods these activities would be expected to occur for more than 15 but less than 30 minutes out of an hour and fall in the Project Specific Noise Criteria of 55 dBA L₂₅ at the adjacent residential uses. However, considering that forklift backup alarms are repetitive and irritating by design, this activity noise has been penalized by 5 dBA and is judged against a more stringent noise criteria of 50 dBA at the adjacent residential uses. Table 11, following, presents and summarizes the assessment of forklift and maintenance activity against this 5-dBA reduced L₂₅ Napa County noise criterion.

Table 11: Forklift and Maintenance Activity Noise Levels

| | Noise Levels, dBA | | | | |
|--|-------------------|-----------|-----------|-----------|-----------|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₂₅ Noise Limit | 50 | 50 | 50 | 50 | 50 |
| Forklift and Maintenance Noise Levels at Residence | 45 | 48 | 47 | 46 | 42 |
| <i>Forklift and Maintenance Exceeds modified L₂₅ Limit?</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> | <i>No</i> |

Considering the findings shown in Table 11, noise levels associated with Forklift and Maintenance Activity activities would not exceed the project specific noise standards at the closest noise sensitive uses.

Mitigation 5: None required.

Impact 6: Marketing Event Noise at adjacent residential uses

The Use permit modification requests 6 events per year with 30 visitors, 2 events per year with 125 visitors. Marketing events would conclude by 10 pm. The project description states that no amplified outdoor music will occur at the project outdoor spaces. However, considering the proposed event sizes, outdoor or indoor events may have background music, outdoor events may include non-amplified (acoustic) music performance and indoor events may have amplified music performances. Events may occur inside the Existing Winery Building, the Hospitality Addition, or the previously approved covered terrace as identified in Figure 3. Indoor events would receive noise shielding from building structure estimated at 12 dBA with open windows and doors and 20 dBA with closed windows and/or doors.

Based on a review of the project site plan and distance information obtained via Goggle Earth;

- Outdoor events held in the covered patio area could be close as approximately 460, 380, 200, 175 and 190 feet from the near property lines of Residences 1, 2, 3, 4 and 6,
- Events held within the Hospitality or Winery Buildings could be close as approximately 340, 280, 160, 160 and 175 feet from the near property lines of Residences 1, 2, 3, 4 and 6,

When underway, events typically produce noise from periods of 30 minutes or more per hour, and thus event noise is judged against the L₅₀ standard. Additionally, a 5-dBA penalty is applied to event noise, because event noise typically contains music or speech. Noise from events concluding by 10 pm is therefore judged against the Napa County Event Noise Criteria of 45 dBA L₅₀ (see Table 5).

The following tables present and summarize the assessment of marketing event noise versus project specific criterion for outside events at the Winery Patio area (the closest outdoor event area to all adjacent residences) (Table 12a), indoor events in the Winery Building with open windows and doors (Table 12b), and indoor events in the Winery Building with closed windows and doors (Table 12c).

Table 12a: Winery Covered Patio Event Noise Levels

| | Noise Levels, dBA | | | | |
|--|-------------------|-----------|---|---|---|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₅₀ Event Noise Limit | 45 | 45 | 45 | 45 | 45 |
| Non-amplified Music Performance | 40 | 42 | 49 | 50 | 50 |
| 30 Guests with Background Music | 29 | 31 | 38 | 39 | 39 |
| 125 Guests with Background Music | 35 | 37 | 44 | 45 | 45 |
| Noise level Exceeds L ₅₀ Limit? | No (all) | No (all) | Yes, music performances, No (all others) | Yes, music performances, No (all others) | Yes, music performances, No (all others) |

Table 12b: Winery Building Indoor Event Noise Levels (open window and doors)

| | Noise Levels, dBA | | | | |
|--|-------------------|-----------------|--|--|--|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₅₀ Event Noise Limit | 45 | 45 | 45 | 45 | 45 |
| Amplified Music Performance | 39 | 41 | 47 | 47 | 46 |
| Amplified Speech | 37 | 39 | 45 | 45 | 44 |
| Non-amplified Music Performance | 34 | 36 | 42 | 42 | 41 |
| 30 Guests with Background Music | 23 | 25 | 31 | 31 | 30 |
| 125 Guests with Background Music | 29 | 31 | 37 | 37 | 36 |
| <i>Noise level Exceeds L₅₀ Limit?</i> | <i>No (all)</i> | <i>No (all)</i> | <i>Yes, amp. music performances, No (all others)</i> | <i>Yes, amp. music performances, No (all others)</i> | <i>Yes, amp. music performances, No (all others)</i> |

Table 12c: Winery Building Indoor Event Noise Levels (closed window and doors)

| | Noise Levels, dBA | | | | |
|--|-------------------|-----------------|-----------------|-----------------|-----------------|
| | Res. 1 | Res. 2 | Res. 3 | Res. 4 | Res. 6 |
| Daytime L ₅₀ Event Noise Limit | 45 | 45 | 45 | 45 | 45 |
| Amplified Music Performance | 31 | 33 | 39 | 39 | 38 |
| Amplified Speech | 29 | 31 | 37 | 37 | 36 |
| Non-amplified Music Performance | 26 | 28 | 34 | 34 | 33 |
| 30 Guests with Background Music | 15 | 17 | 23 | 23 | 22 |
| 125 Guests with Background Music | 21 | 23 | 29 | 29 | 28 |
| <i>Noise level Exceeds L₅₀ Limit?</i> | <i>No (all)</i> | <i>No (all)</i> | <i>No (all)</i> | <i>No (all)</i> | <i>No (all)</i> |

Considering the findings shown in Table 12a and 12b, outdoor events which do not include music performances and all indoor events with closed windows and doors, marketing events will meet the Napa County Noise Criteria at the closest noise sensitive uses with the use of the following mitigation measures.

Mitigation 6:

- a. Outdoor events should not include music performances.
- b. The windows and doors of the winery building should be maintained closed during any indoor event which involves amplified speech or music.

APPENDIX A:

FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL ACOUSTICS

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound may be caused by either its *pitch* or its loudness. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10-decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. For lesser increases of sound from the same or similar sources, a 6 dB change is perceived to be a “noticeable” change and a 3 dB change to be just perceptible. Technical terms are defined in Table 1. There are several methods of characterizing sound. The most common in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2.

Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Day/Night Average Sound Level, L_{dn} , is a measure of the cumulative noise exposure in a community, with a 10 dB penalty added to nighttime (10:00 pm - 7:00 am) noise levels. The Community Noise Equivalent Level, CNEL, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels.

| TERM | DEFINITIONS |
|---|---|
| Decibel, dB | A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter). |
| Frequency, Hz | The number of complete pressure fluctuations per second above and below atmospheric pressure. |
| A-Weighted Sound Level, dBA | The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise. |
| L ₀₁ , L ₁₀ , L ₅₀ , L ₉₀ | The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period. |
| Equivalent Noise Level, L _{eq} | The average A-weighted noise level during the measurement period. |
| Day/Night Noise Level, L _{dn} | The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am. |
| Community Noise Equivalent Level, CNEL | The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels in the night between 10:00 pm and 7:00 am. |
| L _{max} , L _{min} | The maximum and minimum A-weighted noise level during the measurement period. |
| Ambient Noise Level | The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location. |
| Intrusive | That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level. |

| | |
|--|----------------|
| Definitions Of Acoustical Terms | Table 1 |
|--|----------------|

ILLINGWORTH & RODKIN, INC./Acoustical Engineers

Effects of Noise

Sleep and Speech Interference: The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noise of sufficient intensity; above 35 dBA, and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for

multi-family dwellings are set by the State of California at 45 dBA L_{dn} . Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses.

| At a Given Distance From Noise Source | A-Weighted Sound Level in Decibels | Noise Environments | Subjective Impression |
|--|--|---|--------------------------|
| | 140 | | |
| Civil Defense Siren (100') | 130 | | |
| Jet Takeoff (200') | 120 | | Pain Threshold |
| | 110 | Rock Music Concert | |
| Diesel Pile Driver (100') | 100 | | Very Loud |
| | 90 | Boiler Room Printing Press Plant | |
| Freight Cars (50') | 80 | | |
| Pneumatic Drill (50') | 80 | | |
| Freeway (100') | 70 | In Kitchen With Garbage Disposal Running | Moderately Loud |
| Vacuum Cleaner (10') | 60 | Data Processing Center | |
| | 50 | Department Store | |
| Light Traffic (100') | 40 | Private Business Office | Quiet |
| Large Transformer (200') | 40 | | |
| | 30 | Quiet Bedroom | |
| Soft Whisper (5') | 20 | Recording Studio | |
| | 10 | | Threshold of Hearing |
| | 0 | | |

Typical Sound Levels in the Environment & Industry

Table 2

ILLINGWORTH & RODKIN, INC./Acoustical Engineers

Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57-62 dBA L_{dn} with open windows and 65-70 dBA L_{dn} if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development

outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed, those facing major roadways and freeways typically need windows with special glass.

Annoyance: Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The Ldn as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 55 dBA Ldn. At an Ldn of about 60 dBA, approximately 2 percent of the population is highly annoyed. When the Ldn increases to 70 dBA, the percentage of the population highly annoyed increases to about 12 percent of the population. There is, therefore, an increase of about 1 percent per dBA between an Ldn of 60-70 dBA. Between an Ldn of 70-80 dBA, each decibel increase increases by about 2 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the Ldn is 60 dBA, approximately 10 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 2 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 3 percent increase in the percentage of the population highly annoyed.



Onsite Wastewater Disposal Feasibility Study



January 6, 2023
September 9, 2024 – Revision #1

Job No. 20-139

Kim Withrow, REHS
Environmental Health Division
Napa County Planning, Building and Environmental Services Department
1195 Third Street, Suite 210
Napa, CA 94559

Re: Onsite Wastewater Disposal Feasibility Study for the
A&B Vineyards LLC Winery Use Permit Modification Application
5215 Solano Avenue, Napa, California APN 034-190-040

Dear Ms. Withrow:

At the request of A&B Vineyards LLC we have evaluated the process and sanitary wastewater flows associated with the proposed Use Permit Modification. The winery is currently under construction, so wastewater systems have been designed and permitted but not yet installed. As part of our work we have also analyzed the capacity of the permitted process and sanitary wastewater systems that will serve the winery facility to determine if they are adequate to serve the proposed changes in use.

Existing development on the property includes approximately six acres of vineyards, two wells, access roads, winery buildings under construction and the related access and utility infrastructure typical of this type of agricultural and winery development.

The Use Permit Modification application under consideration proposes the following characteristics:

- Wine Production:
 - 45,000 gallons of wine per year
 - Crushing, fermenting, aging and bottling
- Employees:
 - 5 combined full-time and part time
- Marketing Plan:
 - Daily Tours and Tastings by Appointment
 - 34 visitors per day maximum

- Marketing Events Type #1
 - 12 per year
 - 30 guests maximum
 - Food prepared offsite by catering company
- Marketing Events Type #2
 - 2 per year
 - 125 guests maximum
 - Food prepared offsite by catering company
 - Portable toilets used for restrooms

Please see the A&B Vineyards LLC Use Permit Modification Conceptual Site Improvement Plans prepared by Applied Civil Engineering (attached) for approximate locations of existing and proposed facilities.

The remainder of this letter describes the process and sanitary wastewater disposal system design capacities, peak flows associated with the proposed changes in use and our analysis and recommendations related to the existing permitted but not installed process and sanitary wastewater disposal systems' ability to handle the anticipated wastewater flows.

Permitted Process Wastewater System

The permitted and constructed process wastewater treatment and disposal system consists of a Specialty Treatment Solutions membrane bioreactor pretreatment system followed by subsurface disposal via a geoflow drip type dispersal field. The system was designed for a calculated peak flow of 1,000 gpd however the pretreatment system was sized for 2,500 gpd instantaneous maximum to allow for operational flexibility and surge flows. The subsurface drip dispersal field was sized for 1,000 gpd which required 834 lineal feet (1,667 sf) of drip tubing however the field size was increased slightly to make best use of the available space and provide 1,200 lineal feet (2,400 sf) of drip tubing.

Permitted Sanitary Wastewater System

The permitted and constructed sanitary wastewater treatment and disposal system consists of an Orenco AdvanTex pretreatment system followed by subsurface disposal via a geoflow drip type dispersal field. The system was designed for a calculated peak flow of 255 gpd which required 213 lineal feet (425 sf) of drip tubing however the field size was increased slightly to make best use of the available space and provide 300 lineal feet (600 sf) of drip tubing.

Proposed Process Wastewater Design Flows

We have used the generally accepted standard that six gallons of winery process wastewater are generated for each gallon of wine that is produced each year and that 1.5 gallons of wastewater are generated during the crush period for each gallon of wine that is produced. Based on the 45,000-gallon production capacity and the expectation that both white and red wine will be produced at the winery, we have assumed a conservative 45 day crush period. Using these

assumptions, the annual, average daily and peak winery process wastewater flows are calculated as follows:

$$\text{Annual Winery Process Wastewater Flow} = \frac{45,000 \text{ gallons wine}}{\text{year}} \times \frac{6 \text{ gallons wastewater}}{1 \text{ gallon wine}}$$

$$\text{Annual Winery Process Wastewater Flow} = 270,000 \text{ gallons per year}$$

$$\text{Average Daily Process Wastewater Flow} = \frac{270,000 \text{ gallons wastewater}}{\text{year}} \times \frac{1 \text{ year}}{365 \text{ days}}$$

$$\text{Average Daily Winery Process Wastewater Flow} = 740 \text{ gallons per day}$$

$$\text{Peak Winery Process Wastewater Flow} = \frac{45,000 \text{ gallons wine}}{\text{year}} \times \frac{1.5 \text{ gallons wastewater}}{1 \text{ gallon wine}} \times \frac{1 \text{ year}}{45 \text{ crush days}}$$

$$\text{Peak Winery Process Wastewater Flow} = 1,500 \text{ gallons per day (gpd)}$$

Proposed Winery Sanitary Wastewater Design Flows

The peak sanitary wastewater flow from the winery is calculated based on the number of winery employees, the number of daily visitors for tastings and the number of guests attending scheduled marketing events. In accordance with Table 4 of the Napa County "Regulations for Design, Construction, and Installation of Alternative Sewage Treatment Systems" we have used a design flow rate of 15 gallons per day per employee and 3 gallons per day per visitor for tastings. Table 4 does not specifically address design wastewater flows for guests at marketing events. For marketing events that will have catered meals that are prepared offsite we have estimated 5 gallons of wastewater per guest assuming there will be no food preparation or cleanup onsite. All events with more than 30 guests will utilize portable toilets. Based on these assumptions, the peak winery sanitary wastewater flows are calculated as follows:

Employees

$$\text{Peak Sanitary Wastewater Flow} = 5 \text{ employees} \times 15 \text{ gpd per employee}$$

$$\text{Peak Sanitary Wastewater Flow} = 75 \text{ gpd}$$

Daily Tastings

$$\text{Peak Sanitary Wastewater Flow} = 34 \text{ visitors per day} \times 3 \text{ gallons per visitor}$$

$$\text{Peak Sanitary Wastewater Flow} = 102 \text{ gpd}$$

Marketing Events #1 (12 per year)

$$\text{Peak Sanitary Wastewater Flow} = 30 \text{ guests} \times 5 \text{ gallons per guest}$$

$$\text{Peak Sanitary Wastewater Flow} = 150 \text{ gpd}$$

Marketing Events #2 (2 per year)

Peak Sanitary Wastewater Flow = 125 guests X 5 gallons per guest
Peak Sanitary Wastewater Flow = 625 gpd

Total Peak Winery Sanitary Wastewater Flow

In order to manage the peak sanitary wastewater flows to the disposal field portable toilets will be used for all events with more than 30 guests in attendance and daily tours and tastings will not occur on marketing event days. Therefore, the worst-case peak winery sanitary wastewater flow is calculated based on 5 employees and a marketing event for 30 people. The peak flow for this scenario is calculated as follows:

Total Peak Winery Sanitary Wastewater Flow = 75 gpd + 150 gpd

Total Peak Winery Sanitary Wastewater Flow = 225 gpd

Existing Process and Sanitary Wastewater System Capacities

Process Wastewater System Capacity

As noted above the permitted process wastewater system overall design capacity is 1,000 and the pretreatment unit can handle peak day maximums of 2,500 gpd.

Sanitary Wastewater System Capacity

As noted above the permitted sanitary wastewater system design capacity is 255 gpd.

Proposed Design Flow vs Existing Capacity

Process Wastewater System Capacity

The predicted Peak Winery Process Wastewater Flow for the proposed winery operational characteristics (1,500 gpd) is more than the design capacity of the permitted subsurface drip dispersal field (1,000 gpd) but is less than the capacity of the pretreatment system (2,500 gpd). As noted above the design includes 2,400 square feet of dispersal field area which is well in excess of the required 1,667 square feet. This corresponds to an actual capacity of 1,440 gpd based on an application rate of 0.6 gpd/sf which is slightly less than the predicted Peak Winery Process Wastewater Flow (1,500 gpd).

Sanitary Wastewater System Capacity

The predicted Peak Winery Sanitary Wastewater Flow for the proposed winery operational characteristics (225 gpd) is less than the design capacity of the permitted subsurface drip dispersal field (255 gpd). As noted above the design includes 600 square feet of dispersal field area which is well in excess of the required 425 square feet. This corresponds to an actual capacity of 360 gpd based on an application rate of 0.6 gpd/sf which is also in excess of the predicted Peak Winery Sanitary Wastewater Flow (225 gpd).

Recommendations

The predicted Peak Winery Process Wastewater Flow exceeds the capacity of the existing system but the predicted Peak Winery Sanitary Wastewater Flow is within the capacity of the existing system. Therefore, design adjustments are needed to accommodate the new process wastewater flow increase. Improvements are not needed for the sanitary wastewater system as the existing permitted design is adequate to handle the proposed flows.

We have explored options for modifying the design of the winery process wastewater system to accommodate the increased flows. Our recommendations below focus only on the process wastewater system.

Option #1 – Expand Existing System

The 1,500 gpd design flow equates to 2,500 sf of subsurface drip dispersal area based on the 0.6 gpd/sf loading rate. The primary area could easily be expanded from the current design of 2,400 sf to the required 2,500 sf in the area of the previously tested soil. All application of treated winery process wastewater to a subsurface disposal system must comply with the requirements of the Statewide General Waste Discharge Requirements (WDRs) for Wineries in California and the currently in-progress NOI for coverage under this permit will have to be revised accordingly.

Reserve Area

A commensurate increase in reserve area (200% of primary area) would also be required to provide 5,000 sf of reserve area. This reserve area can be accommodated in the vicinity of the originally designed reserve area.

Option #2 – Capture Treated PW and Re-Use for Irrigation

In this scenario the process wastewater would be collected in an irrigation storage tank and then be used for vineyard and/or landscape irrigation rather than being disposed of in the in-ground system. No change is needed to the pretreatment system as it can adequately handle the proposed design flows and provide water of the quality needed for surface irrigation.

Process Wastewater Disposal / Re-Use for Irrigation

We propose that disposal of the treated winery process wastewater be via irrigation of the onsite vineyard (and/or potentially landscaping as well). For the purpose of this study we have assumed that the winery process wastewater will be applied to approximately four acres of vineyard that is located to the west of the new winery building and outside of the well setbacks. This is a conservative assumption to simplify this analysis as more vineyard is available outside of the required setbacks and the treated water can also be used for landscape irrigation. The final irrigation area will be determined and incorporated into the final design with the installation permit application.

In order to accommodate differences in the timing of wastewater generation, irrigation demand, and limitations on wet weather application of treated wastewater a storage tank will be required. We have prepared a water balance calculation to size a tank that will temporarily store treated wastewater generated from the winery before it is applied to the vineyard. The water balance

calculations assume a monthly winery process wastewater generation rate and a monthly vineyard irrigation schedule based on our past experience with projects of this type. The water balance further assumes that during the summer the treated wastewater will be used to offset the irrigation needs of the vineyard and in the winter application of treated winery process wastewater will not occur to prevent runoff. The water balance calculations show that the proposed land application area is large enough to accept all the wastewater generated each month throughout the irrigation system and that a tank with a volume of at least 81,000 gallons is required to capture water from the non-irrigation season to use during the irrigation season, year without carry over (see attached). This tank will also be able to contain more than a weeks' worth of peak flow to allow flexibility in irrigation scheduling during the harvest period.

All land application of treated winery process wastewater must comply with the requirements of the Statewide General Waste Discharge Requirements (WDRs) for Wineries in California and the currently in-progress NOI for coverage under this permit will have to be revised accordingly.

Summary

The calculations presented above illustrate that the wastewater flows associated with the proposed Use Permit Modification will exceed the capacity of the permitted process wastewater system but will not exceed the capacity of the permitted sanitary wastewater system. However, there are at least two options for how to handle the planned increased process wastewater flow rates which include adding to the existing system and capturing the treated water and re-using it for irrigation.

We trust that this provides the information you need to process the subject Use Permit Modification. Please feel free to contact us at (707) 320-4968 if you have any questions.

Sincerely,

Applied Civil Engineering Incorporated

By:

Michael R. Muelrath

Michael R. Muelrath RCE 67435
Principal



Copy:

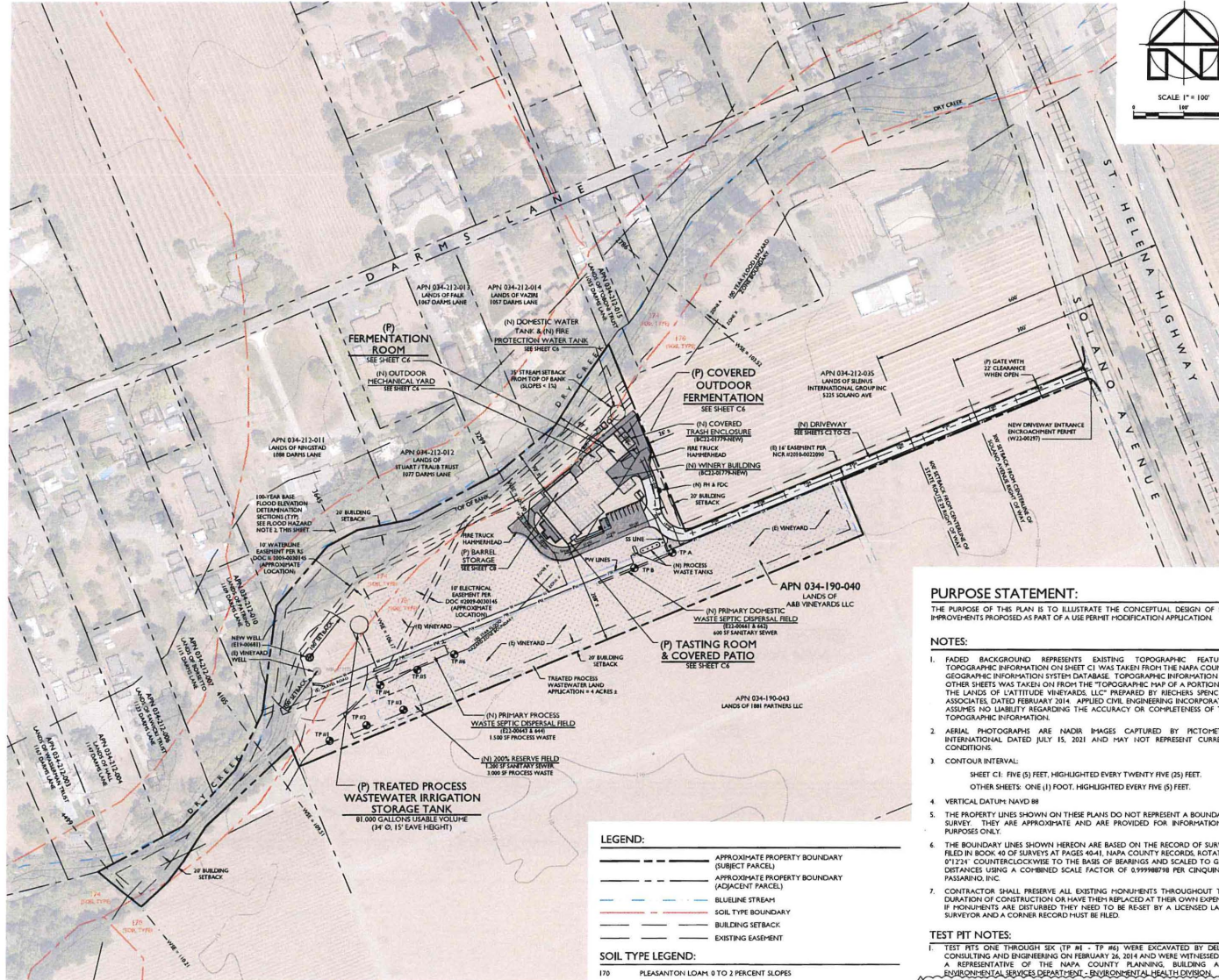
Steve Contursi, A&B Vineyards LLC (via email)
Donna Oldford, Plans4Wine (via email)

Attachments:

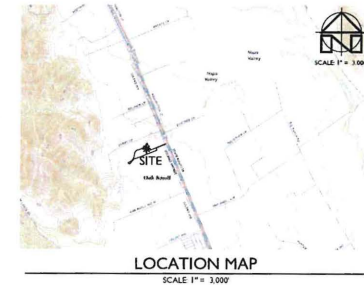
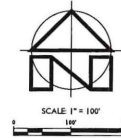
A&B Vineyards LLC Use Permit Modification Conceptual Site Improvement Plans
Water Balance Spreadsheets

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS



OVERALL SITE PLAN
SCALE 1" = 100'



PROJECT INFORMATION:
PROPERTY OWNER & APPLICANT:
A&B VINEYARDS LLC
1042 NORTH COAST HIGHWAY
LAGUNA BEACH, CA 92651
SITE ADDRESS:
5215 SOLANO AVENUE
NAPA, CA 94558
ASSESSOR'S PARCEL NUMBER:
034-190-040
PARCEL SIZE:
10.1 ± ACRES
PROJECT SIZE:
2.0 ± ACRES
ZONING:
AGRICULTURAL PRESERVE (AP)
DOMESTIC WATER SOURCE:
PRIVATE WELL
FIRE PROTECTION WATER SOURCE:
WASTEWATER DISPOSAL:
ONSITE TREATMENT AND DISPERSAL

SHEET INDEX:

- C1 OVERALL SITE PLAN
- C2 DRIVEWAY PLAN & PROFILE STA 0+50 TO STA 9+25
- C3 DRIVEWAY PLAN & PROFILE STA 9+25 TO STA 53+25
- C4 DRIVEWAY CROSS SECTIONS STA 1+00 TO STA 11+25
- C5 DRIVEWAY CROSS SECTIONS STA 11+50 TO STA 53+00
- C6 BUILDING AREA CONCEPTUAL SITE IMPROVEMENT PLAN
- C7 STORMWATER CONTROL PLAN
- C8 IMPERVIOUS SURFACE EXHIBIT

FLOOD HAZARD NOTES:

- ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 06050C0505, EFFECTIVE SEPTEMBER 29, 2010, ALL OR A PORTION OF THE PROJECT SITE IS LOCATED IN A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% CHANCE ANNUAL FLOOD (100 YEAR FLOOD). THE APPROXIMATE FLOOD HAZARD BOUNDARY LINE IS SHOWN ON THIS PLAN. SEE FIRM FOR ADDITIONAL INFORMATION.
- A DETAILED FLOOD STUDY WAS PREPARED BY SCHAF AND WHEELER AND THE BASE FLOOD ELEVATION AT THE BUILDING SITE ACCORDING TO THAT STUDY IS APPROXIMATELY 165.30 +/- NAVD 88. THE FLOODWATER ELEVATION WOULD BE CONTAINED WITHIN THE BANKS OF DAY CREEK. THE BUILDING WILL NONETHELESS BE ELEVATED MORE THAN 1' ABOVE THE BFE.

| EXISTING WINERY PERMIT SUMMARY: | |
|--------------------------------------|---------------------|
| PURPOSE: | PERMIT NUMBER: |
| PRIOR WINERY USE PERMIT MODIFICATION | P21-00087 (PHASE 1) |
| GRADING PERMIT | EW022-00015 |
| FLOODPLAIN PERMIT | FW22-00020 |
| WINERY BUILDING PERMIT | BC22-01079-NEW |
| UTILITY-OTHER PERMIT | BC22-01081 |
| FIRE SPRINKLERS PERMIT | F22-00292 |
| FIRE ALARM PERMIT | F22-00254 |
| PROCESS WASTEWATER | E22-00644 |
| SANITARY WASTEWATER | E22-00622 |

PURPOSE STATEMENT:
THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE CONCEPTUAL DESIGN OF SITE IMPROVEMENTS PROPOSED AS PART OF A USE PERMIT MODIFICATION APPLICATION.

NOTES:

- FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES. TOPOGRAPHIC INFORMATION ON SHEET C1 WAS TAKEN FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATABASE. TOPOGRAPHIC INFORMATION ON OTHER SHEETS WAS TAKEN ON FROM THE TOPOGRAPHIC MAP OF A PORTION OF THE LANDS OF LATTITUDE VINEYARDS, LLC PREPARED BY RECHER, SPENCE & ASSOCIATES, DATED FEBRUARY 2014. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
- AERIAL PHOTOGRAPHS ARE NAIP IMAGES CAPTURED BY PICTOMETRY INTERNATIONAL DATED JULY 15, 2021 AND MAY NOT REPRESENT CURRENT CONDITIONS.
- CONTOUR INTERVAL:
SHEET C1: FIVE (5) FEET, HIGHLIGHTED EVERY TWENTY FIVE (25) FEET.
OTHER SHEETS: ONE (1) FOOT, HIGHLIGHTED EVERY FIVE (5) FEET.
- VERTICAL DATUM: NAVD 88
- THE PROPERTY LINES SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THEY ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
- THE BOUNDARY LINES SHOWN HEREON ARE BASED ON THE RECORD OF SURVEY FILED IN BOOK 49 OF SURVEYS AT PAGES 40-41, NAPA COUNTY RECORDS, ROTATED 912341 COUNTERCLOCKWISE TO THE BASE OF BEARINGS AND SCALED TO GRID DISTANCES USING A COMBINED SCALE FACTOR OF 0.99998079 PER CENQUIN & PARRANHO, INC.
- CONTRACTOR SHALL PRESERVE ALL EXISTING MONUMENTS THROUGHOUT THE DURATION OF CONSTRUCTION OR HAVE THEM REPLACED AT THEIR OWN EXPENSE IF MONUMENTS ARE DISTURBED THEY NEED TO BE RE-SET BY A LICENSED LAND SURVEYOR AND A CORNER RECORD MUST BE FILED.

TEST PIT NOTES:

- TEST PITS ONE THROUGH SIX (TP #1 - TP #6) WERE EXCAVATED BY DELTA CONSULTING AND ENGINEERING ON FEBRUARY 26, 2014 AND WERE WITNESSED BY A REPRESENTATIVE OF THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENVIRONMENTAL HEALTH DIVISION.
- TEST PITS A & B (TP A - TP B) WERE OBSERVED BY APPLIED CIVIL ENGINEERING INCORPORATED ON JULY 26, 2023 AND WERE WITNESSED BY A REPRESENTATIVE OF THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENVIRONMENTAL HEALTH DIVISION.

2142 Jefferson Street, Suite 210
Napa, CA 94559
(707) 238-4451 | www.appliedcivil.com

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
OVERALL SITE PLAN

PREPARED UNDER THE DIRECTION OF:

DRAWN BY:
PowerCAD LLC

CHECKED BY:
PCHM

DATE:
SEPTEMBER 6, 2023

REVISIONS:

| BY | DATE | REVISION |
|-----|-----------|-----------------------|
| BT | 7/10/2023 | THIS PERMIT SUBMITTAL |
| TPS | 7/10/2023 | PERMIT RESUBMITTAL |
| TPS | 7/10/2023 | PERMIT RESUBMITTAL |
| TPS | 7/10/2023 | PERMIT RESUBMITTAL |

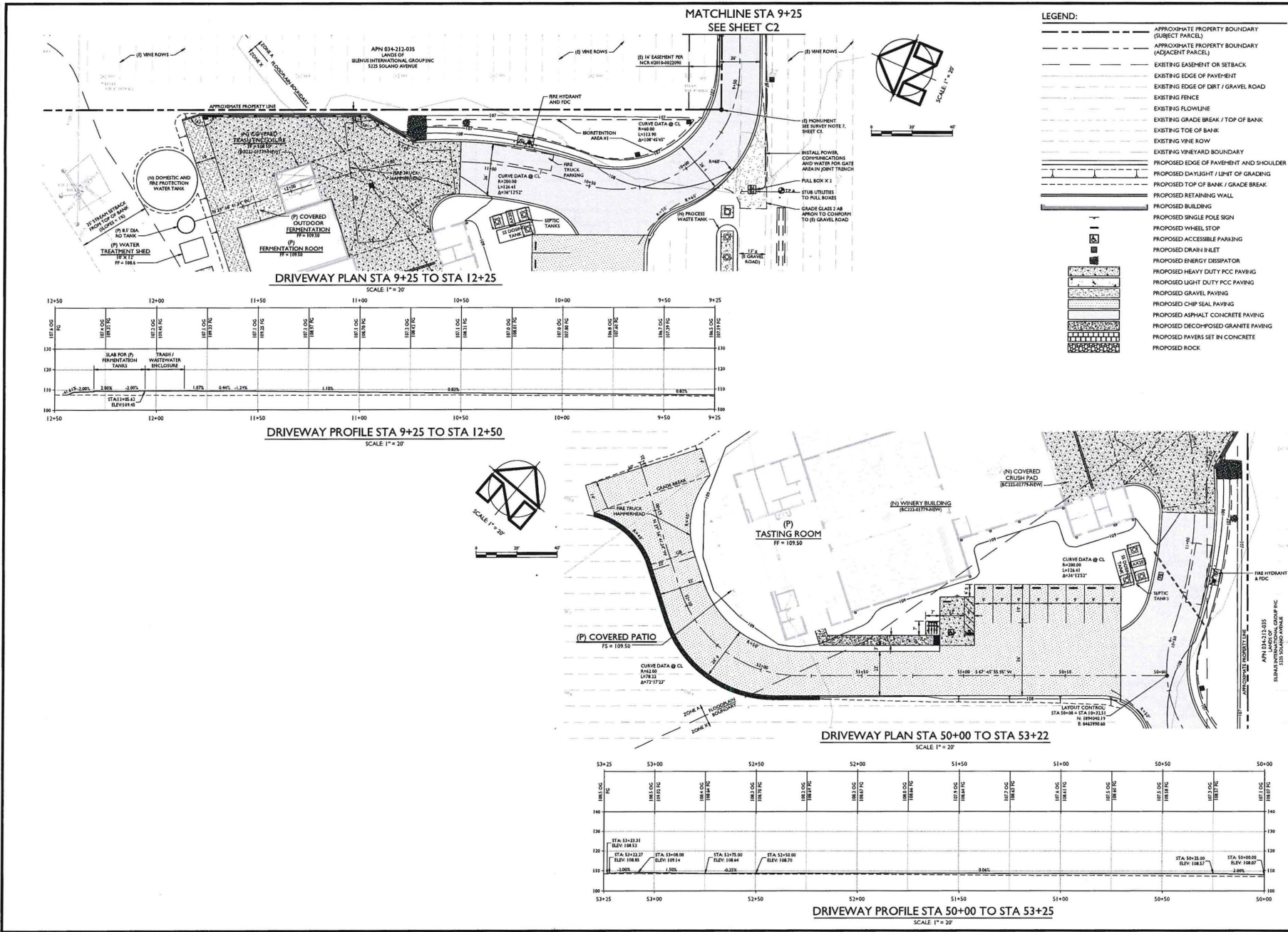
JOB NUMBER:
20-139

FILE:
20-139CONC-OSP.DWG

ORIGINAL SIZE:
24" x 36"

SHEET NUMBER:
CI

OF
8



APPLIED
CIVIL ENGINEERING
INCORPORATED

2160 Jefferson Street, Suite 230
San Francisco, CA 94133
(415) 775-4848 | www.appliedcivil.com

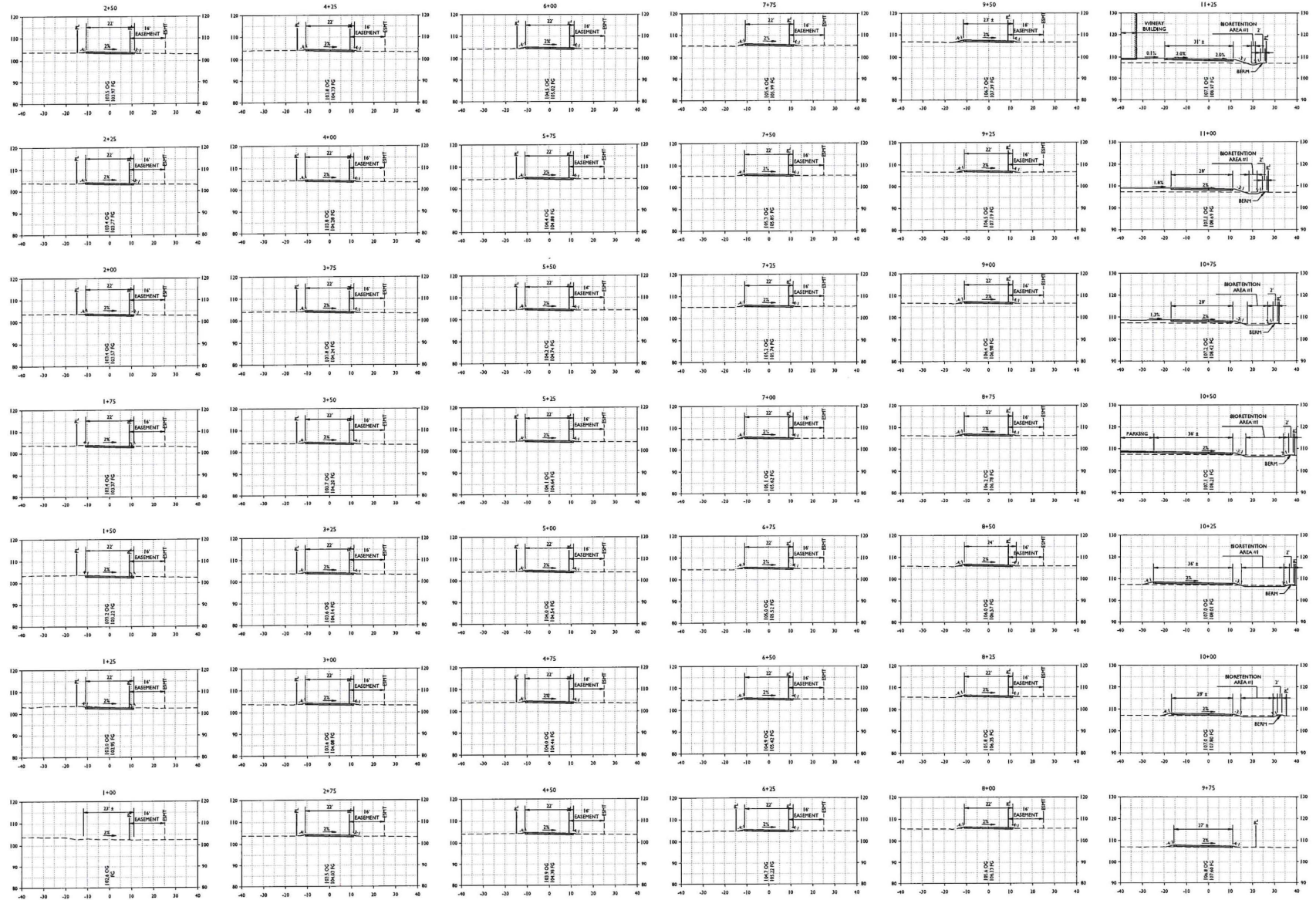
A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
DRIVEWAY PLAN & PROFILE STA 9+25 TO STA 53+25

PREPARED UNDER THE DIRECTION OF:

DRAWN BY: PowerCAD LLC
CHECKED BY: PBR
DATE: AUGUST 9, 2024
REVISIONS BY: 3/10/2023 YP6 PERMIT SUBMITTAL
5/10/2023 YP6 PERMIT RESUBMITTAL
7/6/2023 YP6 PERMIT RESUBMITTAL
8/9/2024 YP6 PERMIT RESUBMITTAL

JOB NUMBER: 20-139
FILE: 20-139-PP-DWY.DWG
ORIGINAL SIZE: 24" X 36"
SHEET NUMBER: **C3** OF 8

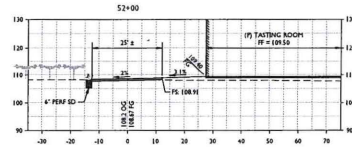
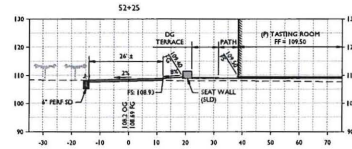
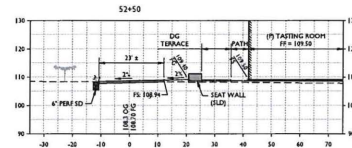
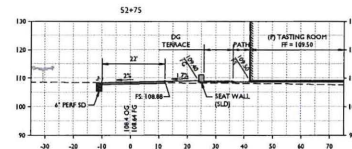
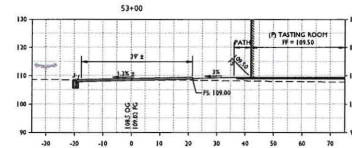
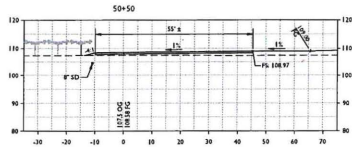
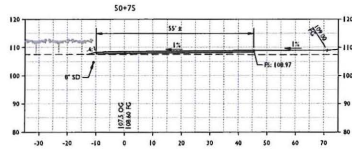
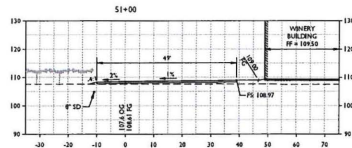
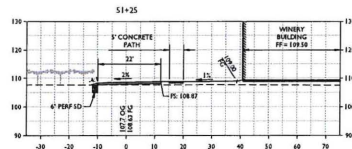
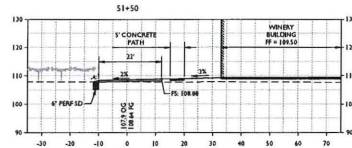
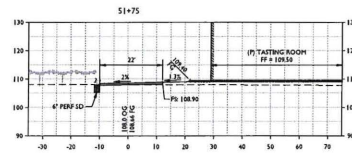


DRIVEWAY CROSS SECTIONS STA 1+00 TO STA 11+25

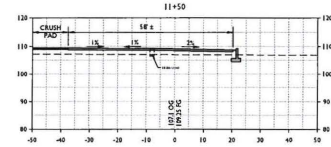
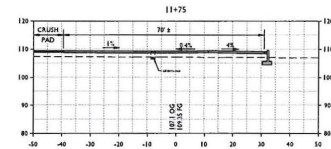
SCALE 1" = 30'



| | |
|----------------|------------------------|
| DRAWN BY: | PowerCAD LLC |
| CHECKED BY: | PRH |
| DATE: | AUGUST 9, 2024 |
| REVISIONS: | BY |
| 3/10/2023 | YHS PERMIT SUBMITTAL |
| 5/10/2023 | YHS PERMIT RESUBMITTAL |
| 7/6/2023 | YHS PERMIT RESUBMITTAL |
| 8/7/2024 | YHS PERMIT RESUBMITTAL |
| JOB NUMBER: | 20-179 |
| FILE: | 20-179-P-DRWY.DWG |
| ORIGINAL SIZE: | 24" X 36" |
| SHEET NUMBER: | C4 |



DRIVEWAY CROSS SECTIONS STA 50+50 TO STA 53+00
SCALE 1" = 20'



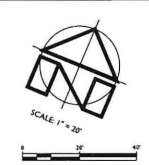
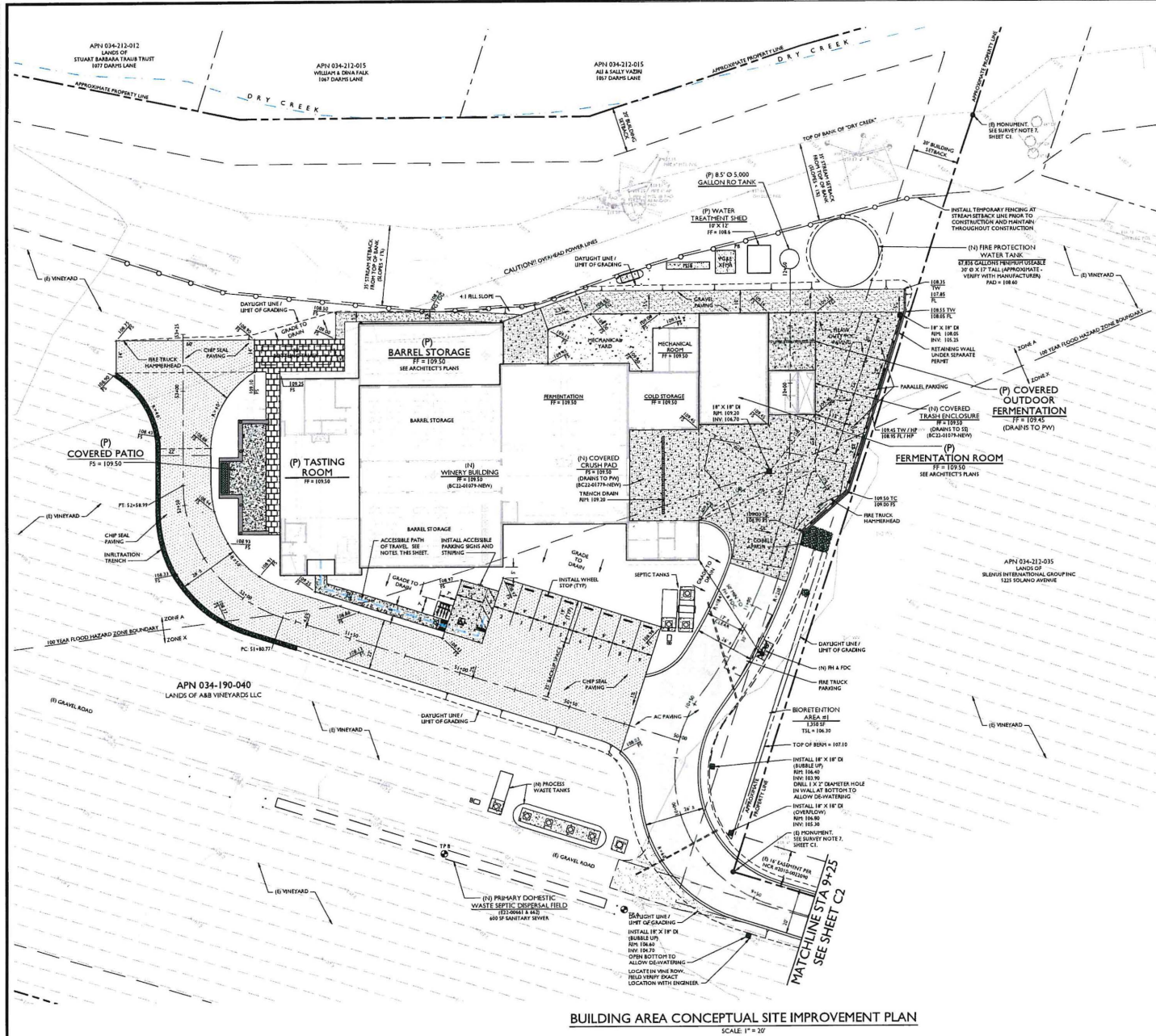
DRIVEWAY CROSS SECTIONS STA 11+50 TO STA 11+75
SCALE 1" = 20'

PREPARED UNDER THE DIRECTION OF:



| | |
|-------------|------------------------|
| DRAWN BY: | PowerCAD LLC |
| CHECKED BY: | FRM |
| DATE: | AUGUST 9, 2024 |
| REVISIONS: | BY: YHS |
| 5/10/2023 | PERMIT SUBMITTAL |
| 5/10/2023 | YHS PERMIT RESUBMITTAL |
| 9/6/2023 | YHS PERMIT RESUBMITTAL |
| 8/9/2024 | YHS PERMIT RESUBMITTAL |

| | |
|----------------|---------------|
| JOB NUMBER: | 20-139 |
| FILE: | 20-139-DR-DWG |
| ORIGINAL SIZE: | 24" x 36" |
| SHEET NUMBER: | |



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY (SUBJECT PARCEL)
- APPROXIMATE PROPERTY BOUNDARY (ADJACENT PARCELS)
- - - EXISTING EASEMENT OR SETBACK
- - - EXISTING EDGE OF DIRT / GRAVEL ROAD
- - - EXISTING OVERHEAD POWER LINE
- - - EXISTING BLUE LINE STREAM
- - - EXISTING GRADE BREAK / TOP OF BANK
- - - EXISTING TOE OF BANK
- - - EXISTING VINEYARD BOUNDARY
- - - PROPOSED EDGE OF PAVEMENT AND SHOULDER
- - - PROPOSED DAYLIGHT / LIGHT OF GRADING
- - - PROPOSED TOP OF BANK / GRADE BREAK
- - - PROPOSED RETAINING WALL
- - - PROPOSED BUILDING
- - - PROPOSED SINGLE POLE SIGN
- - - PROPOSED WHEEL STOP
- - - PROPOSED ACCESSIBLE PARKING
- - - PROPOSED DRAIN INLET
- - - PROPOSED ENERGY DISSIPATOR
- - - PROPOSED HEAVY DUTY PCC PAVING
- - - PROPOSED LIGHT DUTY PCC PAVING
- - - PROPOSED GRAVEL PAVING
- - - PROPOSED CHIP SEAL PAVING
- - - PROPOSED ASPHALT CONCRETE PAVING
- - - PROPOSED DECOMPOSED GRANITE PAVING
- - - PROPOSED ROCK
- - - PROPOSED PAVERS SET IN CONCRETE

ACCESSIBLE ROUTE OF TRAVEL NOTE:

- ALL ACCESSIBLE ROUTES OF TRAVEL SHALL COMPLY WITH THE REQUIREMENTS OF CBC (11B). THE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
- RUNNING SLOPE OF WALKING SURFACES SHALL NOT EXCEED 5% (1:20)
 - RUNNING SLOPE OF RAMPS SHALL NOT EXCEED 8.33% (1:12)
 - CROSS SLOPE OF WALKS AND RAMPS NOT TO EXCEED 2.083% (1:48)
 - LANDING AND LEVEL AREA SLOPES NOT TO EXCEED 2.083% (1:48)
 - VERTICAL CHANGES IN LEVEL SHALL NOT EXCEED 1/4 INCH. ALL LEVEL CHANGES BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO STEEPER THAN 1:2 (V/H). ANY LEVEL CHANGES GREATER THAN 1/2 INCH SHALL BE RAMPED AND COMPLY WITH CBC 11B-405.
 - OPENINGS IN DRAINS AND GRATING SHALL NOT EXCEED 1/2 INCH IN PREDOMINANT DIRECTION OF TRAVEL.

GRADING QUANTITIES*

| | |
|-------|-----------------|
| CUT | 400 ± CY |
| FILL | 900 ± CY |
| NET** | 300 ± CY (FILL) |

* THIS ESTIMATE IS PROVIDED AS A TOOL FOR THE REVIEWING AGENCIES TO EVALUATE THE ENVIRONMENTAL IMPACTS OF THE PROJECT. IT IS NOT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES. CONTRACTOR IS TO PERFORM THEIR OWN EARTHWORK CALCULATIONS AND SHALL NOT USE THE ESTIMATES PRESENTED ABOVE. THIS ESTIMATE IS BASED ON IN PLACE VOLUMES AND DOES NOT INCLUDE FLURT, SHRINKAGE PAVING, AGGREGATES OR SELECT FILL VOLUMES.

BUILDING AREA CONCEPTUAL SITE IMPROVEMENT PLAN
SCALE: 1" = 30'

APPLIED
INCORPORATED
2140 Jefferson Street, Suite 210
Napa, CA 94559
(707) 226-4881 | www.appliedcivil.com

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
BUILDING AREA CONCEPTUAL SITE IMPROVEMENT PLAN

PREPARED UNDER THE DIRECTION OF:



DRAWN BY: PowerCAD LLC

CHECKED BY: mRt

DATE: AUGUST 9, 2024

REVISIONS BY:

| | | |
|-----------|-----|------------------|
| 3/10/2023 | YHS | PERMIT SUBMITTAL |
| 5/10/2023 | YHS | PERMIT SUBMITTAL |
| 6/6/2023 | YHS | PERMIT SUBMITTAL |
| 8/9/2024 | YHS | PERMIT SUBMITTAL |

JOB NUMBER: 20-139

FILE: 20-139CONC-GRAD.DWG

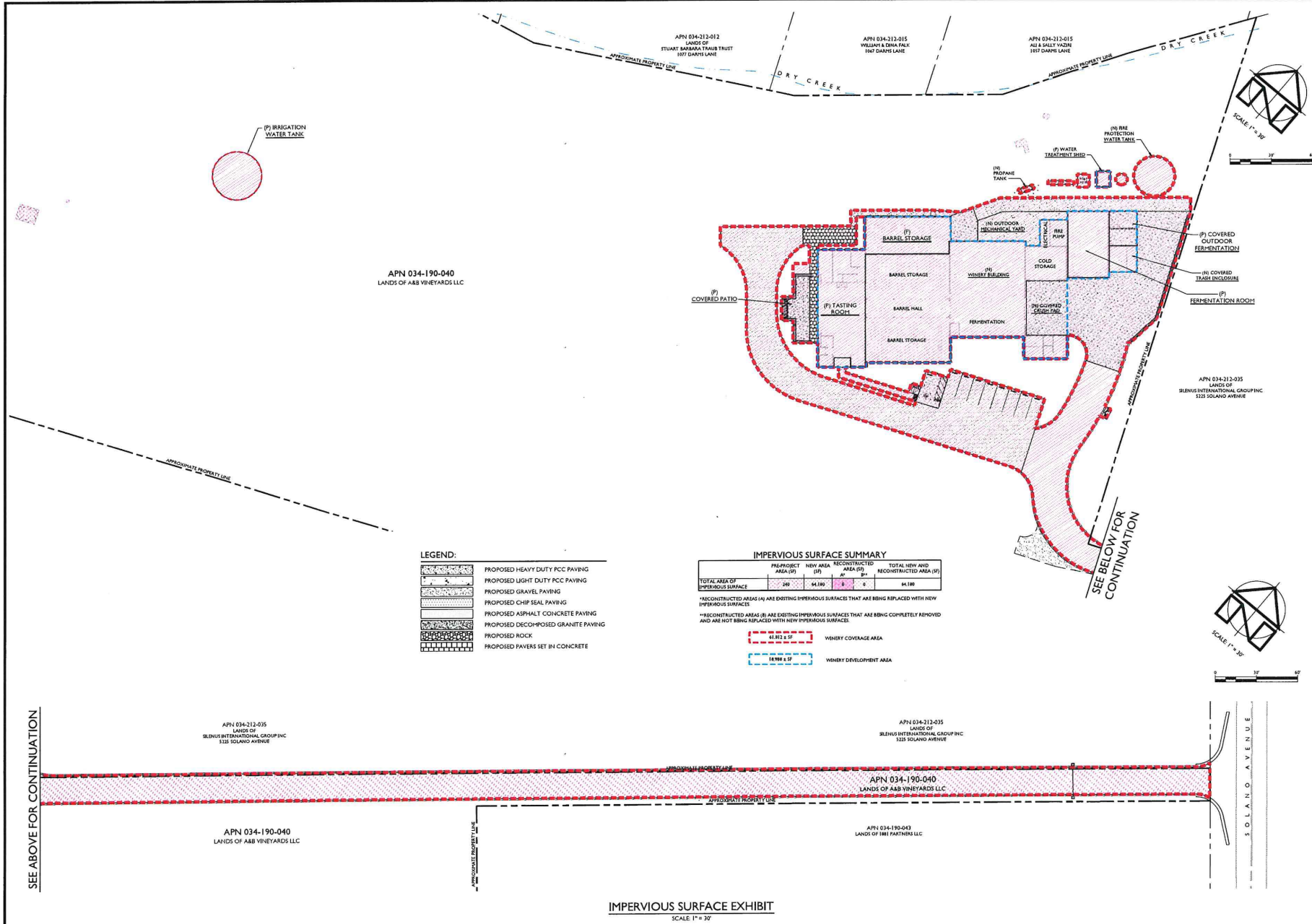
ORIGINAL SIZE: 24" X 36"

SHEET NUMBER:

C6

OF 8





APPLIED
INCORPORATED
2168 Jefferson Street, Suite 210
Napa, CA 94559
(707) 226-9468 | www.appliedcivil.com

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS

IMPERVIOUS SURFACE EXHIBIT

PREPARED UNDER THE DIRECTION OF

POWERCAD LLC

DRAWN BY: PowerCAD LLC

CHECKED BY: PMH

DATE: AUGUST 9, 2024

REVISIONS:

| DATE | BY | DESCRIPTION |
|-----------|-----|------------------|
| 3/10/2023 | YHS | PERMIT SUBMITTAL |
| 5/10/2023 | YHS | PERMIT SUBMITTAL |
| 9/6/2023 | YHS | PERMIT SUBMITTAL |
| 8/9/2024 | YHS | PERMIT SUBMITTAL |

JOB NUMBER: 20-179

FILE: 2013EXH-BSE.DWG

ORIGINAL SIZE: 24" X 36"

SHEET NUMBER: C8

OF 8

Irrigation Storage Tank Water Balance

| Month | Beginning Balance | Process Wastewater | Land Application Capacity | Ending Balance |
|-----------|-------------------|--------------------|---------------------------|----------------|
| January | 29,700 | 13,500 | 0 | 43,200 |
| February | 43,200 | 13,500 | 0 | 56,700 |
| March | 56,700 | 13,500 | 0 | 70,200 |
| April | 70,200 | 10,800 | 0 | 81,000 |
| May | 81,000 | 10,800 | 65,216 | 26,584 |
| June | 26,584 | 13,500 | 163,039 | 0 |
| July | 0 | 27,000 | 163,039 | 0 |
| August | 0 | 48,600 | 97,823 | 0 |
| September | 0 | 48,600 | 97,823 | 0 |
| October | 0 | 40,500 | 65,216 | 0 |
| November | 0 | 16,200 | 0 | 16,200 |
| December | 16,200 | 13,500 | 0 | 29,700 |
| | | 270,000 | 652,155 | |

Notes:

1. All values shown above for beginning balance, inflow, outflow and ending balance are in units of gallons.
2. See attached tables for detailed explanation of process wastewater and irrigation data presented in this table.
3. This water balance is based on the assumption that the tank is empty in August, just prior to crush.
4. This table is intended to illustrate waste disposal capability only. Where irrigation demand exceeds available treated wastewater availability additional irrigation water will be provided by another source.

Winery Process Wastewater Generation Analysis

| | |
|-----------------------------------|--------------------------------|
| Annual Wine Production | 45,000 gallons |
| Wastewater Generation Rate | 6 gallons per gallon of wine |
| Annual Wastewater Generation | 270,000 gallons |
| Crush Season Length | 45 days |
| Wastewater Generated During Crush | 1.5 gallons per gallon of wine |
| Peak Wastewater Generation Rate | 1,500 gallons per day |

| Winery Process Wastewater Generation Table | | | |
|--|----------------------------|------------------------|--------------------|
| Month | Percentage of Annual Total | Monthly Flow (gallons) | Average Flow (gpd) |
| January | 5.0% | 13,500 | 435 |
| February | 5.0% | 13,500 | 482 |
| March | 5.0% | 13,500 | 435 |
| April | 4.0% | 10,800 | 360 |
| May | 4.0% | 10,800 | 348 |
| June | 5.0% | 13,500 | 450 |
| July | 10.0% | 27,000 | 871 |
| August | 18.0% | 48,600 | 1,568 |
| September | 18.0% | 48,600 | 1,620 |
| October | 15.0% | 40,500 | 1,306 |
| November | 6.0% | 16,200 | 540 |
| December | 5.0% | 13,500 | 435 |
| Total | 100.0% | 270,000 | |

Notes:

- I. Wastewater generation rates and monthly proportioning are based on our past experience with similar projects.

Irrigation Schedule Analysis

Vineyard Information:

| | |
|---------------------------|----------------------------------|
| Total acres of vines | 4 acres |
| Vine Row Spacing (approx) | 7 feet |
| Vine Spacing (approx) | 5 feet (estimated) |
| Vine density | 1,245 vines per acre (estimated) |
| Total Vine Count | 4,978 vines |

Irrigation Information:

Seasonal Irrigation¹ 131.0 gallons per vine (May through October)

Non-Irrigation Application 0 inches per month October through April

| Irrigation Schedule | | | | | |
|---------------------|---------------------------------|-------------------------------|-------------------------------|---|-----------------|
| Month | Monthly Percentage ² | Irrigation per Vine (gallons) | Seasonal Irrigation (gallons) | Non-Seasonal Irrigation Application (gallons) | Total (gallons) |
| January | | 0.0 | 0 | 0 | 0 |
| February | | 0.0 | 0 | 0 | 0 |
| March | | 0.0 | 0 | 0 | 0 |
| April | | 0.0 | 0 | 0 | 0 |
| May | 10% | 13.1 | 65,216 | 0 | 65,216 |
| June | 25% | 32.8 | 163,039 | 0 | 163,039 |
| July | 25% | 32.8 | 163,039 | 0 | 163,039 |
| August | 15% | 19.7 | 97,823 | 0 | 97,823 |
| September | 15% | 19.7 | 97,823 | 0 | 97,823 |
| October | 10% | 13.1 | 65,216 | 0 | 65,216 |
| November | | 0.0 | 0 | 0 | 0 |
| December | | 0.0 | 0 | 0 | 0 |
| Total | 100% | 131.0 | 652,155 | 0 | 652,155 |

Notes:

1. Irrigation per vine is based on 0.5 acre-feet per acre of vines per WAA.
2. Monthly vineyard irrigation percentages are based on our past experience with projects of this type.
3. Non-Irrigation Application is for managing tank levels and assumes a maximum of 5 operational days per month based on historic weather data (Summit Engineering NBRID Capacity Study, 1996) and a saturated soil infiltration rate of 0.1 gallons per square foot per day uniformly over the entire area.

“J”

Transient Non-Community Water System Information

Arrow and Branch Winery, Use Permit Major Modification P23-00057
Planning Commission Hearing Date September 17, 2025

TRANSIENT NON-COMMUNITY WATER SYSTEM INFORMATION

FOR THE

A&B Vineyards LLC Winery

LOCATED AT:

5215 Solano Avenue

Napa, CA 94558

Napa County APN 034-190-040

PREPARED FOR:

A&B Vineyards LLC

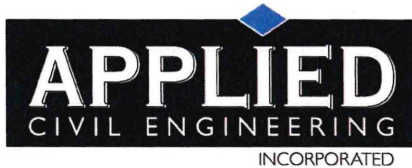
Care of: Steve Contursi

1042 North Coast Highway

Laguna Beach, CA 92651

(949) 233-3752

PREPARED BY:



2160 Jefferson Street, Suite 230

Napa, California 94559

Telephone: (707) 320-4968

www.appliedcivil.com

Job Number: 20-139

Michael R. Muelrath

Michael R. Muelrath R.C.E. 67435

9/19/2024

Date



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| NAME OF PERSON WHO PREPARED THIS REPORT | 2 |
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| Source Adequacy..... | 3 |
| Water Supply Capacity | 3 |
| Water Quality Characterization..... | 4 |
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LIST OF APPENDICES

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INTRODUCTION

A&B Vineyards LLC is applying for a Use Permit Modification to change the entitlements for their previously permitted and under construction winery facility located at 5215 Solano Avenue in Napa County, California. The subject property is located just north of the intersection of Solano Avenue and Oak Knoll Avenue and is also known as Napa County Assessor's Parcel Number 034-190-040.



Figure I: Location Map

A Use Permit (PI2-00440) and subsequent modifications for this project was approved by the Napa County Planning Commission allows the construction and operation of a new winery.

This new Use Permit Modification proposes the following characteristics:

- Wine Production:
 - 45,000 gallons of wine per year
 - Crushing, fermenting, aging and bottling
- Employees:
 - 5 employees
 -

- Marketing Plan:
 - Daily Tours and Tastings by Appointment
 - 34 visitors per day maximum
 - Marketing Events Type #1
 - 12 per year
 - 30 guests maximum
 - Food prepared offsite by catering company
 - Marketing Events Type #2
 - 2 per year
 - 125 guests maximum
 - Food prepared offsite by catering company
 - Portable toilets used for restrooms

Existing development on the property includes approximately six acres of vineyards, two wells, access roads, winery buildings under construction and the related access and utility infrastructure typical of this type of agricultural and winery development. Water for the winery will be provided by the existing Winery Well located on the subject property. Please see the A&B Vineyards LLC Use Permit Modification Conceptual Site Improvement Plans for approximate locations of existing and proposed features.

Groundwater is currently used for vineyard irrigation and to support the entitled winery which is under construction. Groundwater will continued to be used for these activities moving forward including the proposed winery use modifications.

Since the number of employees plus the number of visitors is expected to exceed 24 for 60 or more days out of the year the project will be required to implement a Transient Non-Community Public Water System.

A&B Vineyards LLC has requested that Applied Civil Engineering Incorporated (ACE) prepare a brief report outlining the anticipated technical, managerial and financial aspects of the water system that will be required to serve the proposed winery to accompany the winery Use Permit application as required by Napa County.

WATER SYSTEM NAME

The water system will be known as the “A&B Vineyards Winery Water System”.

NAME OF PERSON WHO PREPARED THIS REPORT

This report was prepared by Michael R. Muelrath, PE of Applied Civil Engineering Incorporated. Information regarding the parameters of the subject Use Permit Modification application was provided by representatives of A&B Vineyard LLC and Taylor Lombardo Architects.

TECHNICAL CAPACITY

System Description

Water for the existing vineyards is currently provided by an existing onsite well (Well Completion Report No. WCR2020-002111. Water for the winery will also be provided by the

existing groundwater well. According to the Well Completion Report and County Permit (E19-00681) records this existing well does have the required 50 foot deep, 3 inch wide annular seal as is required for public water systems. A second existing well is proposed to be reserved for vineyard irrigation only.

Treatment is expected to consist of standard water treatment technologies and detailed plans for the water treatment system will be prepared and presented to Napa County for review during the building permit and water system permit stage.

Water Demand Projection

Napa County Water Availability Analysis Guidelines were used to estimate the annual water demand for the proposed winery uses and associated landscaping around the new winery. The vineyards were included in this analysis even though they have a separate source of water available to meet irrigation needs. The total proposed water use is estimated to be approximately 4.38 acre-feet per year. Of the projected 4.38 ac-ft approximately 1.18 acre-feet is associated with domestic and processing uses for the proposed winery and the balance is associated with vineyard and landscape irrigation. Using the projected annual domestic and processing water demand of 1.18 acre-feet per year, we have calculated an average daily demand of approximately 1,053 gallons and a maximum daily demand (MDD) of approximately 2,369 gallons (calculated using a peaking factor of 2.25 per California Waterworks Standards Section 64554b.3.(C)).

Source Adequacy

The existing well was constructed with a 50 foot deep, 3 inch wide annular seal to meet the requirements for public water systems. A copy of the Well Completion Report providing information about the existing well will be included with the water system application with the winery building permit application package to document adequacy of the seal.

Water Supply Capacity

Assuming a conservative well pumping cycle of 12 hours per day the new well must be capable of producing at least 3.3 gallons per minute to meet the water system's MDD. A pumping test in accordance with California Waterworks Standards Section 64554 was performed by Les Peterson Drilling & Pump Inc on 11/16/2021. According to the report prepared by Peterson Drilling & Pump Inc the yield for the well was determined to be at least 74 gpm which is significantly more than the required 3.3 gpm needed to meet the MDD. More details regarding the pumping test and recovery in accordance with California Waterworks Standards will be submitted prior to building permit and water system permit submittal to document the actual yield.

Furthermore, the results of the Water Availability Analysis prepared by Applied Civil Engineering confirm that the projected aquifer extraction complies with County requirements and therefore long-term supply should be sufficient to meet the needs of the public water system and other irrigation uses.

Once the water system is permitted and constructed we recommend that the water level, yield and drawdown in the well be monitored on an ongoing basis to detect any trends in changing water table levels and well yield so that alternate sources can be developed if needed.

The water system must also include a new storage tank that can store at least the MDD (2,369 gallons).

Water Quality Characterization

Preliminary testing was completed on 12/2/2021 by Alpha Analytical Laboratories Inc in Ukiah. These results indicate treatment will be required for manganese removal. The water treatment system must be designed to reduce all required contaminant levels to below the regulatory maximum contaminant level (MCL) for each constituent, as applicable. Based on preliminary assessment and experience with other wells in the general project area we judge that it will be feasible to provide treatment as needed to meet water quality requirements for the new public water system.

Consolidation Analysis

We have reviewed the California Water Boards System Area Boundary Layer Look-up Tool at <https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=272351aa7db14435989647a86e6d3ad8> [Accessed on 12/20/2022] and found one system identified on the map that is located within 3 miles of the subject property:

I. City of Napa

We have reviewed the possibility of connecting to the City of Napa water system with the Napa County Local Agency Formation Commission and City of Napa Water Division and have determined that it is not feasible to connect to this existing water system since the parcel is in the County and has no existing regular water service (see correspondence in Appendix 2).

MANAGERIAL

Organization

Management and routine operation of the water system will be performed by the winery staff. One staff member will be responsible for performing sampling, reporting and keeping up to date records onsite in accordance with Napa County requirements. The winery staff person in charge of the water system will consult with water system specialists as needed if issues arise with any components of the water system. The water system manager will report directly to the property owner.

Land Ownership

The well, storage tank and all the piping will all be located on the same property as the proposed winery that it will serve which is owned by A&B Vineyards LLC (see ownership documents in Appendix 4) and therefore no easements are necessary.

Water Rights

The A&B Vineyards Winery Water System will use groundwater from a non-adjudicated groundwater basin exclusively and is therefore not subject to water rights through the State Water Resources Control Board.

FINANCIAL

There will be no revenue generated by the water system.

The expected expenses for the water system can be broken down into initial startup cost and ongoing operational cost as shown below.

Startup Cost

Startup cost includes the new water transmission piping, water storage tank, water treatment system equipment, booster pump and installation. The water treatment and storage equipment will be designed based on a full panel of water quality test results that will be performed on water from the existing well. Based on previous experience we estimate that the cost for these components will be approximately \$238,000 (see budget spreadsheet in Appendix 3).

Actual costs will be dependent upon the location of the tank and other water system components as well as results of the water quality testing and design of the water treatment system.

Annual Operating Cost

Annual operating cost for the water system will include a portion of one employee's salary, cost for performing quarterly and annual water quality testing, equipment maintenance, replacement of consumable items, electrical service charges, professional fees and capital replacement allowance. The actual cost to operate and maintain the water system will be dependent on the final design of the water system. We estimate that the annual cost associated with operating and maintaining the water system will be approximately \$22,000 per year (see budget spreadsheet in Appendix 3).

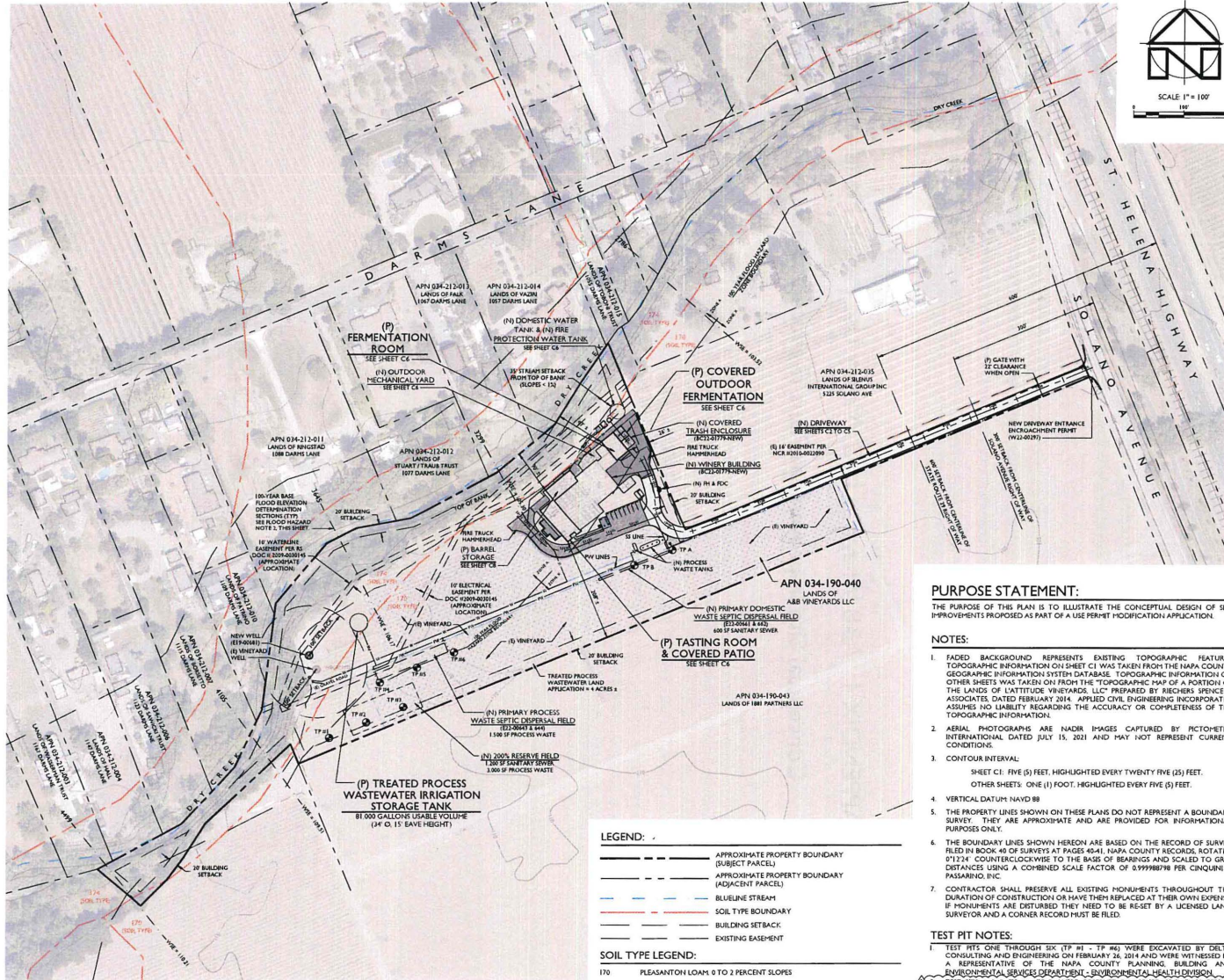
Funding

The startup cost will be financed along with the construction of the winery. The winery's annual budget must include a line item for water system operation and maintenance expenses to ensure finances are available to operate and maintain the water system throughout the life of the winery.

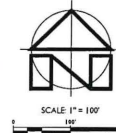
APPENDIX I: A&B Vineyards LLC Winery Use Permit Modification
Conceptual Site Improvement Plans (Reduced to 8.5" x 11")

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS



OVERALL SITE PLAN
SCALE: 1" = 100'



PROJECT INFORMATION:

PROPERTY OWNER & APPLICANT:
A&B VINEYARDS LLC
1042 NORTH COAST HIGHWAY
LAGUNA BEACH, CA 92651

SITE ADDRESS:
5215 SOLANO AVENUE
NAPA, CA 94558

ASSESSOR'S PARCEL NUMBER:
034-190-040

PARCEL SIZE:
10.1 ± ACRES

PROJECT SIZE:
2.0 ± ACRES

ZONING:
AGRICULTURAL PRESERVE (AP)

DOMESTIC WATER SOURCE:
PRIVATE WELL

FIRE PROTECTION WATER SOURCE:
STORAGE TANK

WASTEWATER DISPOSAL:
ON-SITE TREATMENT AND DISPERSAL

SHEET INDEX:

- C1 OVERALL SITE PLAN
- C2 DRIVEWAY PLAN & PROFILE STA 0+50 TO STA 9+25
- C3 DRIVEWAY PLAN & PROFILE STA 9+25 TO STA 53+25
- C4 DRIVEWAY CROSS SECTIONS STA 1+00 TO STA 11+25
- C5 DRIVEWAY CROSS SECTIONS STA 11+50 TO STA 53+00
- C6 BUILDING AREA CONCEPTUAL SITE IMPROVEMENT PLAN
- C7 STORMWATER CONTROL PLAN
- C8 IMPERVIOUS SURFACE EXHIBIT

FLOOD HAZARD NOTES:

- ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 96050305P, EFFECTIVE SEPTEMBER 29, 2010, ALL OR A PORTION OF THE PROJECT SITE IS LOCATED IN A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% CHANCE ANNUAL FLOOD (100 YEAR FLOOD). THE APPROXIMATE FLOOD HAZARD BOUNDARY LINE IS SHOWN ON THIS PLAN. SEE FIRM FOR ADDITIONAL INFORMATION.
- A DETAILED FLOOD STUDY WAS PREPARED BY SCHAFER AND WHEELER AND THE BASE FLOOD ELEVATION AT THE BUILDING SITE ACCORDING TO THAT STUDY IS APPROXIMATELY 105.10 ± NAVD 88. THE FLOODWATER ELEVATION WOULD BE CONTAINED WITHIN THE BANKS OF DRY CREEK. THE BUILDING WILL NONETHELESS BE ELEVATED MORE THAN 1' ABOVE THE BFE.

EXISTING WINERY PERMIT SUMMARY:

| PURPOSE | PERMIT NUMBER |
|--------------------------------------|---------------------|
| PRIOR WRITRY USE PERMIT MODIFICATION | F21-00007 (PHASE 1) |
| GRADING PERMIT | 030222-00010 |
| FLOODPLAIN PERMIT | ENF22-00020 |
| WINERY BUILDING PERMIT | BC23-01079-NEW |
| UTILITY-OTHER PERMIT | BC23-01081 |
| FIRE SPRINKLERS PERMIT | F22-00292 |
| FIRE ALARM PERMIT | F22-00258 |
| PROCESS WASTEWATER | E22-00644 |
| SANITARY WASTEWATER | E22-00622 |

PURPOSE STATEMENT:

THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE CONCEPTUAL DESIGN OF SITE IMPROVEMENTS PROPOSED AS PART OF A USE PERMIT MODIFICATION APPLICATION.

NOTES:

- FADED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES. TOPOGRAPHIC INFORMATION ON SHEET C1 WAS TAKEN FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATABASE. TOPOGRAPHIC INFORMATION ON OTHER SHEETS WAS TAKEN FROM THE TOPOGRAPHIC MAP OF A PORTION OF THE LANDS OF LUTTITUDE VINEYARDS, LLC, PREPARED BY RECHERCH SERVICE & ASSOCIATES, DATED FEBRUARY 2014. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
- AERIAL PHOTOGRAPHS ARE NAIRI IMAGES CAPTURED BY PHOTOETRY INTERNATIONAL DATED JULY 15, 2021 AND MAY NOT REPRESENT CURRENT CONDITIONS.
- CONTOUR INTERVAL:
SHEET C1: FIVE (5) FEET, HIGHLIGHTED EVERY TWENTY FIVE (25) FEET.
OTHER SHEETS: ONE (1) FOOT, HIGHLIGHTED EVERY FIVE (5) FEET.
- VERTICAL DATUM: NAVD 88
- THE PROPERTY LINES SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THEY ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
- THE BOUNDARY LINES SHOWN HEREON ARE BASED ON THE RECORD OF SURVEY FILED IN BOOK 46 OF SURVEYS AT PAGE 4041, NAPA COUNTY RECORDS, ROTATED 91234, COUNTerclockwise TO THE BASE OF BEARINGS AND SCALED TO GRID DISTANCES USING A COMBINED SCALE FACTOR OF 0.9999878 PER CINQUIN & PASARODI, INC.
- CONTRACTOR SHALL PRESERVE ALL EXISTING MONUMENTS THROUGHOUT THE DURATION OF CONSTRUCTION OR HAVE THEM REPLACED AT THEIR OWN EXPENSE. IF MONUMENTS ARE DISTURBED THEY NEED TO BE RESET BY A LICENSED LAND SURVEYOR AND A CORNER RECORD MUST BE FILED.

TEST PIT NOTES:

- TEST PITS ONE THROUGH SIX (TP #1 - TP #6) WERE EXCAVATED BY DELTA CONSULTING AND ENGINEERING ON FEBRUARY 26, 2014 AND WERE WITNESSED BY A REPRESENTATIVE OF THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENVIRONMENTAL HEALTH DIVISION.
- TEST PITS A & B (TP A - TP B) WERE OBSERVED BY APPLIED CIVIL ENGINEERING INCORPORATED ON JULY 26, 2023 AND WERE WITNESSED BY A REPRESENTATIVE OF THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENVIRONMENTAL HEALTH DIVISION.



A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
OVERALL SITE PLAN

PREPARED UNDER THE DIRECTION OF:



DRAWN BY:

POWER/CAC LLC

CHECKED BY:

PHR1

DATE:

SEPTEMBER 6, 2023

REVISIONS:

BY:

3/10/2023

YES

PERMIT SUBMITTAL

5/10/2023

YES

PERMIT SUBMITTAL

9/4/2023

YES

PERMIT SUBMITTAL

8/9/2024

YES

PERMIT SUBMITTAL

JOB NUMBER:

20-179

FILE:

20-179CONC-OSP.DWG

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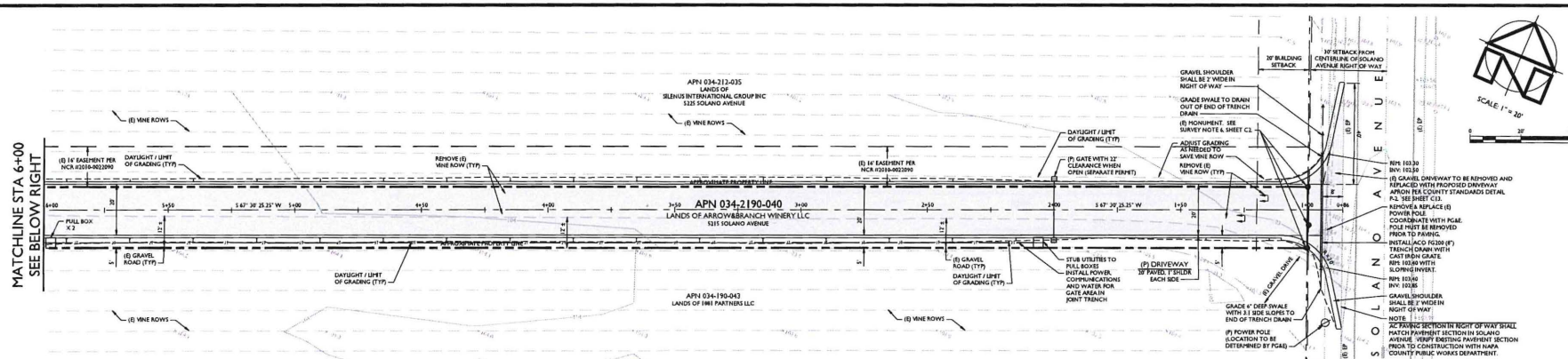
24" X 36"

SHEET NUMBER:

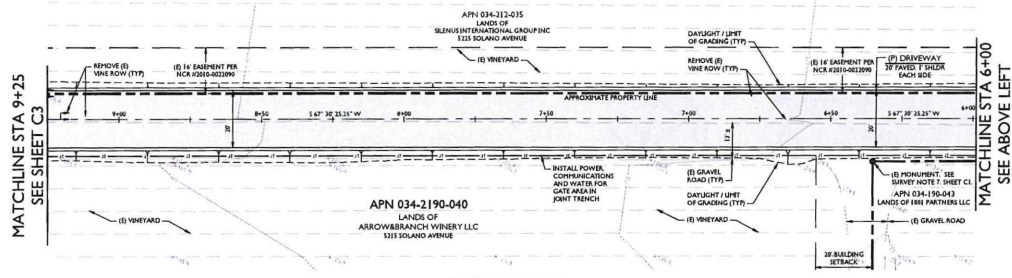
C1

OF

8

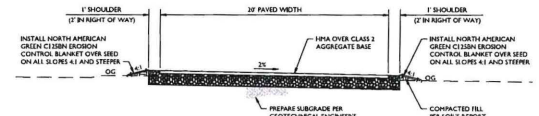


**DRIVEWAY PLAN
STA 0+86 TO STA 6+00**
SCALE 1" = 20'

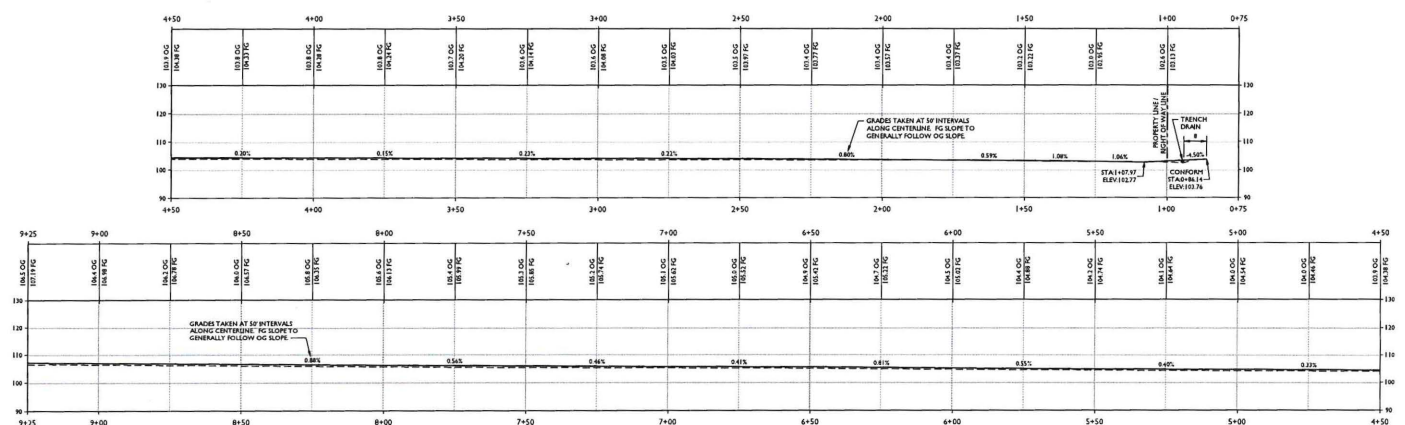


**DRIVEWAY PLAN
STA 6+00 TO STA 9+25**
SCALE 1" = 20'

- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY (SUBJECT PARCEL)
 - - - APPROXIMATE PROPERTY BOUNDARY (ADJACENT PARCEL)
 - - - EXISTING EASEMENT OR SETBACK
 - - - EXISTING EDGE OF PAVEMENT
 - - - EXISTING EDGE OF DIRT / GRAVEL ROAD
 - - - EXISTING VINE ROW
 - - - EXISTING VINEYARD BOUNDARY
 - - - PROPOSED EDGE OF PAVEMENT AND SHOULDER
 - - - PROPOSED DAYLIGHT / LIFT OF GRADING
 - - - PROPOSED JOINT TRENCH
 - - - PROPOSED ASPHALT CONCRETE PAVING



TYPICAL DRIVEWAY SECTION
SCALE 1" = 5'



**DRIVEWAY PROFILES
STA 0+75 TO STA 9+25**
SCALE 1" = 20'



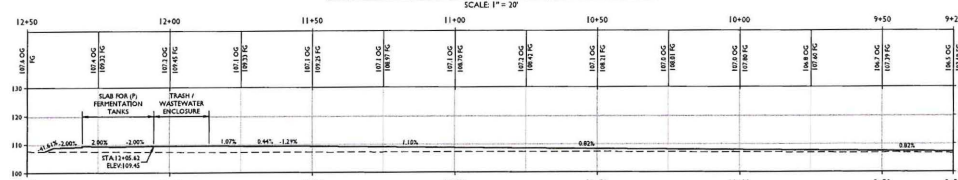
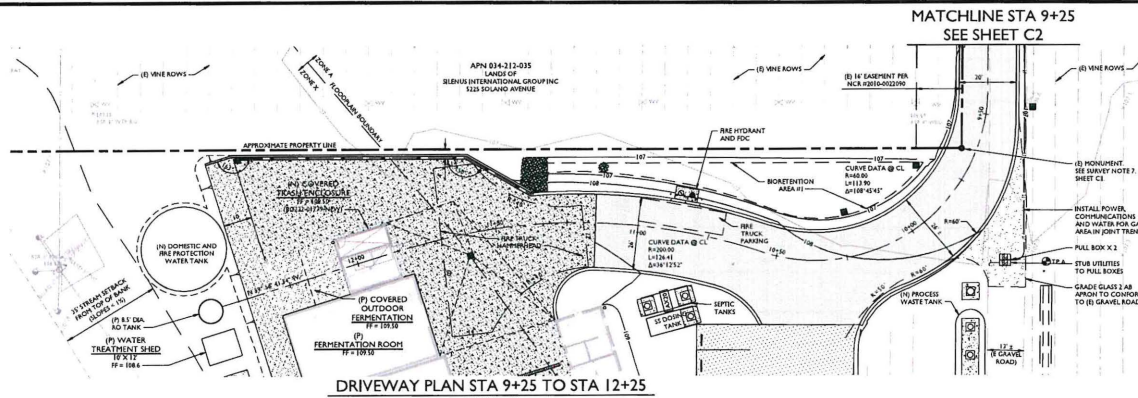
| | |
|-------------|----------------|
| DRAWN BY: | PowerCAD LLC |
| CHECKED BY: | YPS1 |
| DATE: | AUGUST 9, 2024 |
| REVISIONS: | BY |
| 3/10/2023 | YPS |
| 5/10/2023 | YPS |
| 1/6/2023 | YPS |
| 8/9/2024 | YPS |

JOB NUMBER:
20-139

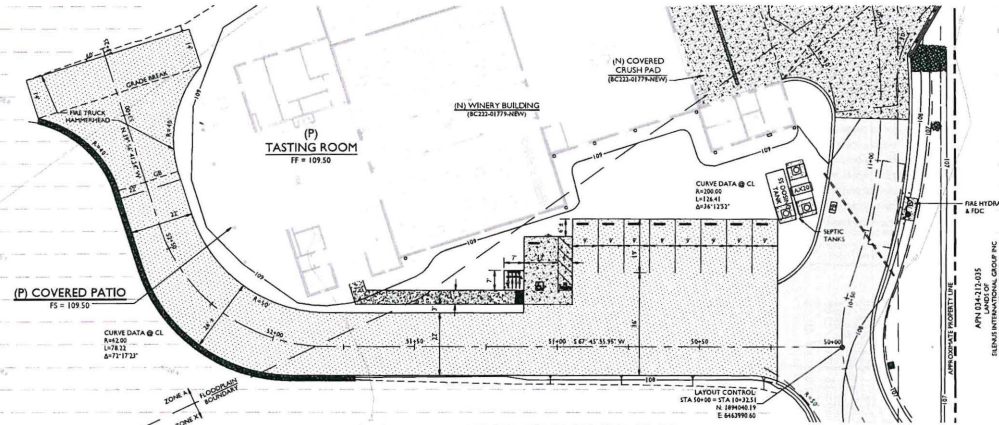
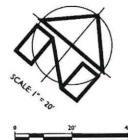
FILE:
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ORIGINAL SIZE:
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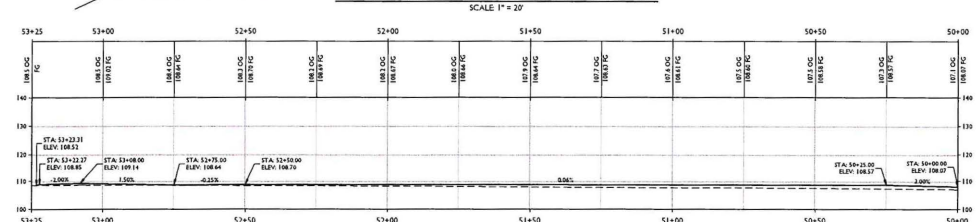
SHEET NUMBER:
C2



DRIVEWAY PROFILE STA 9+25 TO STA 12+50



DRIVEWAY PLAN STA 50+00 TO STA 53+22



DRIVEWAY PROFILE STA 50+00 TO STA 53+25

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY (SUBJECT PARCELS)
- APPROXIMATE PROPERTY BOUNDARY (ADJACENT PARCELS)
- EXISTING EASEMENT OR SETBACK
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF DIRT / GRAVEL ROAD
- EXISTING FENCE
- EXISTING FLOWLINE
- EXISTING GRADE BREAK / TOP OF BANK
- EXISTING TOE OF BANK
- EXISTING VINE ROW
- EXISTING VINEYARD BOUNDARY
- PROPOSED EDGE OF PAVEMENT AND SHOULDER
- PROPOSED DAYLIGHT / LIMIT OF GRADING
- PROPOSED TOP OF BANK / GRADE BREAK
- PROPOSED RETAINING WALL
- PROPOSED BUILDING
- PROPOSED SINGLE POLE SIGN
- PROPOSED WHEEL STOP
- PROPOSED ACCESSIBLE PARKING
- PROPOSED DRAIN INLET
- PROPOSED ENERGY DISSIPATOR
- PROPOSED HEAVY DUTY PCC PAVING
- PROPOSED LIGHT DUTY PCC PAVING
- PROPOSED GRAVEL PAVING
- PROPOSED CHIP SEAL PAVING
- PROPOSED ASPHALT CONCRETE PAVING
- PROPOSED DECOMPOSED GRANITE PAVING
- PROPOSED PAVES SET IN CONCRETE
- PROPOSED ROCK



A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
DRIVEWAY PLAN & PROFILE STA 9+25 TO STA 53+25

PREPARED UNDER THE DIRECTION OF:



DRAWN BY: PowerCAD LLC
CHECKED BY: PRM
DATE: AUGUST 9, 2024
REVISIONS: BY: 3/10/2023 YHS PERMIT SUBMITTAL
5/10/2023 YHS PERMIT RESUBMITTAL
9/6/2023 YHS PERMIT RESUBMITTAL
8/9/2024 YHS PERMIT RESUBMITTAL

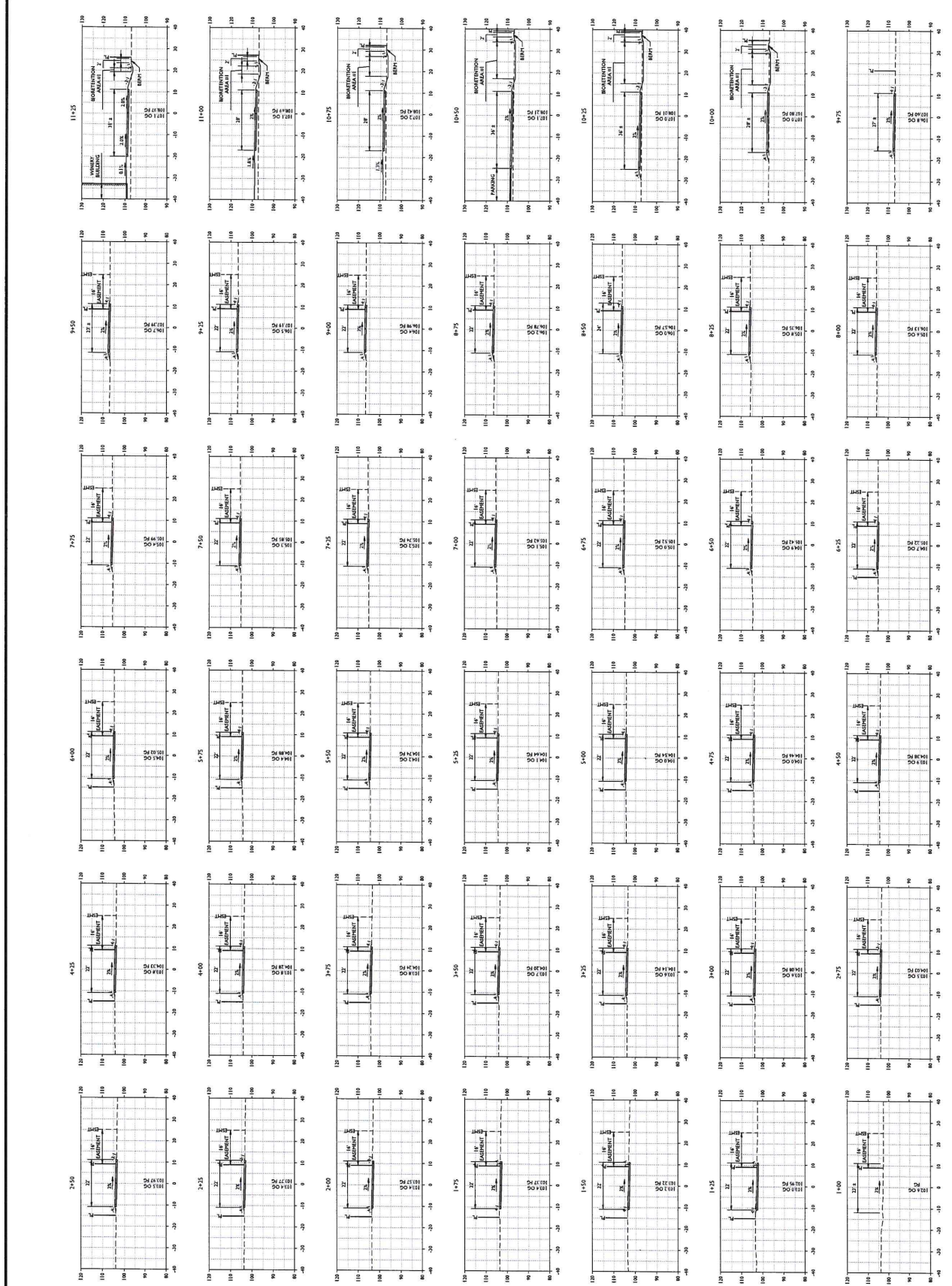
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SHEET NUMBER: C3

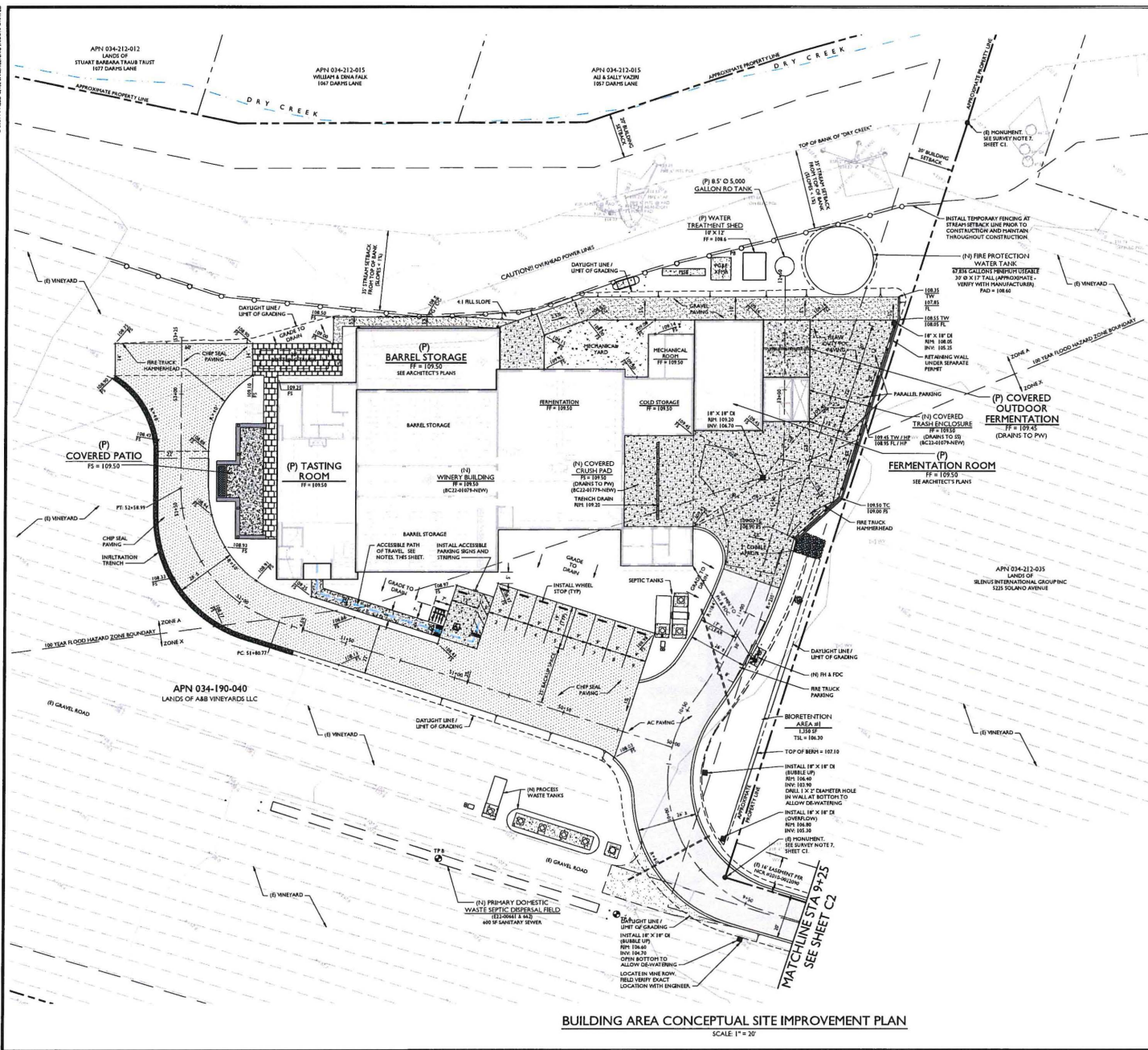


DRAWN BY: PowerCAD LLC
CHECKED BY: PPH
DATE: AUGUST 9, 2024
DESIGN NO.: 24-1396P-CMVC-DWG
PROJECT: PERMIT SUBMITTAL
SHEET NO.: 1 OF 1

FOR NUMBER: 24-139
FILE: 24-1396P-CMVC-DWG
ORIGINAL SIZE: 24" X 36"
SHEET NUMBER: C4
OF 8



DRIVEWAY CROSS SECTIONS STA 1+00 TO STA 11+25
SCALE 1" = 20'



SCALE: 1" = 20'



LEGEND:

- | | |
|--|---|
| | APPROXIMATE PROPERTY BOUNDARY (SUBJECT PARCEL) |
| | APPROXIMATE PROPERTY BOUNDARY (ADJACENT PARCEL) |
| | EXISTING EASEMENT OR SETBACK |
| | EXISTING EDGE OF DRIFT / GRAVEL ROAD |
| | EXISTING OVERHEAD POWER LINE |
| | EXISTING BLUE LINE STREAM |
| | EXISTING GRADE BREAK / TOP OF BANK |
| | EXISTING TOE OF BANK |
| | EXISTING VINE ROW |
| | EXISTING VINEYARD BOUNDARY |
| | PROPOSED EDGE OF PAVEMENT AND SHOULDER |
| | PROPOSED DAYLIGHT / LIMIT OF GRADING |
| | PROPOSED TOP OF BANK / GRADE BREAK |
| | PROPOSED RETAINING WALL |
| | PROPOSED BUILDING |
| | PROPOSED SINGLE POLE SIGN |
| | PROPOSED WHEEL STOP |
| | PROPOSED ACCESSIBLE PARKING |
| | PROPOSED DRAIN INLET |
| | PROPOSED ENERGY DISSIPATOR |
| | PROPOSED HEAVY DUTY PCC PAVING |
| | PROPOSED LIGHT DUTY PCC PAVING |
| | PROPOSED GRAVEL PAVING |
| | PROPOSED CHIP SEAL PAVING |
| | PROPOSED ASPHALT CONCRETE PAVING |
| | PROPOSED DECOMPOSED GRANITE PAVING |
| | PROPOSED ROCK |
| | PROPOSED PAVERS SET IN CONCRETE |

ACCESSIBLE ROUTE OF TRAVEL NOTE:

ALL ACCESSIBLE ROUTES OF TRAVEL SHALL COMPLY WITH THE REQUIREMENTS OF CBC 11B. THE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

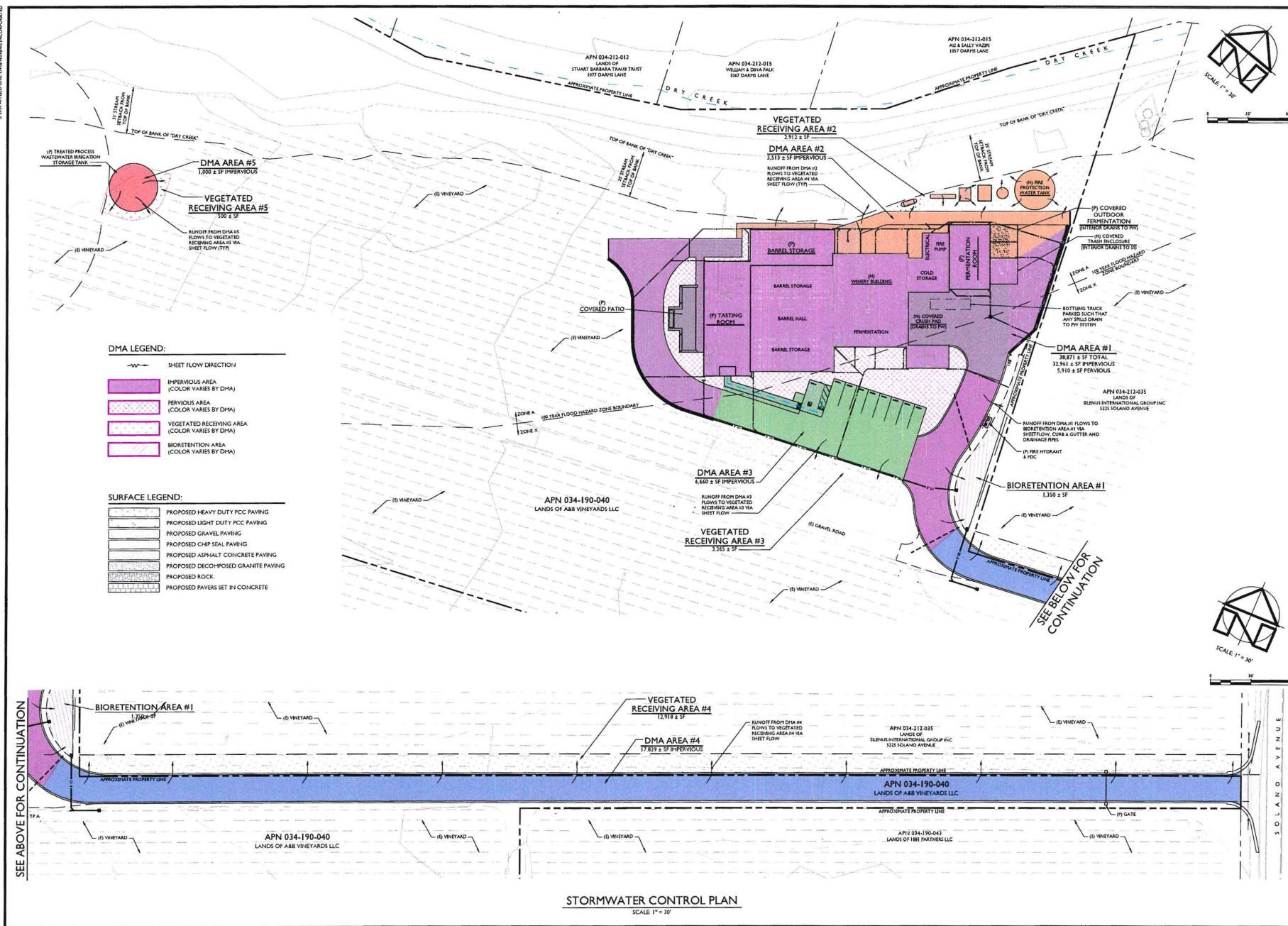
- A. RUNNING SLOPE OF WALKING SURFACES SHALL NOT EXCEED 5% (1:20)
- B. RUNNING SLOPE OF RAMPS SHALL NOT EXCEED 8.33% (1:12)
- C. CROSS SLOPE OF WALKS AND RAMPS NOT TO EXCEED 2.083% (1:48)
- D. LANDING AND LEVEL AREA SLOPES NOT TO EXCEED 2.083% (1:48)
- E. VERTICAL CHANGES IN LEVEL SHALL NOT EXCEED 1/4 INCH. ALL LEVEL CHANGES BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO STEEPER THAN 1:2. ANY LEVEL CHANGES GREATER THAN 1/2 INCH SHALL BE RAMPED AND COMPLY WITH CIRC 118-405.
- F. OPENINGS IN DRAINS AND GRATING SHALL NOT EXCEED 1/2 INCH IN PREDOMINANT DIRECTION OF TRAVEL.

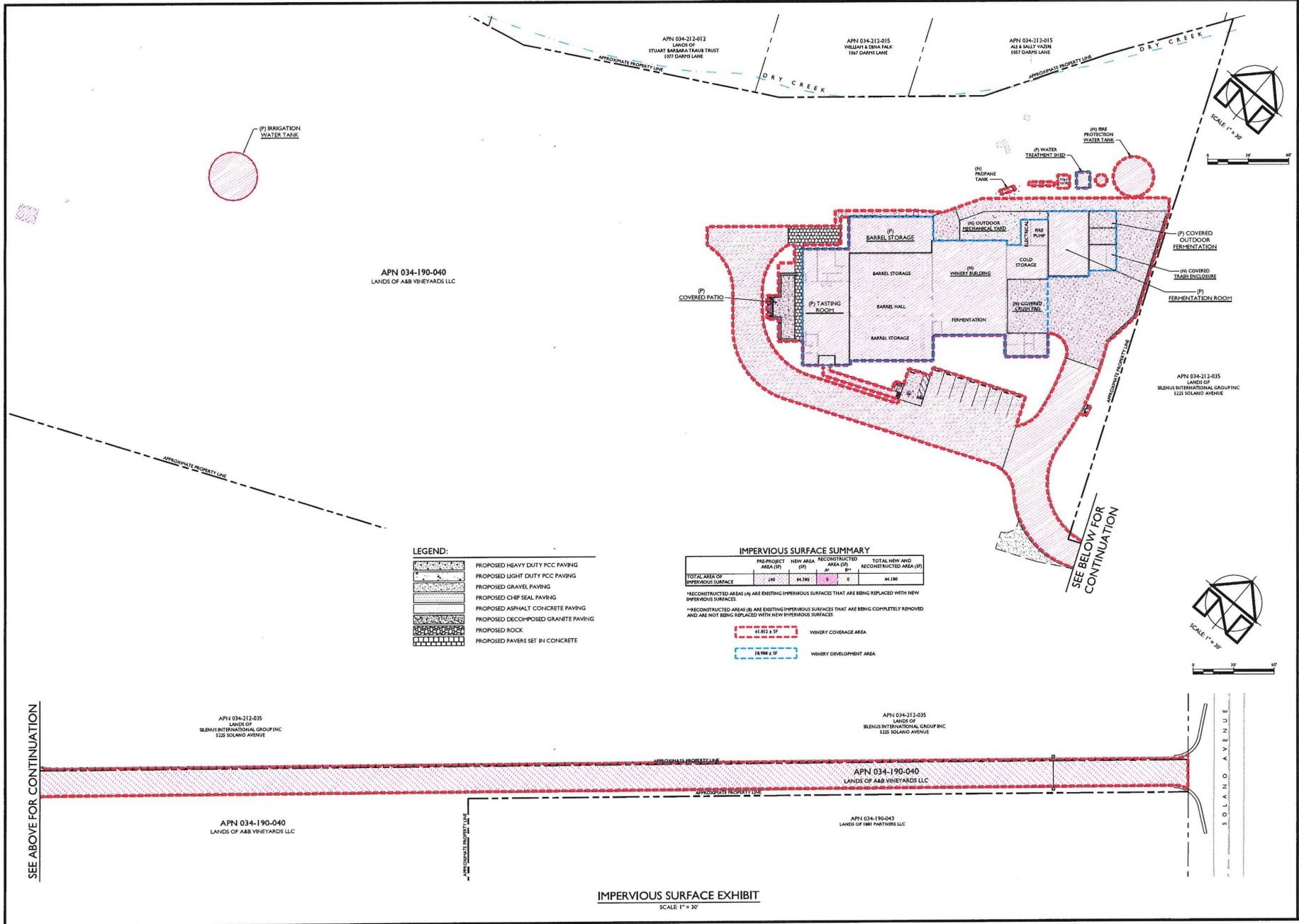
GRADING QUANTITIES*

| | |
|-------|-----------------|
| CUT | 600 ± CY |
| FILL | 900 ± CY |
| NET** | 300 ± CY (FILL) |

* THIS ESTIMATE IS PROVIDED AS A TOOL FOR THE REVIEWING AGENCIES TO EVALUATE THE ENVIRONMENTAL IMPACTS OF THE PROJECT. IT IS NOT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES. CONTRACTOR IS TO PERFORM THEIR OWN EARTHWORK CALCULATIONS AND SHALL NOT USE THE ESTIMATES PRESENTED ABOVE. THIS ESTIMATE IS BASED ON IN PLACE VOLUMES AND DOES NOT INCLUDE FLUFF, SHRINKAGE PAVING, AGGREGATES OR SELECT FILL VOLUMES.







APPENDIX 2: Correspondence with LAFCO and the City of Napa

Eric Wade

From: Dana Stockon-Smith <dstockon@cityofnapa.org>
Sent: Wednesday, December 21, 2022 5:05 PM
To: Eric Wade
Cc: Mike Muelrath
Subject: Re: Water service at 5215 Solano Ave, Napa

This parcel is not able to connect to City Water for domestic or fire protection services as it is in the County and has no existing regular water service.

The interruptible surplus ag water connection to this parcel cannot be used for any purpose other than irrigation or frost protection. Last irrigation season (2022) there was zero surplus water available, and it's not looking hopeful that Lake Hennessey will fill to a level this year that would allow us to provide surplus water for the 2023 irrigation season. In addition, the municipal code states even in years with surplus water, the water will be available only from April 15th to September 15th:

13.04.050 Metered rates for interruptible surplus agricultural water service.

G. The following conditions shall be applicable to all interruptible surplus agricultural water service for irrigation:

- 1. Water service shall be available only during the period April 15th to September 15th of each year;*
- 2. The water service shall be turned on April 14th and off on September 16th of each year by a city representative;*

Surplus ag water is not a reliable alternate water source. Let me know if you have any other questions.

Thanks,
Dana Stockon
City of Napa - Utilities Department
1700 Second St. Ste. 100
Napa CA 94559
(707) 257-9496

From: Eric Wade <eric@appliedcivil.com>
Sent: Wednesday, December 21, 2022 10:05 AM
To: Dana Stockon-Smith
Cc: Mike Muelrath
Subject: FW: Water service at 5215 Solano Ave, Napa

You don't often get email from eric@appliedcivil.com. [Learn why this is important](#)

[EXTERNAL]

Hi Dana,

I'm working on a water system report for the new Arrow & Branch Winery at 5215 Solano Ave, APN 034-190-040, as part of a County Use Permit application. This site appears to be outside of the City limits but is shown as being within the City of Napa water system service area on the Water Board's website. There is an interruptible Ag service that likely runs from Darms Lane under Dry Creek to the parcel, however I'm evaluating if the existing well can provide enough water for the winery's estimated water domestic and irrigation demand with the necessary water treatment and storage tanks. If City water is available for domestic and fire protection use it may be considered as an alternate, however the availability of water on a

surplus-only condition, if applicable, may not be reliable enough to be the primary water source or make sense financially since the on-site storage, pumping, and treatment infrastructure would still be needed when surplus water is not available. Please let me know your thoughts. I know we are going into the holidays so I look forward to connecting with you early next year if not sooner.
Thanks,

Eric Wade
Office: (707) 320-4968
Mobile: (707) 337-4326

Applied Civil Engineering Incorporated
www.appliedcivil.com

From: Freeman, Brendon <bfreeman@napa.lafco.ca.gov>
Sent: Tuesday, December 20, 2022 3:55 PM
To: Eric Wade <eric@appliedcivil.com>
Cc: Mike Muelrath <mike@appliedcivil.com>
Subject: RE: Water service at 5215 Solano Ave, Napa

Good afternoon Eric,

Under California Government Code Section 56133, and with local LAFCO policies in mind, the City of Napa can only provide water service to 5215 Solano Ave if one of the following conditions applies:

- There exists a documented threat to public health or safety involving existing facilities on the property
- The water service is considered a transfer of nonpotable or nontreated water
- The water service involves surplus water to agricultural lands and facilities, including, but not limited to, incidental residential structures, for projects that serve conservation purposes or that directly support agricultural industries

It does sound as if the third bulletpoint condition might be possible to meet, but the City of Napa and LAFOC would need to know more about the specific intended use of water. Also, the City would need to determine the water being provided is surplus water.

Please let me know if you have any questions, and enjoy the holidays!

Brendon Freeman, Executive Officer
Local Agency Formation Commission of Napa County
1754 Second Street, Suite C
Napa, California 94559
Office: (707) 259-8645
Mobile: (707) 363-1783
www.napa.lafco.ca.gov
 Like Us

From: Eric Wade <eric@appliedcivil.com>
Sent: Tuesday, December 20, 2022 3:32 PM
To: Freeman, Brendon <bfreeman@napa.lafco.ca.gov>
Cc: Mike Muelrath <mike@appliedcivil.com>
Subject: Water service at 5215 Solano Ave, Napa

[External Email - Use Caution]

Hi Brendon,

I'm working on a public water system application for the new Arrow & Branch Winery at 5215 Solano Ave, APN 034-190-040. This site appears to be outside of the City limits but is shown as being within the City of Napa water system service area on the Water Board's website. I've been told there is an existing interruptible Ag service that likely runs from Darms Lane under Dry Creek to the parcel, and I'm evaluating if an existing well can provide enough water for the winery's estimated domestic water and irrigation demand with the necessary water treatment and storage tank infrastructure. If City water is available for domestic and fire protection use it may be considered as an alternate. I'm planning on reaching out to the City as well, but I'd like see what info you have regarding this site's ability to connect to the City's water system.

Thanks,

Eric Wade
Project Engineer



2160 Jefferson Street, Suite 230
Napa, CA 94559

Office: (707) 320-4968
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APPENDIX 3: Budgeting Spreadsheets

SIMPLIFIED CAPITAL IMPROVEMENT PLAN (CIP)

Date: 1/6/2023

System ID No.: TBD

System Name: A&B Vineyards Winery Water System

Service Connections: 1

*Enter information only in YELLOW shaded cells

| QTY | COMPONENT | UNIT COST | INSTALLED COST | AVG LIFE, YEARS | ANNUAL RESERVE | MONTHLY RESERVE | MONTHLY RESERVE PER CUSTOMER |
|------|---|-----------|----------------|-----------------|----------------|-----------------|------------------------------|
| 1 | Drilled Well, 6", steel casing | 80 | 43600 | 25 | 1744.00 | 145.33 | 145.33 |
| 0 | Drilled Well, 8", steel casing | 130 | 0 | 25 | 0.00 | 0.00 | 0.00 |
| 0 | Drilled Well, 12", steel casing | 200 | 0 | 25 | 0.00 | 0.00 | 0.00 |
| 1 | Wellhead Electrical Controls | 700 | 700 | 25 | 28.00 | 2.33 | 2.33 |
| 0 | Submersible Pump, 20 HP | 9000 | 0 | 7 | 0.00 | 0.00 | 0.00 |
| 0 | Submersible Pump, 3 HP | 2000 | 0 | 7 | 0.00 | 0.00 | 0.00 |
| 1 | Submersible Pump, 5 HP | 3500 | 3500 | 7 | 500.00 | 41.67 | 41.67 |
| 1 | Booster Pump Station, 10 HP, complete | 14000 | 14000 | 5 | 2800.00 | 233.33 | 233.33 |
| 1 | Booster Pump Station Electrical Controls | 5000 | 5000 | 5 | 1000.00 | 83.33 | 83.33 |
| 0 | Pressure Tank | 1.5 | 0 | 10 | 0.00 | 0.00 | 0.00 |
| 1 | Pressure Tank | 80 | 120 | 10 | 12.00 | 1.00 | 1.00 |
| 0 | Storage Tank, Plastic | 0.5 | 0 | 10 | 0.00 | 0.00 | 0.00 |
| 0 | Storage Tank, Redwood | 1.3 | 0 | 40 | 0.00 | 0.00 | 0.00 |
| 0 | Storage Tank, Redwood | 1.3 | 0 | 40 | 0.00 | 0.00 | 0.00 |
| 0 | Storage Tank, Steel | 1.2 | 0 | 50 | 0.00 | 0.00 | 0.00 |
| 0 | Storage Tank, Steel | 1.2 | 0 | 50 | 0.00 | 0.00 | 0.00 |
| 1 | Storage Tank, Steel | 30000 | 120000 | 50 | 2400.00 | 200.00 | 200.00 |
| 0 | Storage Tank, Concrete | 1.5 | 0 | 80 | 0.00 | 0.00 | 0.00 |
| 3 | Master Meter, 2" | 450 | 1350 | 10 | 135.00 | 11.25 | 11.25 |
| 0 | Master Meter, 3" | 800 | 0 | 10 | 0.00 | 0.00 | 0.00 |
| 1 | Master Meter, 4" | 2500 | 2500 | 10 | 250.00 | 20.83 | 20.83 |
| 0 | Hypochlorinator w/ Tank & Pump, Complete | 800 | 0 | 10 | 0.00 | 0.00 | 0.00 |
| 0 | Pipe w/ sand bedding, 1" (Enter linear feet for quantity) | 20 | 0 | 50 | 0.00 | 0.00 | 0.00 |
| 1200 | Pipe w/ sand bedding, 2" (Enter linear feet for quantity) | 25 | 30000 | 50 | 600.00 | 50.00 | 50.00 |
| 0 | Pipe w/ sand bedding, 3" (Enter linear feet for quantity) | 30 | 0 | 50 | 0.00 | 0.00 | 0.00 |
| 0 | Pipe w/ sand bedding, 4" (Enter linear feet for quantity) | 35 | 0 | 50 | 0.00 | 0.00 | 0.00 |
| 0 | Pipe w/ sand bedding, 6" (Enter linear feet for quantity) | 50 | 0 | 50 | 0.00 | 0.00 | 0.00 |
| 0 | Standpipe Hydrant, 1-1/2" | 700 | 0 | 20 | 0.00 | 0.00 | 0.00 |
| 0 | Standpipe Hydrant, 2-1/2" | 900 | 0 | 20 | 0.00 | 0.00 | 0.00 |
| 1 | Customer Meter w/ Box & Shutoff, Complete | 250 | 250 | 20 | 12.50 | 1.04 | 1.04 |
| 10 | Distribution Valve, 2" | 150 | 1500 | 10 | 150.00 | 12.50 | 12.50 |
| 0 | Distribution Valve, 3" | 250 | 0 | 10 | 0.00 | 0.00 | 0.00 |
| 0 | Distribution Valve, 4" | 600 | 0 | 20 | 0.00 | 0.00 | 0.00 |
| 0 | Distribution Valve, 6" | 850 | 0 | 20 | 0.00 | 0.00 | 0.00 |
| 1 | Air & Vacuum Relief Valve, Typical | 375 | 375 | 20 | 18.75 | 1.56 | 1.56 |
| 1 | Calcite Filter and Softening | 7500 | 7500 | 20 | 375.00 | 31.25 | 31.25 |
| 1 | UV | 7500 | 7500 | 20 | 375.00 | 31.25 | 31.25 |
| | | | 0 | 50 | 0.00 | 0.00 | 0.00 |
| | | | | | | | |
| | SUBTOTAL Existing CIP Costs | | \$237,895.00 | | \$10,400.25 | \$866.69 | \$866.69 |
| | | | | | | | |
| | NEW Project CIP Costs | | | | | | |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | OTHER ITEM | | 0 | 1 | 0.00 | 0.00 | 0.00 |
| | SUBTOTAL New Project CIP Costs | | \$0.00 | | \$0.00 | \$0.00 | \$0.00 |
| | | | | | | | |
| | TOTAL Existing and New Project CIP: | | \$237,895.00 | | \$10,400.25 | \$866.69 | \$866.69 |

Report Prepared by (Title): _____

Date: _____

NOTE: Installed costs are averages and include all materials and contracted labor and equipment.

NOTES:

FIVE YEAR BUDGET PROJECTION (Small Community Water System)

INSTRUCTIONS: Yellow-shaded cells are for data entry; all other cells are locked except line item descriptions which can be changed if needed. Years 2 through 5 will be compounded automatically by the inflation factor in Cell G6.

| System Name: | | Inflation Factor (%): | | | 3.0 | |
|-----------------------------------|---|-----------------------|------------|------------|------------|------------|
| A&B Vineyards Winery Water System | | System ID Number: | | | TBD | |
| LINE | EXPENSES AND SOURCE OF FUNDS | 2023 | 2024 | 2025 | 2026 | 2027 |
| 1 | OPERATIONS AND MAINTENANCE (O&M) EXPENSES | | | | | |
| 2 | Salaries and Benefits | 6,240.00 | 6,427.20 | 6,620.02 | 6,818.62 | 7,023.17 |
| 3 | Contract Operation and Maintenance | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | Power and Other Utilities | 2,500.00 | 2,575.00 | 2,652.25 | 2,731.82 | 2,813.77 |
| 5 | Fees Regulatory | 674.00 | 694.22 | 715.05 | 736.50 | 758.59 |
| 6 | Treatment Chemicals | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | Coliform Monitoring | 240.00 | 247.20 | 254.62 | 262.25 | 270.12 |
| 8 | Chemical Monitoring | 50.00 | 51.50 | 53.05 | 54.64 | 56.28 |
| 9 | Transportation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | Materials, Supplies, and Parts | 500.00 | 515.00 | 530.45 | 546.36 | 562.75 |
| 11 | Office Supplies | 100.00 | 103.00 | 106.09 | 109.27 | 112.55 |
| 12 | Miscellaneous | 500.00 | 515.00 | 530.45 | 546.36 | 562.75 |
| 13 | Additional O&M for New Project | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | Total O&M Expenses: | 10,804.00 | 11,128.12 | 11,461.96 | 11,805.82 | 12,160.00 |
| 16 | GENERAL AND ADMINISTRATIVE EXPENSES | | | | | |
| 17 | Engineering and Professional Services | 720.00 | 741.60 | 763.85 | 786.76 | 810.37 |
| 18 | Depreciation and Amortization | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 19 | Insurance | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | Existing Contribution to CIP (From CIP J48) | 10,400.25 | 10,400.25 | 10,400.25 | 10,400.25 | 10,400.25 |
| 21 | O&M Reserve | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | Other Reserves | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | Miscellaneous | 100.00 | 103.00 | 106.09 | 109.27 | 112.55 |
| 24 | ** New Funding Project Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | Additional New Project Contribution to CIP (From CIP J59) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | ** Debt Service | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 27 | Total General and Administrative Expenses: | 11,220.25 | 11,244.85 | 11,270.19 | 11,296.29 | 11,323.17 |
| 28 | TOTAL EXPENSES (Line 14+ Line 27): | 22,024.25 | 22,372.97 | 22,732.15 | 23,102.11 | 23,483.16 |
| 30 | REVENUES RECEIVED | | | | | |
| 31 | Cash Revenues (Water Rates) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 32 | ** Depreciation Reserves | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 33 | ** Fees and Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 34 | ** Hookup Charges | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 35 | ** Withdrawal from CIP or Other Reserves | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 36 | ** Other Fund Sources: Interest, Etc. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 37 | ** Grants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 38 | ** SRF Loan | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 39 | ** Business Loans | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40 | TOTAL REVENUE (Lines 31 through 39): | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 41 | NET LOSS OR GAIN: | -22,024.25 | -22,372.97 | -22,732.15 | -23,102.11 | -23,483.16 |

(** Inflation factor not applied to future year projections)

| | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|---------|---------|---------|---------|---------|
| Number of Customers: | 1 | 1 | 1 | 1 | 1 |
| Average Monthly Revenue Needed Per Customer: | 1835.35 | 1864.41 | 1894.35 | 1925.18 | 1956.93 |
| (total expenses ÷ # of customers ÷ 12) | | | | | |

APPENDIX 4: Ownership Documents

(2)

RECORDING REQUESTED BY

Placer Title Company
Escrow Number: P-426649
Branch: 701

AND WHEN RECORDED MAIL TO

A&B Vineyards LLC
200 Spectrum Center Drive, Suite 2020
Irvine CA 92618



2020-0027169

Recorded
Official Records
County of
Napa
JOHN TUTEUR
Assessor-Recorder-Co.

REC FEE 27.00
TAX 4180.00

12:44PM 20-Oct-2020

JS
Page 1 of 5

A.P.N.: 034-190-040-000

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED



The undersigned grantor(s) declare(s):

Documentary transfer tax is \$4,180.00 City Transfer Tax: \$0.00

(X) Unincorporated Area () City of _____

(X) computed on full value of property conveyed, or

() computed on full value less value of liens and encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

L'Attitude Vineyards, LLC, a California limited liability company

Hereby GRANT(S) to

A&B Vineyards LLC, a California limited liability company

The land described herein is situated in the State of California, County of Napa, unincorporated area, described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

MAIL TAX STATEMENTS TO PARTY SHOWN ON FOLLOWING LINE; IF NO PARTY SHOWN, MAIL AS DIRECTED ABOVE

SAME AS ABOVE

Name

Street Address

City & State

Page 1 of 5

Grant Deed - Sale

Signature page to Grant Deed

Dated: October 14, 2020

L'Attitude Vineyards, LLC, a California limited liability company

By: Robert Williamson
By: Robert Williamson, Managing Member

By: Joni Williamson
By: Joni Williamson, Managing Member

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

)

) ss.

County of Napa

)

On 10-19-20 before me,

LARRY S. FRATTINI

Notary Public personally appeared ROBERT WILLIAMSON AND

JONI WILLIAMSON

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.

SIGNATURE

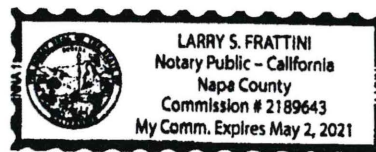


EXHIBIT "A"
LEGAL DESCRIPTION

The land described herein is situated in the State of California, County of Napa, unincorporated area, described as follows:

PARCEL ONE:

That portion of the lands of L' Attitude Vineyards, LLC in the Unincorporated area of the County of Napa, State of California, as described in the Grant Deed Recorded May 31, 2006, as Instrument No. 2006-0018911, in the Official Records of the County of Napa, and portion of Parcel 1 as shown on the Map entitled "Parcel Map of the Lands of Kenneth E. Laird and Gail S. Laird, et al.", filed November 15, 1994, in Book 20 of Parcel Maps at Page(s) 51-52, in the office of the County Recorder of Napa County described as follows:

Beginning at the Western line of Solano Avenue, formerly lands of the State of California as conveyed by the Deed Recorded September 12, 1969 in Book 814 of Official Records of the County of Napa, at Page 647 that bears North 21° 54' 57" West; 1008.09 feet from the East corner of Parcel 1 as shown on the Parcel Map entitled "Parcel Map of the lands of Kenneth E. Laird, and Gail S. Laird, et al., on Map No. 4774 filed November 15, 1994, in Book 20 of Parcel Maps at Pages 51 and 52 in the Office of the Recorder of the County of Napa; thence South 67° 42' 48" West, 535.02 feet; thence South 22° 17' 45" East, 118.00 feet; thence South 67° 42' 15" West, 1219.60 feet; thence North 22° 17' 45" West, 42.12 feet; South 47° 09' 56" West, 232.21 feet; thence South 32° 30' 30" West, 81.65 feet; thence South 36° 51' 11" West, 53.92 feet; thence South 45° 19' 47" West, 73.34 feet; thence North 49° 40' 41" West, 113.75 feet; more or less, to the centerline of Dry Creek; thence Northeasterly along the centerline of Dry Creek the following courses and distances North 61° 49' 00" East, 189.94 feet; thence North 43° 22' 40" East, 154.96 feet; thence North 25° 24' 24" East, 126.08 feet; thence 7° 12' 07" East, 218.11 feet; thence North 40° 30' 09" East, 157.11 feet; thence North 61° 41' 23" East, 68.02 feet; thence North 78° 52' 19" East, 109.72 feet; thence North 62° 08' 02" East, 194.49 feet; thence North 50° 04' 28" East, 152.03 feet; thence North 31° 43' 06" East, 96.50 feet; thence North 34° 27' 29" East, 96.85 feet to the point that bears South 34° 27' 29" West; 33.45 feet from the West corner of Parcel "B" as shown on the lands of "Edwin L. & Annie Brunt 958 O.R. 196" on Map No. 3462 filed September 16, 1981 in Book 12 of Parcel Maps at pages 68 And 69 in the Office of the Recorder of the County of Napa; thence leaving said centerline South 22° 17' 45" East, 407.40 feet, more or less; thence North 67° 42' 48" East, 862.00 feet to said Western line of Solano Avenue formerly lands of the State of California as conveyed by the deed Recorded August 25, 1970 in Book 34 of Official Records of the County of Napa at Page 128; thence along said Western line of Solano Avenue, South 21° 57' 47" East; 24.00 feet to the point of beginning.

APN: 034-190-040

PARCEL TWO:

A non-exclusive easement; appurtenant to Parcel one above, for ingress, egress and incidental purposes as reserved in the Grant Deed from L'Attitude Vineyards, LLC., a California limited liability company to Silenus International Group Inc., a California corporation recorded September 23, 2010, Instrument Number 2010-0022090 and being more particularly described therein.

PARCEL THREE:

A non-exclusive easement; appurtenant to Parcel One above, for electrical and incidental purposes as reserved in the Grant Deed from L'Attitude Vineyards, LLC., a California limited liability company to Silenus International Group, Inc., a California corporation, Recorded September 23, 2010, Instrument Number 2010-0022090 and being more particularly described therein.

END OF DOCUMENT

PARCEL FOUR:

A non-exclusive easement, appurtenant to Parcel One, for water pipeline and incidental purposes as reserved in the Grant Deed from L'Attitude Vineyards, LLC., a California limited liability company to Silenus International Group Inc., a California corporation Recorded September 23,2010, Instrument Number 2010-0022090 and being more particularly described therein.

“K”

Stormwater Control Plan

Stormwater Control Plan for a Regulated Project

A&B Vineyards LLC
5215 Solano Avenue, Napa County
Napa, CA 94558
APN 34-190-040

PREPARED FOR:
A&B Vineyards LLC
1042 North Coast Highway
Laguna Beach, CA 92651

PREPARED BY:



2160 Jefferson Street, Suite 230
Napa, California 94559
Telephone: (707) 320-4968
www.appliedcivil.com

Job No. 20-139

Eric Wade

Eric Wade, PE C81862

1/06/2023

Date



This Stormwater Control Plan was prepared using the template by Dan Cloak Environmental Consulting dated July 2014.

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Project Data

Table I. Project Data Form

| | |
|--|--|
| Project Name/Number | A&B Vineyards Winery |
| Application Submittal Date | January 2023 |
| Project Location | 5215 Solano Avenue Napa, CA 94558 APN 034-190-040 |
| Project Phase No. | 2 |
| Project Type and Description | New winery fermentation, barrel storage, and tasting room added to building with associated site improvements. |
| Total Project Site Area (acres) | 2 +/- (total disturbed area) |
| Total New and Replaced Impervious Surface Area | 0.07 acres (approximate) |
| Total Pre-Project Impervious Surface Area | 1.31 acres (approximate) |
| Total Post-Project Impervious Surface Area | 1.38 acres (approximate) |

I. Setting

I.A. Project Location and Description



Figure I: Location Map

A & B Vineyards LLC is applying for a Use Permit Modification to add features to the winery facility and utility infrastructure in construction at their property located at 5215 Solano Avenue in Napa County, California. The subject property, known as Napa County Assessor's Parcel Number 034-190-040, is located along the southwest side of Solano Avenue, North of the City of Napa, approximately 740 feet south of the intersection of Solano Avenue and Darms Lane.

The roughly 10.1 acre parcel is zoned Agricultural Preserve (AP). Topography can be described as gentle with average slopes less than 5%. The United States Department of Agriculture Soil Conservation Service Soils Map for Napa County shows two soil types mapped on the property. The northeasterly areas with flatter topography are mapped as Cortina very stony loam, 0 to 5 percent slopes. The northerly areas along Dry Creek are mapped as Riverwash and the remainder of the property is mapped as Pleasanton loam, 0 to 2 percent slopes. All proposed above ground site improvements are located within the Pleasanton soils area (HSG C).

Existing development on the property includes groundwater wells, vineyards and the access and utility infrastructure typical of this type of agricultural development.

Runoff from the property generally flows from west to east. Runoff concentrates in a roadside swale at Solano Avenue that runs northerly and is tributary to Dry Creek which is tributary to the Napa River.

Proposed onsite improvements include additional barrel storage and fermentation rooms, a tasting room, covered patio, and changes to the mechanical yard.

Please see the A & B Vineyards LLC Use Permit Modification Conceptual Site Improvement Plans for approximate locations of existing and proposed features.

I.B. Opportunities and Constraints for Stormwater Control

Opportunities for stormwater control include:

1. The moderately sloping topography will allow roof and impervious area runoff to be routed to treatment areas at lower elevations
2. Large vegetated buffers between all site improvements and drainage ways.

Constraints for stormwater control include:

1. The near surface soils have a slow infiltration rate (HSG C).
2. Existing vineyard areas to be preserved.

II. Low Impact Development Design Strategies

II.A. Optimization of Site Layout

II.A.1. Limitation of development envelope

- The original winery building footprint and outdoor patio areas are being developed on areas that are already improved with agricultural development.
- Nearly all of the new impervious surfaces were accounted for in previous approvals for the winery, reserving areas for these additions to the winery. Since an increase of 50% of impervious surface is not proposed, a hydromodification analysis has not been prepared.
- The proposed buildings and access roads have been carefully designed to preserve natural vegetation and vineyards on the property and no tree removal is proposed.

II.A.2. Preservation of natural drainage features

All natural drainage features on the property will be preserved. Proposed work within the creek setback will be minimized and generally involve new landscape planting.

II.A.3. Setbacks from creeks, wetlands, and riparian habitats

The project has been designed with respect to stream setbacks as required by the Napa County Conservation Regulations. A setback is shown along Dry Creek located just north of the winery.

II.A.4. Minimization of imperviousness

All access ways and parking areas have been designed to the minimum Napa County width standards and will not be excessively large. This ensures that excess impervious surfaces are not created. The new buildings have been carefully designed to house the required functions with the minimum footprint necessary.

II.A.5. Use of drainage as a design element

Drainage design has been coordinated with the landscape design to provide an aesthetically pleasing site layout that addresses stormwater control requirements.

II.B. Use of Permeable Pavements

Permeable pavements are not proposed, however the use of DG for convenience paths instead of concrete is noted on landscape plans.

II.C. Dispersal of Runoff to Pervious Areas

The site layout and topography will allow for dispersal of runoff from impervious surfaces to pervious areas.

II.D. Stormwater Control Measures

Runoff from all impervious areas at the building site, including roofs and paved areas in the immediate vicinity of the winery facility, will be routed to a single bioretention facility as shown on the Stormwater Control Plan Exhibit. The facility will be designed and constructed to the criteria in the BASMAA Post-Construction Manual (2019), including the following features:

- Surrounded by a compacted soil berm.
- Each layer built to the elevations specified in the plans and referenced details:
 - Bottom of Gravel Layer (BGL)
 - Top of Gravel Layer (TGL)
 - Top of Soil Layer (TSL)
 - Overflow Grate
 - Facility Rim
- 12 inches of Class 2 permeable rock, Caltrans specification 68-2.02F(3)
- 18 inches sand/compost mix meeting BASMAA specifications
- 6-inch-deep reservoir between top of soil elevation and overflow elevation
- Drain inlet with frame overflow structure, with grate set to specified elevation, connected to storm drain (overflow used where storm drain connection is available and omitted where no storm drain exists)
- Plantings selected for water conservation
- Irrigation system on a separate zone, with drip emitters and “smart” irrigation controllers

- Sign identifying the facility as a stormwater treatment facility.

III. Documentation of Drainage Design

III.A. Descriptions of Each Drainage Management Area

III.A.1. Table of Drainage Management Areas

| DMA Name | Surface Type | Area (square feet) |
|----------|---|--------------------|
| DMA #1 | Winery building roofs, asphalt some roadway improvements, and concrete production areas | 38,868 +/- |
| DMA #2 | Rear yard mechanical area | 5,310 +/- |
| DMA #3 | Front parking area | 6,660 +/- |
| DMA #4 | Driveway | 17,829 +/- |

III.A.2. Drainage Management Area Descriptions

DMA #1, totaling 38,868 square feet, consists of the winery building roofs, driveway turnaround, concrete work areas, a portion of the winery driveway, and landscape areas. DMA #1 drains to Bioretention Area #1.

DMA #2, totaling 5,310 square feet, consists of rear yard mechanical yard and access areas that cannot be intercepted at Bioretention Area #1 due to the elevation of the surfaces and linear and scattered nature. DMA #2 drains to Vegetated Receiving Area #2.

DMA #3, totaling 6,660 square feet, consists of the winery parking area that cannot be intercepted at Bioretention Area #1 due to the geometric constraints on the size of the bioretention area. DMA #4 drains to Vegetated Receiving Area #3.

DMA #4, totaling 17,829 square feet, consists of the winery driveway that cannot be intercepted at Bioretention Area #1 due to the elevation of the road and linear nature. DMA #4 drains to Vegetated Receiving Area #4.

III.B. Tabulation and Sizing Calculations

III.B.1. Information Summary for Bioretention Facility Design

| | |
|--------|------------|
| DMA #1 | 38,868 +/- |
|--------|------------|

III.B.2. Self-Treating Areas

| DMA Name | Area (square feet) |
|-------------|-----------------------|
|-------------|-----------------------|

| | |
|-----|--|
| N/A | |
|-----|--|

III.B.3. Self-Retaining Areas

| DMA Name | Area (square feet) |
|-------------|-----------------------|
|-------------|-----------------------|

| | |
|-----|--|
| N/A | |
| | |

III.B.4. Vegetated Receiving Areas

| DMA Name | Area (square feet) |
|-------------|-----------------------|
|-------------|-----------------------|

| | |
|--------|--------|
| VRA #2 | 2,655 |
| VRA #3 | 3,265 |
| VRA #4 | 12,918 |

Areas Draining to Self-Retaining Areas

| DMA Name | Area (square feet) | Post-project surface type | Runoff factor | Product (Area x runoff factor)[A] | Receiving self-retaining DMA | Receiving self-retaining DMA Area (square feet) [B] | Ratio [A]/[B] |
|----------|--------------------|---------------------------|---------------|-----------------------------------|------------------------------|---|---------------|
| None | | | | | | | |

III.B.5. Areas Draining to Bioretention Facilities

| DMA Name | DMA Area (square feet) | Post-project surface type | DMA Runoff factor | DMA Area x runoff factor | Facility Name | | |
|----------|------------------------|---------------------------|-------------------|--------------------------|----------------------|-------------------|-------------------|
| | | | | | Bioretention Area #1 | | |
| DMA #1 | 32,961 | Impervious | 1.0 | 32,961 | Sizing factor | Min Facility Size | (P) Facility Size |
| DMA #1 | 5,910 | Permeable | 0.1 | 591 | | | |
| | | | | | | | |
| Total= | | | | 33,552 | 0.04 | 1342 | 1350 |

Areas Draining to Vegetated Receiving Areas

| DMA Name | Area (square feet) | Post-project surface type | Runoff factor | Product (Area x runoff factor)[A] | Vegetated receiving area DMA | Receiving self-retaining DMA Area (square feet) [B] | Ratio [A]/[B]<2 |
|----------|--------------------|---------------------------|---------------|-----------------------------------|------------------------------|---|-----------------|
| DMA#2 | 5,310 | Imperv | 1 | 5,310 | VRA#2 | 2,731 | 1.9 |
| DMA#3 | 6,660 | Imperv | 1 | 6,660 | VRA#3 | 3,265 | 2 |
| DMA#4 | 17,829 | Imperv | 1 | 17,829 | VRA#4 | 12,918 | 1.4 |

IV. Source Control Measures

IV.A. Site activities and potential sources of pollutants

IV.B. Source Control Table

| Potential source of runoff pollutants | Permanent source control BMPs | Operational source control BMPs |
|--|---|--|
| <input checked="" type="checkbox"/> Storm Drain Inlets | <input checked="" type="checkbox"/> Mark all inlets with the words "No Dumping! Drains to Waterway" or similar. | <input checked="" type="checkbox"/> Maintain and periodically repaint or replace inlet markings. <input checked="" type="checkbox"/> Provide stormwater pollution prevention information to all onsite personnel. <input checked="" type="checkbox"/> See applicable BMPs in Fact Sheet SC-44, "Drainage System Maintenance" in the CASQA Stormwater Quality Handbook at: www.casqa.org/resources/bmp-handbooks <input checked="" type="checkbox"/> Include the following in lease agreements (if facility is leased): "Tenant shall not allow anyone to discharge anything to the storm drains or to store or deposit materials so as to create a potential discharge to storm drains." |
| <input checked="" type="checkbox"/> Interior Floor Drains and Elevator Shaft Pumps | <input checked="" type="checkbox"/> All interior floor drains will be plumbed to the sanitary sewer. | <input checked="" type="checkbox"/> Inspect and maintain drains to prevent blockage and overflow. |

| | | |
|--|---|--|
| <input type="checkbox"/> Interior Parking Garages | <input type="checkbox"/> Parking garage floor drains will be plumbed to the sanitary sewer | <input type="checkbox"/> Inspect and maintain drains to prevent blockage and overflow. |
| <input checked="" type="checkbox"/> Indoor and Structural Pest Control | <input checked="" type="checkbox"/> Buildings will be designed to meet applicable code requirements to discourage entry of pests. | <input checked="" type="checkbox"/> Provide Integrated Pest Management information to Owners, lessees and operators. |
| <input checked="" type="checkbox"/> Landscape / Outdoor Pesticide Use / Building and Grounds Maintenance | <p><input checked="" type="checkbox"/> Landscape will be designed to accomplish the following:</p> <p>Preserve existing native trees, shrubs and groundcover to the maximum extent practicable.</p> <p>Minimize irrigation and runoff, promote surface infiltration where appropriate and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.</p> <p>Where landscape areas are used to retain or detain stormwater plants that are tolerant of saturated soil conditions will be used.</p> <p>Pest resistant plants will be specified where practicable.</p> <p>Plants will be selected for site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency and plant interactions.</p> | <p><input checked="" type="checkbox"/> Maintain landscaping using the minimum required or no pesticides and fertilizers.</p> <p><input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-4I, "Building and Grounds Maintenance" in the CASQA Stormwater Quality Handbook at: www.casqa.org/resources/bmp-handbooks</p> <p><input checked="" type="checkbox"/> Provide IPM information to new owners, lessees and operators.</p> |

| | | |
|---|---|--|
| <input checked="" type="checkbox"/> Pools, Spas, Ponds, Decorative Fountains and other Water Features | <input checked="" type="checkbox"/> Do not connect to onsite wastewater disposal systems. Drain to landscape area for infiltration | <input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance" in the CASQA Stormwater Quality Handbook at: www.casqa.org/resources/bmp-handbooks |
| <input type="checkbox"/> Food Service | <input type="checkbox"/> Restaurants, grocery stores and other food service operations will have a floor sink or other area for cleaning floor mats, containers and equipment located either indoors or in a covered area outdoors. | <input type="checkbox"/> Drain must be connected to grease interceptor and grease interceptor must be pumped whenever solids accumulate to 35% of total tank capacity. |
| <input checked="" type="checkbox"/> Refuse Areas | <input checked="" type="checkbox"/> Refuse and recycling will be collected in the trash enclosure. The enclosure will be fenced to prevent dispersal of materials. If covered, the area will be drained to the sanitary sewer system. If not covered, all bins will have water tight lids. Adjacent areas will be graded to prevent run-on. | <input checked="" type="checkbox"/> Refuse area must be patrolled and cleaned regularly. |
| <input checked="" type="checkbox"/> Industrial Processes | <input checked="" type="checkbox"/> All winery processing activities to be performed indoors or outdoors under roof. No processes to drain to exterior or to storm drain system. | <input checked="" type="checkbox"/> See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks |

| | | |
|--|---|---|
| | | |
| <input checked="" type="checkbox"/> Outdoor Storage (Equipment or Materials) | <input checked="" type="checkbox"/> All winemaking materials to be used onsite are to be unloaded and immediately moved to a covered area to minimize exposure to rainfall. <input checked="" type="checkbox"/> Material deliveries shall be scheduled for times when it is not raining to minimize exposure to rainfall. <input checked="" type="checkbox"/> Facility shall comply with Napa County requirements for Hazardous Waste Generation, Storage and Disposal, Hazardous Materials Release Response and Inventory, California Accidental Release (CalARP) and Uniform Fire Code Article 80 Section 103(b) & (c) 1991 | <input checked="" type="checkbox"/> See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials" in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks |
| <input checked="" type="checkbox"/> Vehicle and Equipment Cleaning | <input checked="" type="checkbox"/> No vehicle or equipment washing will be performed onsite. All employees will be informed that car washing is prohibited. | <input checked="" type="checkbox"/> Not Applicable |
| <input checked="" type="checkbox"/> Vehicle and Equipment Repair and Maintenance | <input checked="" type="checkbox"/> No vehicle or equipment repairs will be performed onsite. All employees will be | <input checked="" type="checkbox"/> Notify all future owners, lessees and operators that the following restrictions apply to this site: |

| | | |
|--|---|--|
| | informed that vehicle maintenance onsite is prohibited. | <input checked="" type="checkbox"/> No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinse water from parts cleaning into storm drains. <input checked="" type="checkbox"/> No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. <input checked="" type="checkbox"/> No person shall leave unattended parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment. |
| <input type="checkbox"/> Fuel Dispensing Areas | No vehicle fueling will be performed onsite. All employees will be informed that vehicle fueling onsite is prohibited. | <input type="checkbox"/> The property owner, lessee or operator, as applicable, shall dry sweep the fueling area routinely. <input type="checkbox"/> See the Business Guide Sheet, “Automotive Service—Service Stations” in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks |
| <input type="checkbox"/> Loading Docks | <input type="checkbox"/> Loading docks shall be covered and graded to minimize run-on to and runoff from the loading area. <input type="checkbox"/> Roof downspouts shall be positioned to direct stormwater away from the loading area. <input type="checkbox"/> Water from loading dock areas shall be drained to a containment system that is pumped | <input type="checkbox"/> Move loaded and unloaded items indoors as soon as possible. See Fact Sheet SC-30, “Outdoor Loading and Unloading” in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks |

| | | |
|--|---|---|
| | regularly to avoid overflows. | |
| <input checked="" type="checkbox"/> Fire Sprinkler Test Water | <input checked="" type="checkbox"/> Provide a means to drain fire sprinkler test water to infiltrate into landscaping and not discharge to the storm drain. | <input checked="" type="checkbox"/> See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at: www.casqa.org/resources/bmp-handbooks |
| Miscellaneous Drain, Wash Water or Other Sources <input checked="" type="checkbox"/> Boiler Drain Lines <input checked="" type="checkbox"/> Condensate Drain Lines <input checked="" type="checkbox"/> Rooftop Equipment <input type="checkbox"/> Drainage Sumps <input checked="" type="checkbox"/> Roofing, Gutters and Trim <input type="checkbox"/> Other: | <input checked="" type="checkbox"/> Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. <input checked="" type="checkbox"/> Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. <input checked="" type="checkbox"/> Condensate drain lines may not discharge to the storm drain system. <input checked="" type="checkbox"/> Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. <input type="checkbox"/> Any drainage sumps on-site shall feature a sediment sump to reduce | If architectural copper is used, implement the following BMPs for management of rinsewater during installation: <input type="checkbox"/> If possible, purchase copper materials that have been pre-patinated at the factory. <input type="checkbox"/> If patination is done on-site, prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site. <input type="checkbox"/> Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. <input type="checkbox"/> Implement the following BMPs during routine maintenance: <input type="checkbox"/> Prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling offsite. |

| | | |
|--|--|--|
| | the quantity of sediment in pumped water. <input type="checkbox"/> Include controls for other sources as specified by local agency. | |
| <input checked="" type="checkbox"/> Plazas, Sidewalks and Parking Lots | None. | <input checked="" type="checkbox"/> Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and haul offsite to municipal waste treatment plant for disposal, do not discharge to a storm drain. |

IV.C. Features, Materials, and Methods of Construction of Source Control BMPs

Full design specifications for all source control BMPs will be submitted with the building permit drawing package.

V. Stormwater Facility Maintenance

V.A. Ownership and Responsibility for Maintenance in Perpetuity

The Applicant must commit to executing a Post Construction Stormwater BMP Maintenance Agreement which will be recorded with Napa County. This agreement will obligate the applicant to accept responsibility for operation and maintenance of stormwater treatment and flow-control facilities in perpetuity or until such time as this responsibility is formally transferred to a subsequent property owner.

V.B. Summary of Maintenance Requirements for Each Stormwater Facility

The bioretention facilities will be maintained on the following schedule at a minimum. Details of maintenance responsibilities and procedures will be included in a Stormwater Facility Operation and Maintenance Plan to be submitted for approval prior to the completion of construction.

At no time will synthetic pesticides or fertilizers be applied, nor will any soil amendments, other than aged compost mulch or sand/compost mix, be introduced.

Daily: The facilities will be examined for visible trash during regular policing of the site, and trash will be removed.

After Significant Rain Events: A significant rain event is one that produces approximately a half-inch or more rainfall in a 24-hour period. Within 24 hours after each such event, the following will be conducted:

The surface of the facility will be observed to confirm there is no ponding.

- Inlets and outlets will be inspected, and any accumulations of trash or debris will be removed.
- The surface of the mulch layer will be inspected for movement of material. Mulch will be replaced and raked smooth if needed.

Prior to the Start of the Rainy Season: In September or each year, the facility will be inspected to confirm there is no accumulation of debris that would block flow, and that growth and spread of plantings does not block inlets or the movement of runoff across the surface of the facility.

Annual Landscape Maintenance: In December – February of each year, vegetation will be cut back as needed, debris removed, and plants and mulch replaced as needed. The concrete work will be inspected for damage. The elevation of the top of soil and mulch layer will be confirmed to be consistent with the 6-inch reservoir depth.

VI. Construction Checklist

Stormwater
Control

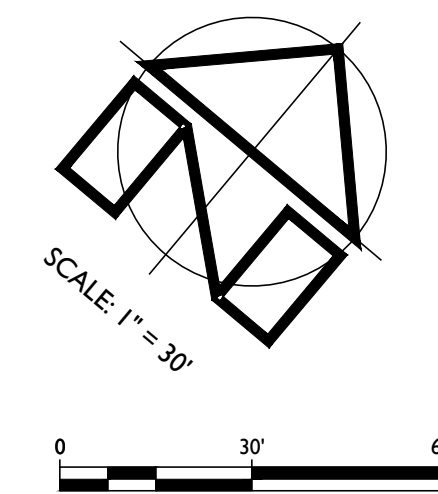
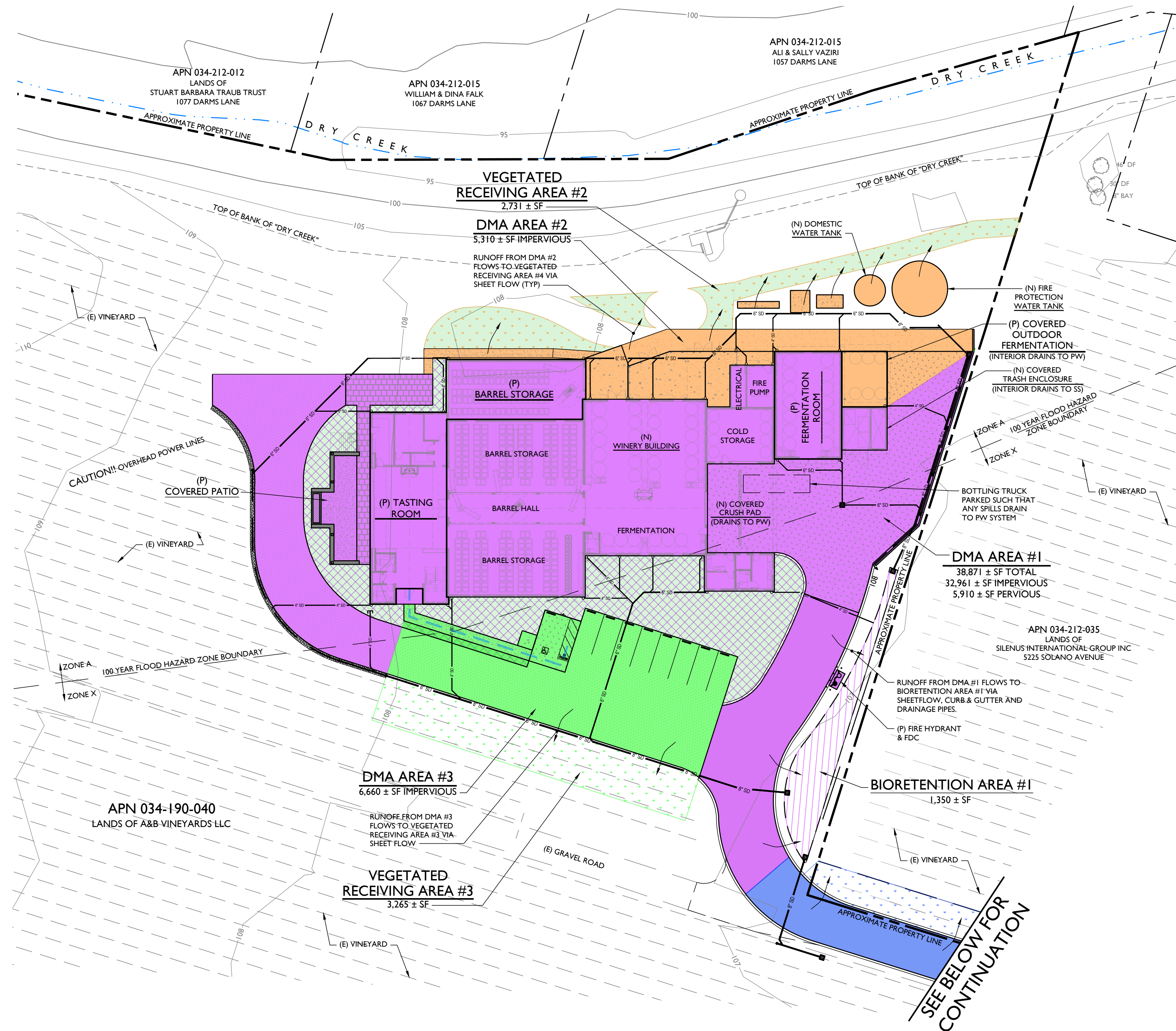
Plan Source Control or Treatment Control
Page # Measure

| | | |
|-----|--|--|
| I | Bioretention Area #1 | |
| I | Storm Drain Inlets | |
| I | Interior Floor Drains and Elevator Shaft Pumps | |
| N/A | Interior Parking Garages | |
| I | Indoor and Structural Pest Control | |
| I | Landscape / Outdoor Pesticide Use / Building and Grounds Maintenance | |
| N/A | Pools, Spas, Ponds, Decorative Fountains and other Water Features | |
| N/A | Food Service | |
| I | Refuse Areas | |
| I | Industrial Processes | |

| | | |
|-----|--|--|
| I | Outdoor Storage (Equipment or Materials) | |
| N/A | Vehicle and Equipment Cleaning | |
| N/A | Vehicle and Equipment Repair and Maintenance | |
| N/A | Fuel Dispensing Areas | |
| N/A | Loading Docks | |
| I | Fire Sprinkler Test Water | |
| I | Miscellaneous Drain, Wash Water or Other Sources Boiler Drain Lines Condensate Drain Lines Rooftop Equipment Drainage Sumps Roofing, Gutters and Trim Other: | |
| I | Plazas, Sidewalks and Parking Lots | |

VII. Certifications

This preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are intended to be in accordance with the current edition of the BASMAA Post-Construction Manual as required by Napa County.

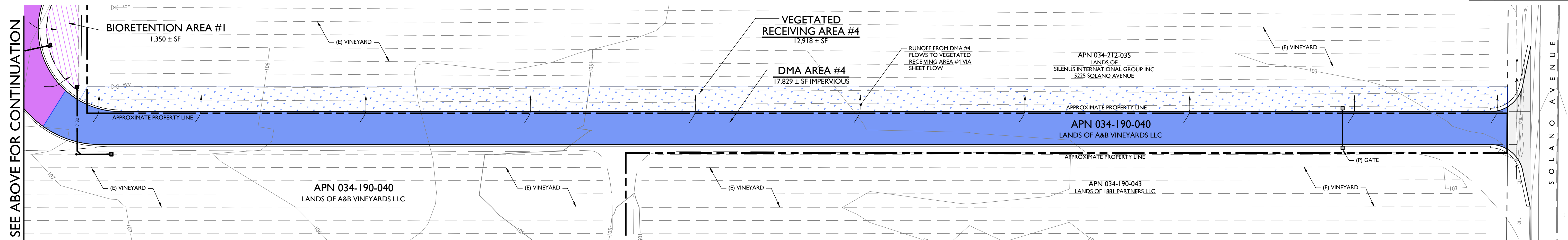
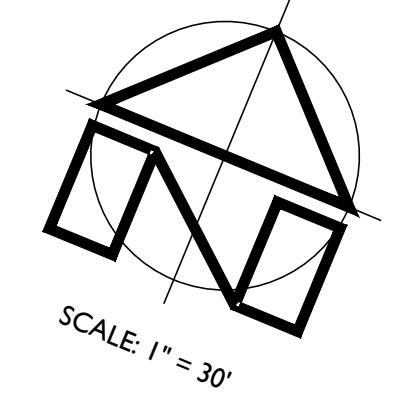


DMA LEGEND:

- ~> SHEET FLOW DIRECTION
- IMPERVIOUS AREA (COLOR VARIES BY DMA)
 - PERVIOUS AREA (COLOR VARIES BY DMA)
 - VEGETATED RECEIVING AREA (COLOR VARIES BY DMA)
 - BIORETENTION AREA (COLOR VARIES BY DMA)

SURFACE LEGEND:

- PROPOSED HEAVY DUTY PCC PAVING
- PROPOSED LIGHT DUTY PCC PAVING
- PROPOSED GRAVEL PAVING
- PROPOSED CHIP SEAL PAVING
- PROPOSED ASPHALT CONCRETE PAVING
- PROPOSED DECOMPOSED GRANITE PAVING
- PROPOSED ROCK
- PROPOSED PAVERS SET IN CONCRETE



STORMWATER CONTROL PLAN

SCALE: 1" = 30'

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
STORMWATER CONTROL PLAN

PREPARED UNDER THE
DIRECTION OF:



DRAWN BY:
PowerCAD LLC

CHECKED BY:
MRM

DATE:
MARCH 10, 2023

REVISIONS: BY:
3/10/2023 YMS
PERMIT SUBMITTAL

JOB NUMBER:
20-139

FILE:
20-139EXH-SCP.DWG

ORIGINAL SIZE:
24" X 36"

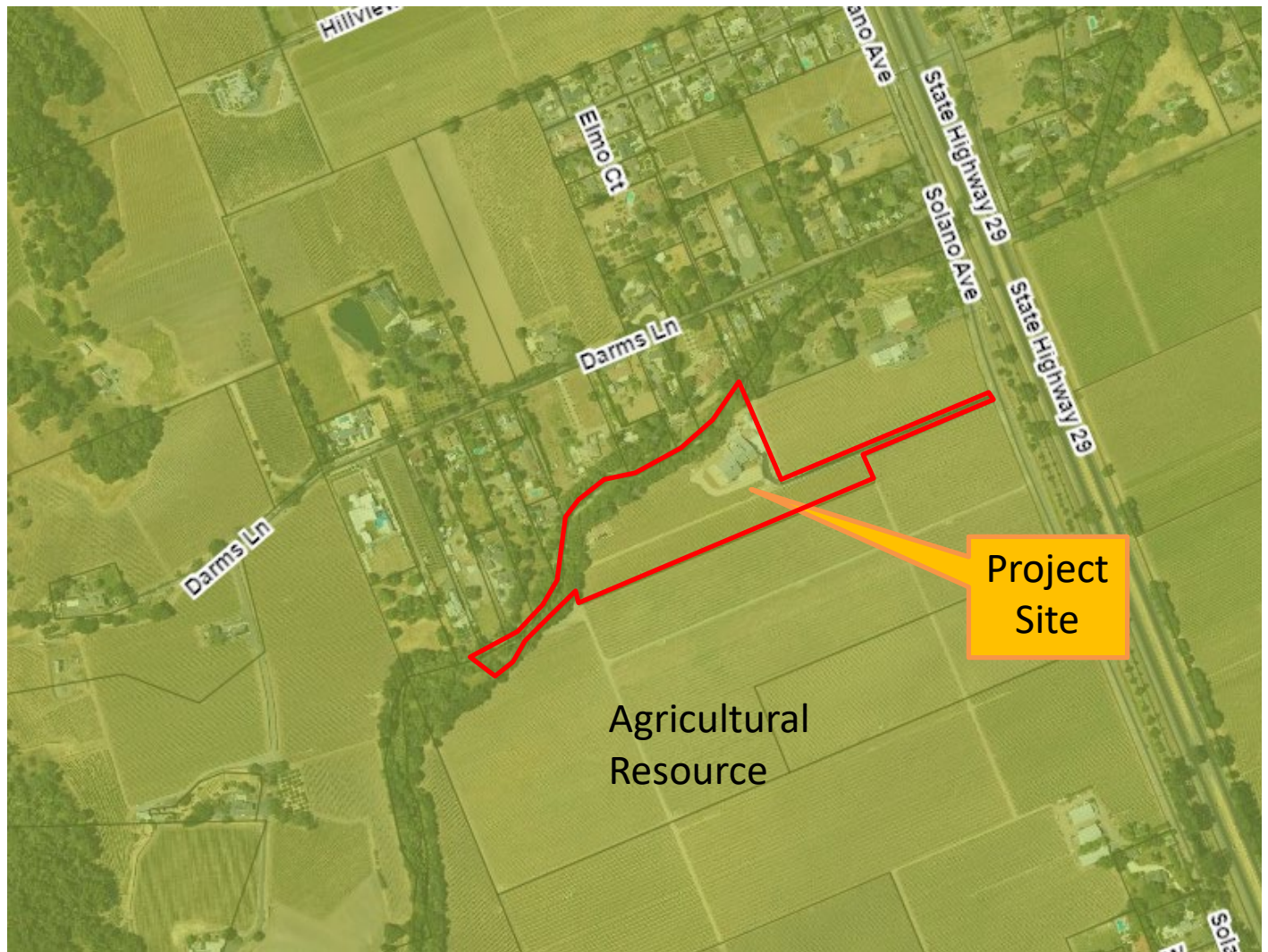
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NAPA COUNTY LAND USE PLAN 2008 – 2030



LEGEND



URBANIZED OR NON-AGRICULTURAL

- Study Area
- Cities
- Urban Residential*
- Rural Residential*
- Industrial
- Public-Institutional

OPEN SPACE

- Agriculture, Watershed & Open Space
- Agricultural Resource

TRANSPORTATION

- Mineral Resource
- Limited Access Highway
- American Canyon ULL
- City of Napa RUL
- Landfill - General Plan
- Road
- Airport
- Railroad
- Airport Clear Zone

* See Action Item AG/LU-114.1 regarding agriculturally zoned areas within these land use designations



LEGEND

- Zoning
- Parcels



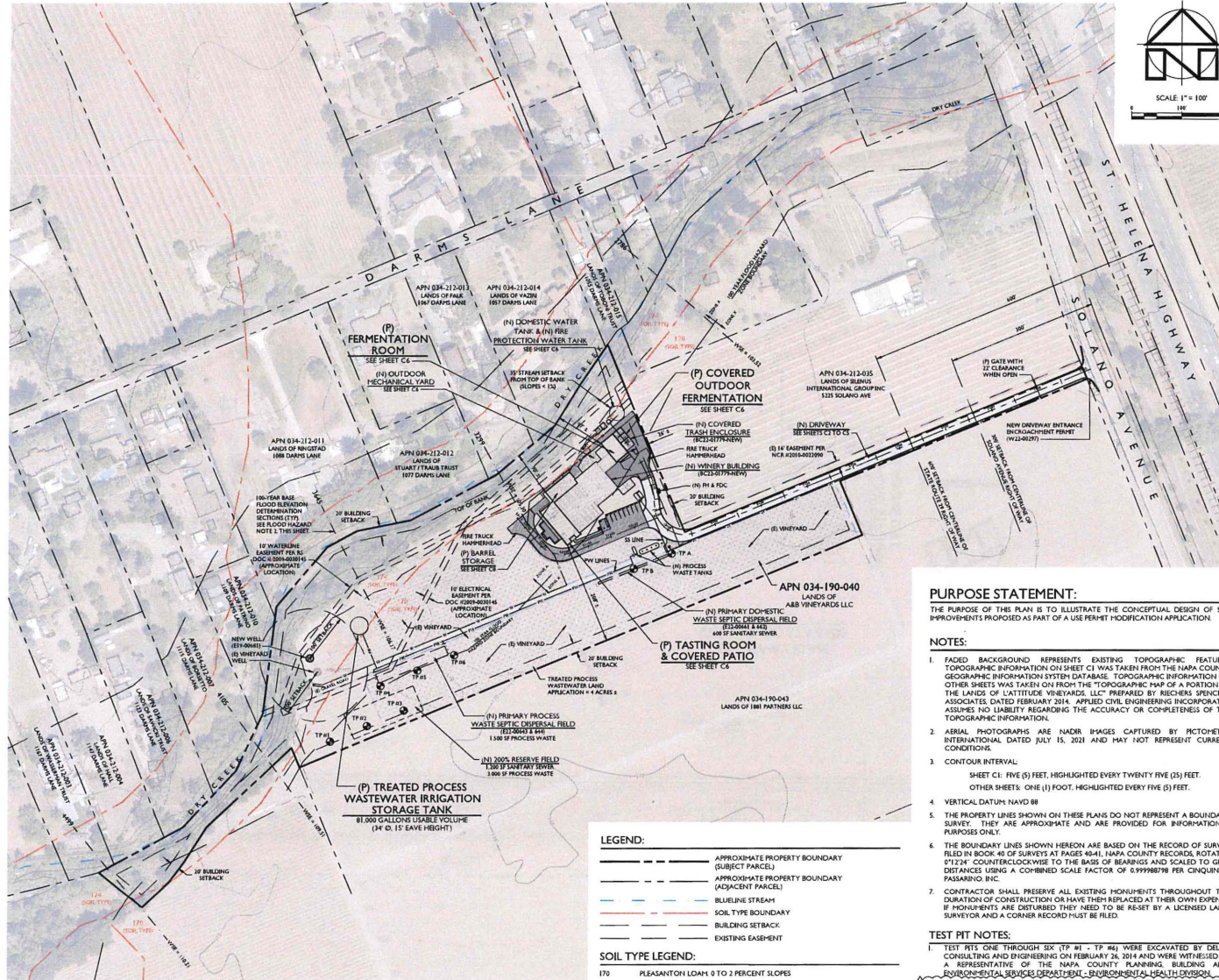
ZONING MAP



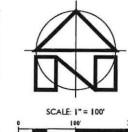
Existing Conditions

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS



OVERALL SITE PLAN
SCALE: 1" = 100'



PROJECT INFORMATION:
PROPERTY OWNER & APPLICANT:
 A&B VINEYARDS LLC
 1042 NORTH COAST HIGHWAY
 LAGUNA BEACH, CA 92651
SITE ADDRESS:
 5215 SOLANO AVENUE
 NAPA, CA 94558
ASSESSOR'S PARCEL NUMBER:
 034-190-040
PARCEL SIZE:
 10.1 ± ACRES
PROJECT SIZE:
 2.0 ± ACRES
ZONING:
 AGRICULTURAL PRESERVE (AP)
DOMESTIC WATER SOURCE:
 PRIVATE WELL
FIRE PROTECTION WATER SOURCE:
 STORAGE TANK
WASTEWATER DISPOSAL:
 ONSITE TREATMENT AND DISPERSAL

SHEET INDEX:
 C1 OVERALL SITE PLAN
 C2 DRIVEWAY PLAN & PROFILE STA 0+50 TO STA 9+25
 C3 DRIVEWAY PLAN & PROFILE STA 9+25 TO STA 53+25
 C4 DRIVEWAY CROSS SECTIONS STA 1+00 TO STA 11+25
 C5 DRIVEWAY CROSS SECTIONS STA 11+50 TO STA 53+00
 C6 BUILDING AREA CONCEPTUAL SITE IMPROVEMENT PLAN
 C7 STORMWATER CONTROL PLAN
 C8 IMPERVIOUS SURFACE EXHIBIT

FLOOD HAZARD NOTES:
 1. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 06055C0505, EFFECTIVE SEPTEMBER 29, 2015, ALL OR A PORTION OF THE PROJECT SITE IS LOCATED IN A SPECIAL FLOOD HAZARD AREA SUBJECT TO INUNDATION BY THE 1% CHANCE ANNUAL FLOOD (100-YEAR FLOOD). THE APPROXIMATE FLOOD HAZARD BOUNDARY LINE IS SHOWN ON THIS PLAN. SEE FIRM FOR ADDITIONAL INFORMATION.
 2. A DETAILED FLOOD STUDY WAS PREPARED BY SCHAFF AND WHEELER AND THE BASE FLOOD ELEVATION AT THE BUILDING SITE ACCORDING TO THAT STUDY IS APPROXIMATELY 105.30' ± (NAVD 88). THE FLOODWATER ELEVATION WOULD BE CONTAINED WITHIN THE BANKS OF DRY CREEK. THE BUILDING WILL NONETHELESS BE ELEVATED MORE THAN 1' ABOVE THE BFE.

| EXISTING WINERY PERMIT SUMMARY: | |
|--------------------------------------|---------------------|
| PURPOSE: | PERMIT NUMBER: |
| PRIOR WINERY USE PERMIT MODIFICATION | P21-00087 (PHASE 1) |
| GRADING PERMIT | E0522-00010 |
| FLOODPLAIN PERMIT | E0522-00020 |
| WINERY BUILDING PERMIT | BC23-01079-A&W |
| UTILITY-OTHER PERMIT | BC22-01081 |
| FIRE SPRINKLERS PERMIT | F23-00292 |
| FIRE ALARM PERMIT | F23-00258 |
| PROCESS WASTEWATER | E23-00444 |
| SANITARY WASTEWATER | E23-00612 |

PURPOSE STATEMENT:
 THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE CONCEPTUAL DESIGN OF SITE IMPROVEMENTS PROPOSED AS PART OF A USE PERMIT MODIFICATION APPLICATION.

NOTES:
 1. FACED BACKGROUND REPRESENTS EXISTING TOPOGRAPHIC FEATURES TOPOGRAPHIC INFORMATION ON SHEET C1 WAS TAKEN FROM THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATABASE. TOPOGRAPHIC INFORMATION ON OTHER SHEETS WAS TAKEN ON FROM THE TOPOGRAPHIC MAP OF A PORTION OF THE LANDS OF LATITUDE VINEYARDS, LLC PREPARED BY REICHERS SPENCE & ASSOCIATES, DATED FEBRUARY 2014. APPLIED CIVIL ENGINEERING INCORPORATED ASSUMES NO LIABILITY REGARDING THE ACCURACY OR COMPLETENESS OF THE TOPOGRAPHIC INFORMATION.
 2. AERIAL PHOTOGRAPHS ARE NAIRI IMAGES CAPTURED BY PHOTOCHERRY INTERNATIONAL DATED JULY 15, 2021 AND MAY NOT REPRESENT CURRENT CONDITIONS.
 3. CONTOUR INTERVAL:
 SHEET C1: FIVE (5) FEET, HIGHLIGHTED EVERY TWENTY FIVE (25) FEET.
 OTHER SHEETS: ONE (1) FOOT, HIGHLIGHTED EVERY FIVE (5) FEET.
 4. VERTICAL DATUM: NAVD 88
 5. THE PROPERTY LINES SHOWN ON THESE PLANS DO NOT REPRESENT A BOUNDARY SURVEY. THEY ARE APPROXIMATE AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
 6. THE BOUNDARY LINES SHOWN HEREON ARE BASED ON THE RECORD OF SURVEY FILED IN BOOK 40 OF SURVEYS AT PAGES 40-41, NAPA COUNTY RECORDS, ROTATED 01234° COUNTERCLOCKWISE TO THE BASIS OF BEARINGS AND SCALED TO GRID DISTANCE USING A COMBINED SCALE FACTOR OF 0.99998 PER CHAIN & PASSANINO INC.
 7. CONTRACTOR SHALL PRESERVE ALL EXISTING MONUMENTS THROUGHOUT THE DURATION OF CONSTRUCTION OR HAVE THEM REPLACED AT THEIR OWN EXPENSE. IF MONUMENTS ARE DISTURBED THEY NEED TO BE RE-SET BY A LICENSED LAND SURVEYOR AND A CORNER RECORD MUST BE FILED.

TEST PIT NOTES:
 1. TEST PITS ONE THROUGH SIX (TP #1 - TP #6) WERE EXCAVATED BY DELTA CONSULTING AND ENGINEERING ON FEBRUARY 26, 2014 AND WERE WITNESSED BY A REPRESENTATIVE OF THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENVIRONMENTAL HEALTH DIVISION.
 2. TEST PITS A & B (TP A - TP B) WERE OBSERVED BY APPLIED CIVIL ENGINEERING INCORPORATED ON JULY 26, 2023 AND WERE WITNESSED BY A REPRESENTATIVE OF THE NAPA COUNTY PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT - ENVIRONMENTAL HEALTH DIVISION.

LEGEND:
 - - - - - APPROXIMATE PROPERTY BOUNDARY (SUBJECT PARCEL)
 - - - - - APPROXIMATE PROPERTY BOUNDARY (ADJACENT PARCELS)
 - - - - - BUILDING STREAM
 - - - - - SOIL TYPE BOUNDARY
 - - - - - BUILDING SETBACK
 - - - - - EXISTING EASEMENT

SOIL TYPE LEGEND:
 I70 PLEASANTON LOAM 0 TO 2 PERCENT SLOPES
 I74 100% RIVERWASH
 SOIL TYPE BOUNDARIES SHOWN ON THIS MAP ARE BASED ON THE NAPA COUNTY GEOGRAPHIC INFORMATION SYSTEM DATA AND SHOULD BE CONSIDERED APPROXIMATE

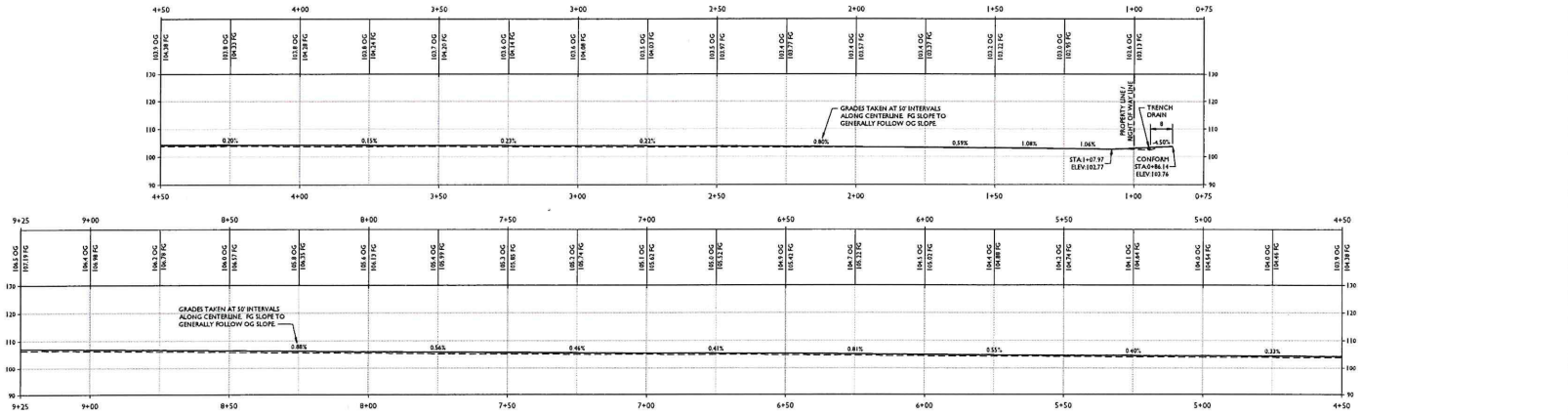
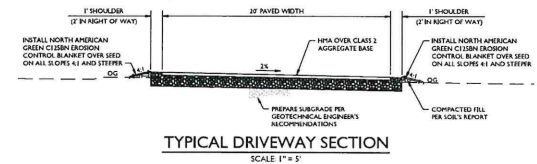
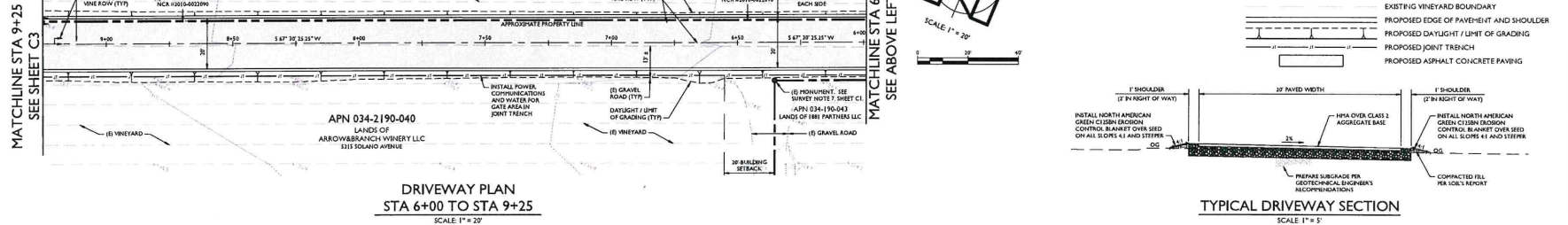
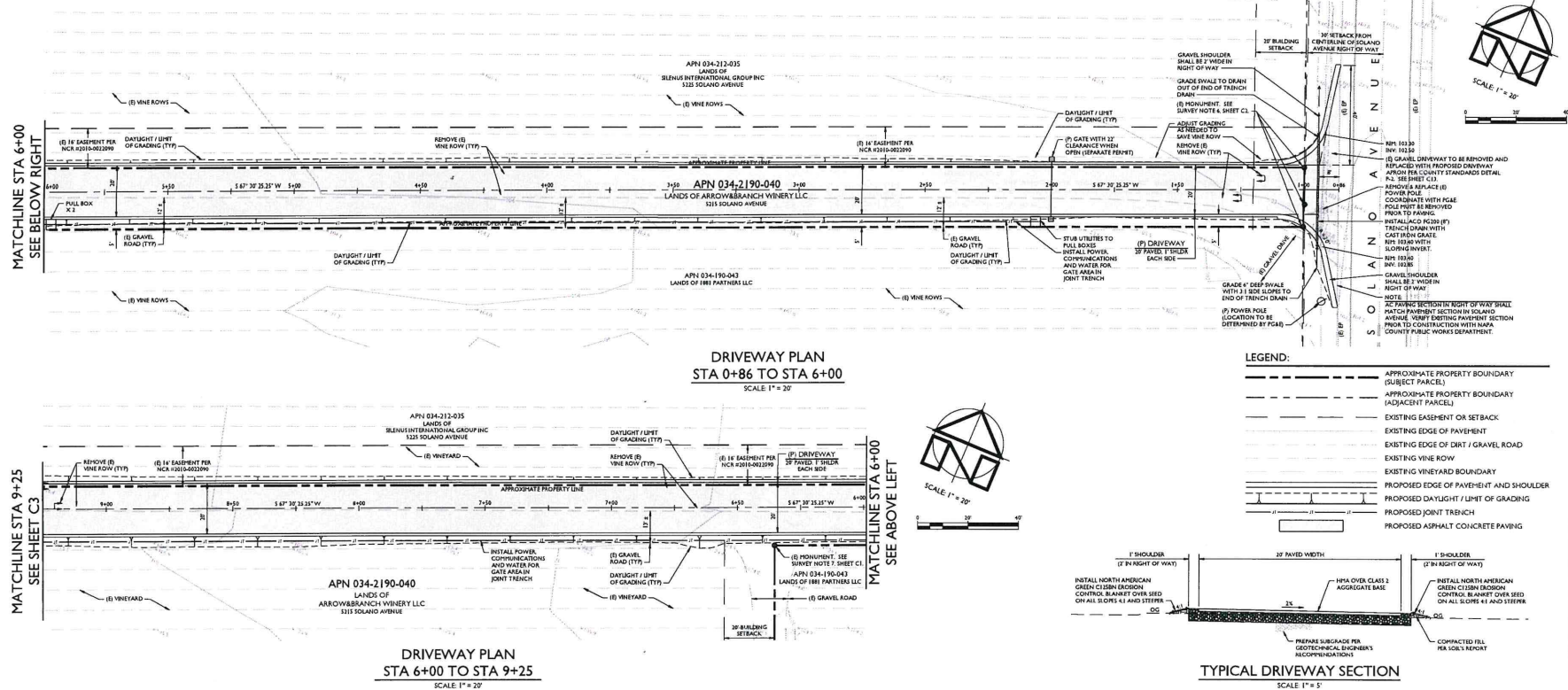
APPLIED
 INCORPORATED
 2160 Jefferson Street, Suite 210
 Napa, CA 94559
 (707) 252-0101 | www.appliedcivil.com

A&B VINEYARDS LLC
 USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
 OVERALL SITE PLAN



PREPARED UNDER THE DIRECTION OF:
 DRAWN BY: PowerCAD LLC
 CHECKED BY: JPB
 DATE: SEPTEMBER 6, 2023
 REVISIONS: BY: 3/10/2023 TYS PERMIT SUBMITTAL
 3/10/2023 TYS PERMIT SUBMITTAL
 3/10/2023 TYS PERMIT SUBMITTAL
 3/10/2023 TYS PERMIT SUBMITTAL

JOB NUMBER:
 20-139
FILE:
 20-139CONC-OSP.DWG
ORIGINAL SIZE:
 24" x 36"
SHEET NUMBER:
 C1
 OF
 8



DRIVEWAY PROFILES
STA 0+75 TO STA 9+25
SCALE 1" = 20'



A&B VINEYARDS LLC

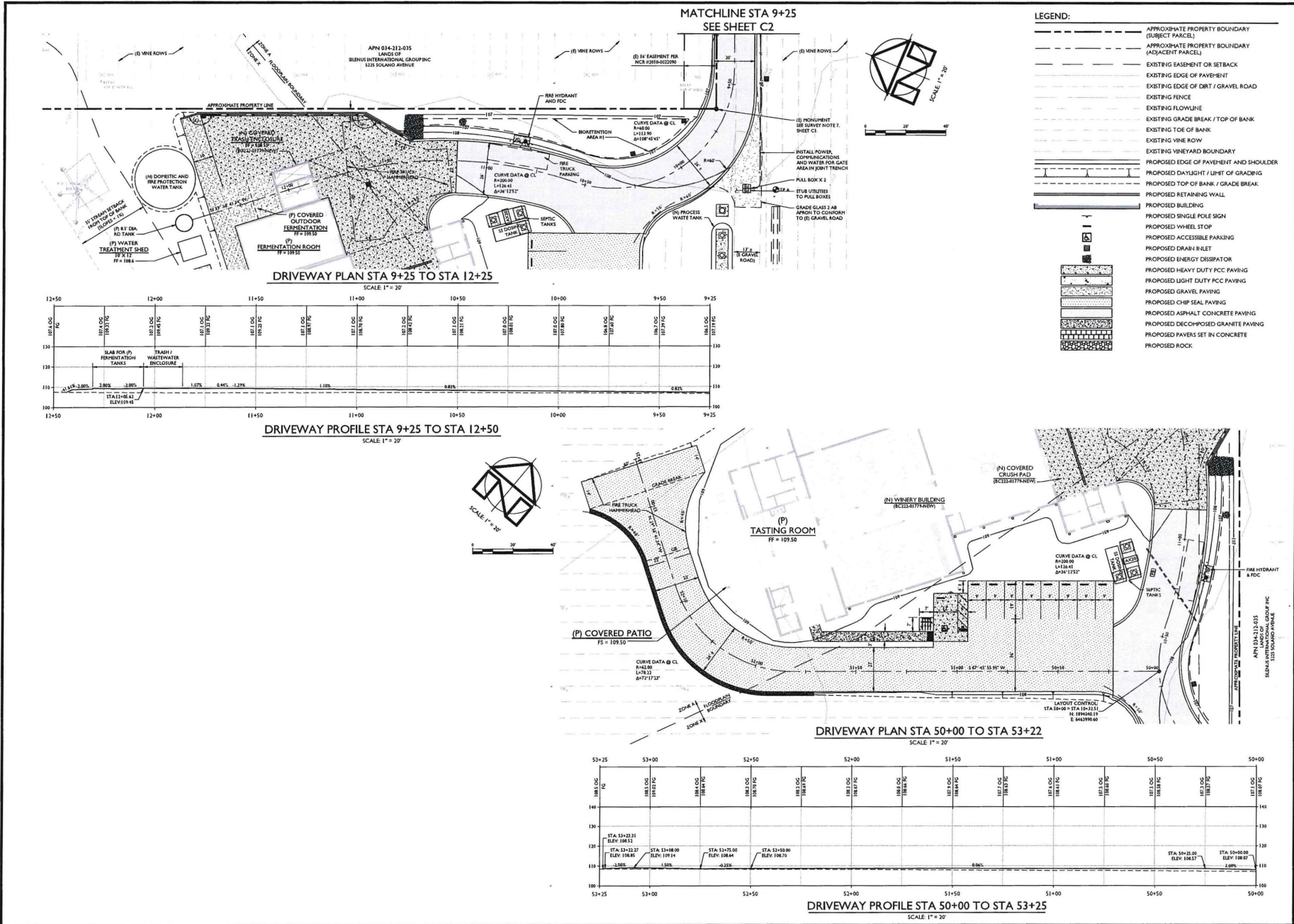
USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
DRIVEWAY PLAN & PROFILE STA 0+80 TO STA 9+25



| | |
|-------------|---------------------------------------|
| DRAWN BY: | PowerCAD LLC |
| CHECKED BY: | PHR1 |
| DATE: | AUGUST 9, 2024 |
| REVISIONS: | BY: YHS 7/10/2023 PERMIT SUBMITTAL |
| | 5/10/2023 YHS PERMIT RESUBMITTAL |
| | 7/6/2023 YHS PERMIT RESUBMITTAL |
| | 8/7/2024 YHS PERMIT RESUBMITTAL |

JOB NUMBER:
20-139
FILE:
30-139B-DWY.DWG
ORIGINAL SIZE:
24" X 36"
SHEET NUMBER:

C2
OF
8



APPLIED

INCORPORATED

2160 Jefferson Street, Suite 210
San Jose, CA 95131
(408) 255-0404 | info@appliedcivil.com

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
DRIVEWAY PLAN & PROFILE STA 9+25 TO STA 53+25

PREPARED UNDER THE DIRECTION OF:

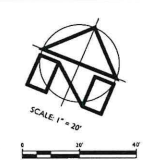
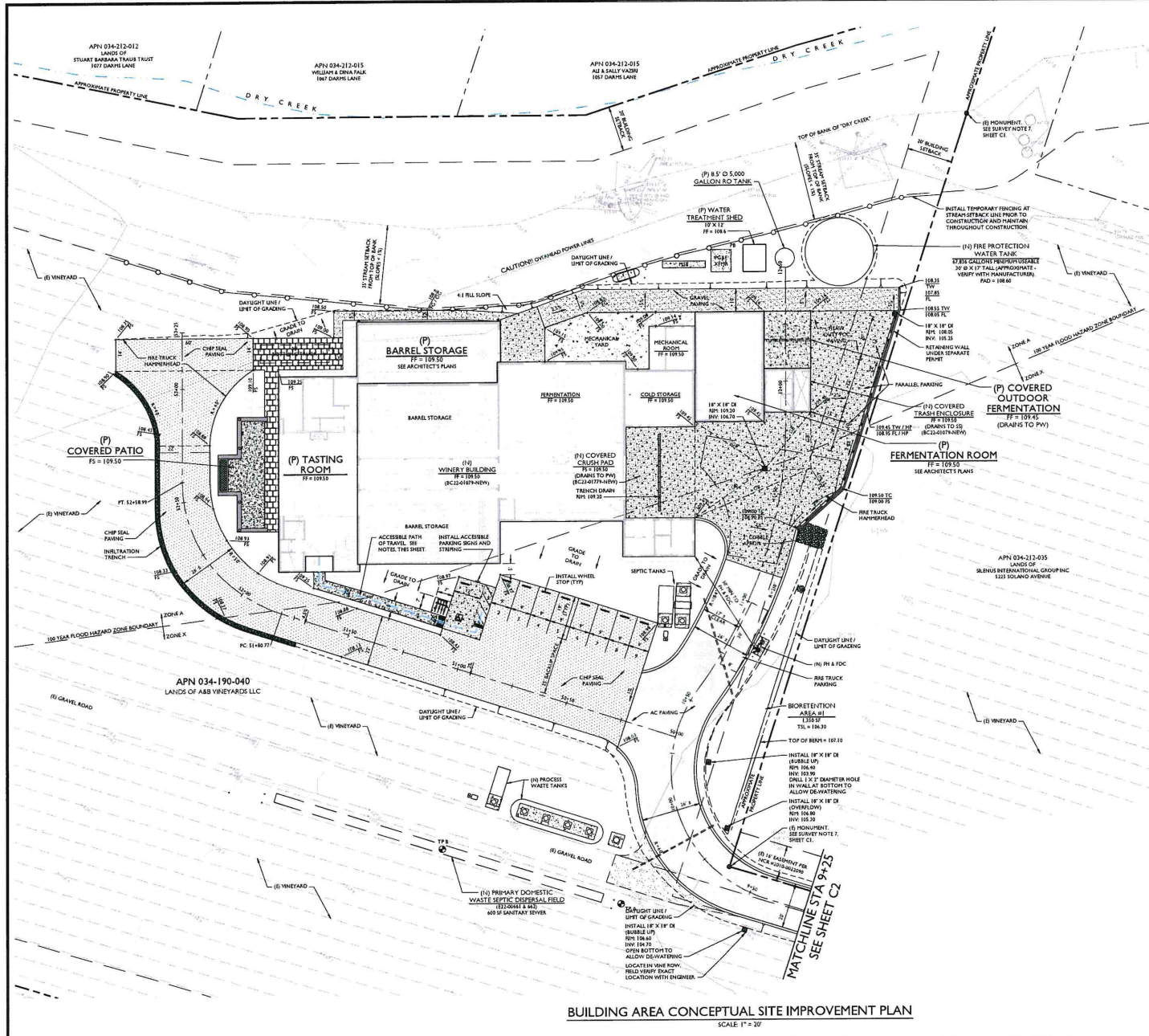
REGISTERED PROFESSIONAL ENGINEER
FOR THE STATE OF CALIFORNIA
No. 12106
AUGUST 9, 2024

| | |
|-------------|------------------------|
| DRAWN BY: | PowerCAD LLC |
| CHECKED BY: | PHM |
| DATE: | AUGUST 9, 2024 |
| REVISIONS: | BY: |
| 1/10/2023 | YHS PERMIT RESUBMITTAL |
| 9/6/2023 | YHS PERMIT RESUBMITTAL |
| 8/9/2024 | YHS PERMIT RESUBMITTAL |

C3

OF

8



- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY (SUBJECT PARCEL)
 - APPROXIMATE PROPERTY BOUNDARY (ADJACENT PARCEL)
 - EXISTING EASEMENT OR SETBACK
 - EXISTING EDGE OF DIRT / GRAVEL ROAD
 - EXISTING OVERHEAD POWER LINE
 - EXISTING BLUE LINE STREAM
 - EXISTING GRADE BREAK / TOP OF BANK
 - EXISTING TOE OF BANK
 - EXISTING VINE ROW
 - EXISTING VINEYARD BOUNDARY
 - PROPOSED EDGE OF PAVEMENT AND SHOULDER
 - PROPOSED DAYLIGHT / LIGHT OF GRADING
 - PROPOSED TOP OF BANK / GRADE BREAK
 - PROPOSED RETAINING WALL
 - PROPOSED BUILDING
 - PROPOSED SINGLE POLE SIGN
 - PROPOSED WHEEL STOP
 - PROPOSED ACCESSIBLE PARKING
 - PROPOSED DRAIN INLET
 - PROPOSED ENERGY DISSIPATOR
 - PROPOSED HEAVY DUTY PCC PAVING
 - PROPOSED LIGHT DUTY PCC PAVING
 - PROPOSED GRAVEL PAVING
 - PROPOSED CHIP SEAL PAVING
 - PROPOSED ASPHALT CONCRETE PAVING
 - PROPOSED DECOMPOSED GRANITE PAVING
 - PROPOSED ROCK
 - PROPOSED PAVERS SET IN CONCRETE

ACCESSIBLE ROUTE OF TRAVEL NOTE:

ALL ACCESSIBLE ROUTES OF TRAVEL SHALL COMPLY WITH THE REQUIREMENTS OF CBC 118. THE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- RUNNING SLOPE OF WALKING SURFACES SHALL NOT EXCEED 5% (1:20)
- RUNNING SLOPE OF RAMPS SHALL NOT EXCEED 8.33% (1:12)
- CROSS SLOPE OF WALKS AND RAMPS NOT TO EXCEED 2.083% (1:48)
- LANDING AND LEVEL AREA SLOPES NOT TO EXCEED 2.083% (1:48)
- VERTICAL CHANGES IN LEVEL SHALL NOT EXCEED 1/4 INCH. ALL LEVEL CHANGES BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2 (2%). ANY LEVEL CHANGES GREATER THAN 1/2 INCH SHALL BE RAMPED AND COMPLY WITH CBC 118-405
- OPENINGS IN DRAINS AND GRATING SHALL NOT EXCEED 1/2 INCH IN PREDOMINANT DIRECTION OF TRAVEL

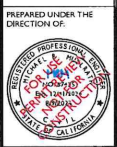
GRADING QUANTITIES*

| | |
|-------|-----------------|
| CUT | 400 ± CY |
| FILL | 900 ± CY |
| NET** | 300 ± CY (FILL) |

* THIS ESTIMATE IS PROVIDED AS A TOOL, FOR THE REVIEWING AGENCIES TO EVALUATE THE ENVIRONMENTAL IMPACTS OF THE PROJECT. IT IS NOT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES. CONTRACTOR IS TO PERFORM THEIR OWN EARTHWORK CALCULATIONS AND SHALL NOT USE THE ESTIMATES PRESENTED ABOVE. THIS ESTIMATE IS BASED ON IN PLACE VOLUMES AND DOES NOT INCLUDE FLUFF, SHRINKAGE, PAVING, AGGREGATES OR SELECT FILL VOLUMES.

A&B VINEYARDS LLC

USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
BUILDING AREA CONCEPTUAL SITE IMPROVEMENT PLAN

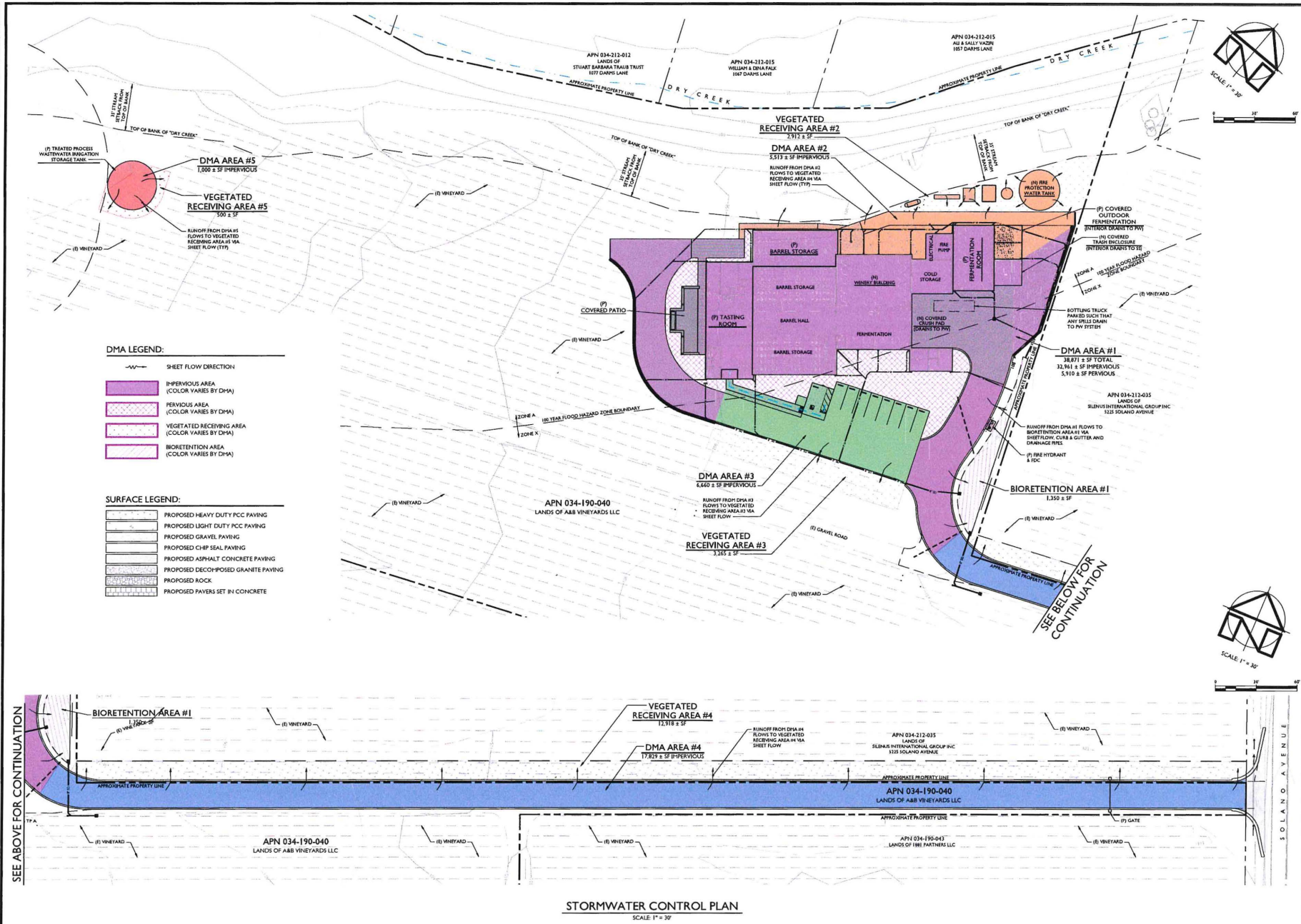


PREPARED UNDER THE DIRECTION OF:

DRAWN BY: PowerCAD LLC
CHECKED BY: MRH
DATE: AUGUST 9, 2024
REVISIONS: BY: 3/10/2023 YHS PERMIT SUBMITTAL
5/10/2023 YHS PERMIT RESUBMITTAL
9/6/2023 YHS PERMIT RESUBMITTAL
8/9/2024 YHS PERMIT RESUBMITTAL

JOB NUMBER: 20-139
FILE: 20-139CONC-GRADDWG
ORIGINAL SIZE: 24" X 36"
SHEET NUMBER: **C6**
OF 8

BUILDING AREA CONCEPTUAL SITE IMPROVEMENT PLAN
SCALE 1" = 20'



APPLIED
INCORPORATED
2140 Jefferson Street, Suite 210
Naples, CA 94959
(707) 259-1111 | www.appliedcivil.com

A&B VINEYARDS LLC
USE PERMIT MODIFICATION CONCEPTUAL SITE IMPROVEMENT PLANS
STORMWATER CONTROL PLAN



DRAWN BY: PowerCAD LLC
CHECKED BY: PRM
DATE: AUGUST 9, 2024

| REVISIONS | BY |
|-----------|------------------------|
| 3/10/2023 | YHS PERMIT SUBMITTAL |
| 5/10/2023 | YHS PERMIT RESUBMITTAL |
| 9/4/2023 | YHS PERMIT RESUBMITTAL |
| 8/9/2024 | YHS PERMIT RESUBMITTAL |

JOB NUMBER: 20-119
FILE: 20-119XHS-CP.DWG
ORIGINAL SIZE: 24" x 36"
SHEET NUMBER: **C7**





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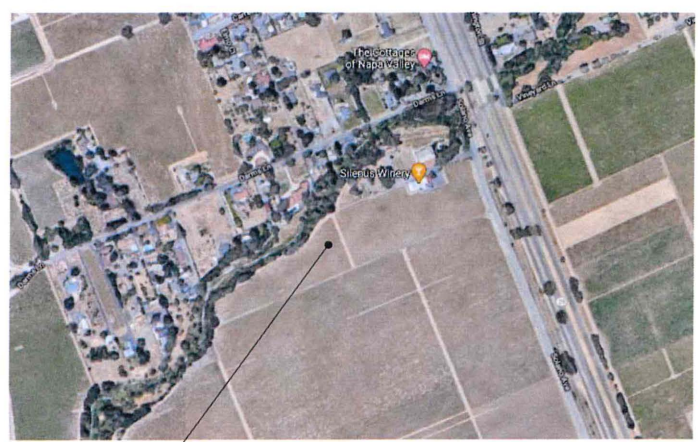
Cover

| revision | date |
|-----------------|----------|
| Major Mod | 03.06.23 |
| Permit Resubmit | 05.10.23 |
| Permit Resubmit | 08.03.23 |

job no: 2008
drawn: FL
checked: TT
date: 08.03.23
sheet no:

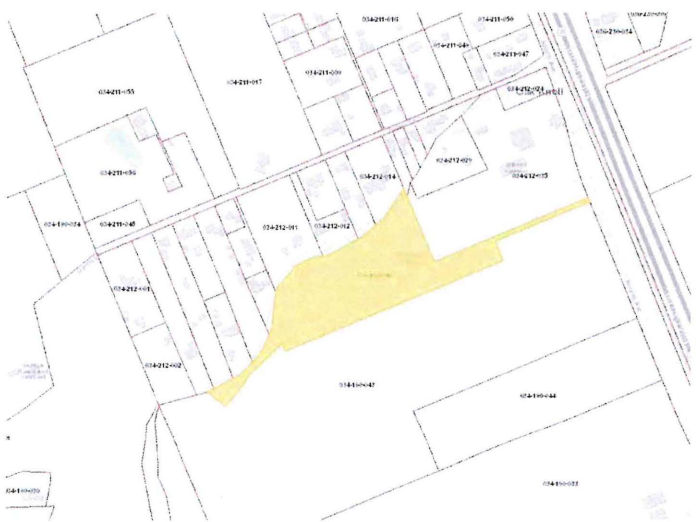
A0.01

Location Map (not to scale)



Project Site

Plot Plan (not to scale)



Square Footages, Occupancy/ Use Group

| Production vs. Accessory | | |
|---|------------------------|---------------|
| Total Net Usable Area by Type (exterior production spaces included) | Net Production | Net Accessory |
| | 13,797 | 4,687 |
| Total Net Usable Area | 20,124 | |
| Accessory Area as Percentage of Total Net Production Area | 4687 s.f. / 13797 s.f. | 33.97% |

| Building Area Details | | | |
|--|------------|-----------|-----------|
| EXISTING BUILDINGS - P21-00087 | | | |
| ROOM NO./NAME | PRODUCTION | AREA (SF) | ACCESSORY |
| Production Building | 13,797 | 1,004 | 379 |
| Outdoor Covered Cynth | | 1,301 | |
| Vine Pump and Mechanical | | 373 | |
| Tram and Wine Storage Treatment | | 373 | |
| Existing Building Subtotal Net Usable Area | 10,268 | 1,640 | 379 |
| Existing Building Total Net Usable Area | | 17,287 | |

| PROPOSED HOSPITALITY AND PRODUCTION ADDITION | | | |
|---|------------|-----------|-----------|
| ROOM NO./NAME | PRODUCTION | AREA (SF) | ACCESSORY |
| 201 Great Room | | 1,146 | |
| 202 Entry | | 244 | |
| 202a Closet | | 22 | |
| 203 W.C. | | 86 | |
| 204 W.C. | | 86 | |
| 205 Stairs | | 34 | |
| 206 Office | | 117 | |
| 206a Hallway | | 98 | |
| 207 Conference Room/Feasting | | 244 | |
| 208 Cafe Goods | | 34 | |
| 209 Storage | | 37 | |
| 210 | | 177 | |
| 211 Covered Terrace | | 370 | |
| 212 Decking | | 790 | |
| 222 Office | | 122 | |
| 223 Office | | 185 | |
| 224 Conference Room/Feasting | | 105 | |
| 225 Hallway | | 171 | |
| 226 W.C. | | 51 | |
| 227 W.C. | | 64 | |
| 228 Terrace | | 660 | |
| 230 Fermentation 2 | 1,336 | | |
| 240 Barrel Storage 2 | 1,573 | | |
| 261 Covered Outdoor Fermentation | 2,200 | | |
| Proposed Outdoor Area | 620 | 1,750 | |
| Proposed Building Subtotal Net Usable Area including Outdoor Covered Area | 3,529 | 1,640 | 4,687 |
| Proposed Building Total Net Usable Area | | 7,837 | |
| *Outdoor Hospitality Area are not counted toward net Accessory Area | | | |

| TOTAL | | | AREA (SF) |
|---|------------|--------|-----------|
| | PRODUCTION | | ACCESSORY |
| (B) PRODUCTION FIRE PUMP, MECH., TRASH, WATER TREATMENT | 10,268 | 1,640 | 379 |
| PROPOSED HOSPITALITY | | | 4,687 |
| PROPOSED PRODUCTION | 3,529 | | |
| Subtotal Net Usable Area | 13,797 | 1,640 | 4,687 |
| Total Net Usable Area | | 20,124 | |

Project Team

CLIENT:
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eric@appliedinc.com

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Bob Cleaver
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Lafayette, CA 94549
T: 925.324.1117
bob@cleaverdesign.com

Project Data

Site Address:
5215 Solano Avenue
Napa, CA 94558

Assessor's Parcel Number:
034-190-040

Zoning District:
Agricultural Preserve (AP)

FEMA Flood Zone:
Parcel falls within FEMA flood zone

Fire Hazard Severity:
No Fire Hazard Severity rating

Use Group & Occupancy:
F-2, S-2, A-2, B

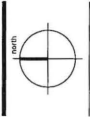
Project Scope:
New hospitality and production addition to existing Winery Building

Index of Drawings

| Architectural | |
|---------------|----------------------------|
| A0.01 | Cover |
| A1.01 | Site Plan |
| A2.01 | First Floor Plan |
| A2.02 | Second Floor |
| A2.03 | Roof Plan |
| A3.01 | Exterior Elevations |
| A3.02 | Exterior Elevations |
| Civil | |
| C1 | Overall Site Plan |
| C2 | Driveway Plan & Profile |
| C3 | Driveway Plan & Profile |
| C4 | Driveway Cross Sections |
| C5 | Driveway Cross Sections |
| C6 | Building Area Conceptual |
| C7 | Site Improvement Plan |
| C8 | Stormwater Control Plan |
| | Impervious Surface Exhibit |
| Landscape | |
| L-001-M | Cover Sheet |
| L-101-M | Landscape Plan |
| L-102-M | Hydrozone Plan/ MWLO |
| L-103-M | Irrigation Plan |
| L-501-M | Irrigation Details |

Exterior Building Colors/Materials





Arrow & Branch Winery
Phase 2 Building
5215 Solano Avenue
Napa, CA 94558
APN 034-190-040

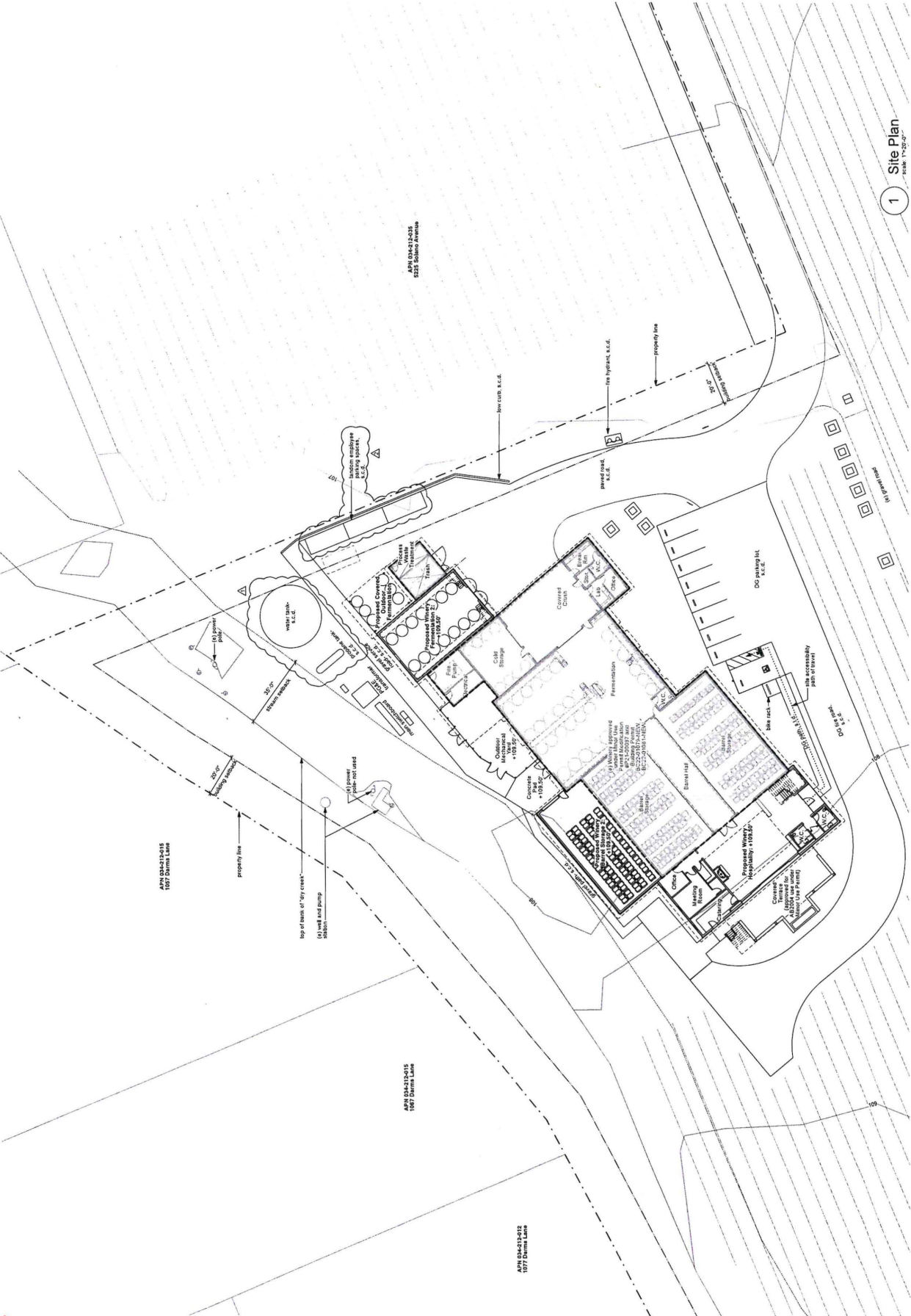
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Site Plan

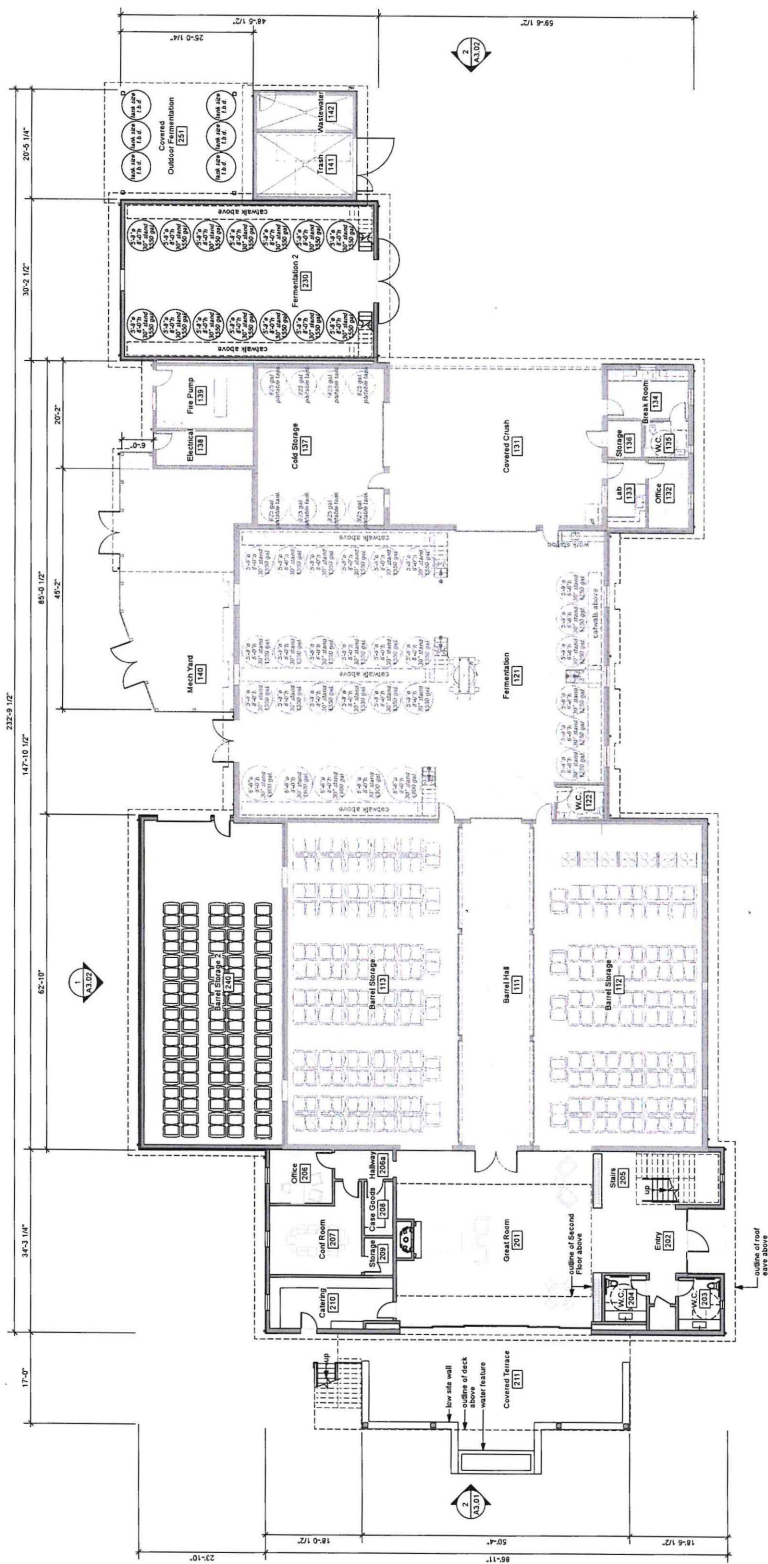
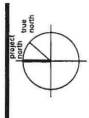
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| Major Add | 03.06.23 |
| Permit Resubmit | 05.10.23 |
| Permit Resubmit | 08.03.23 |

job no: 2008
drawn: TL
checked: TT
date: 08.03.23
sheet no:

A1.01

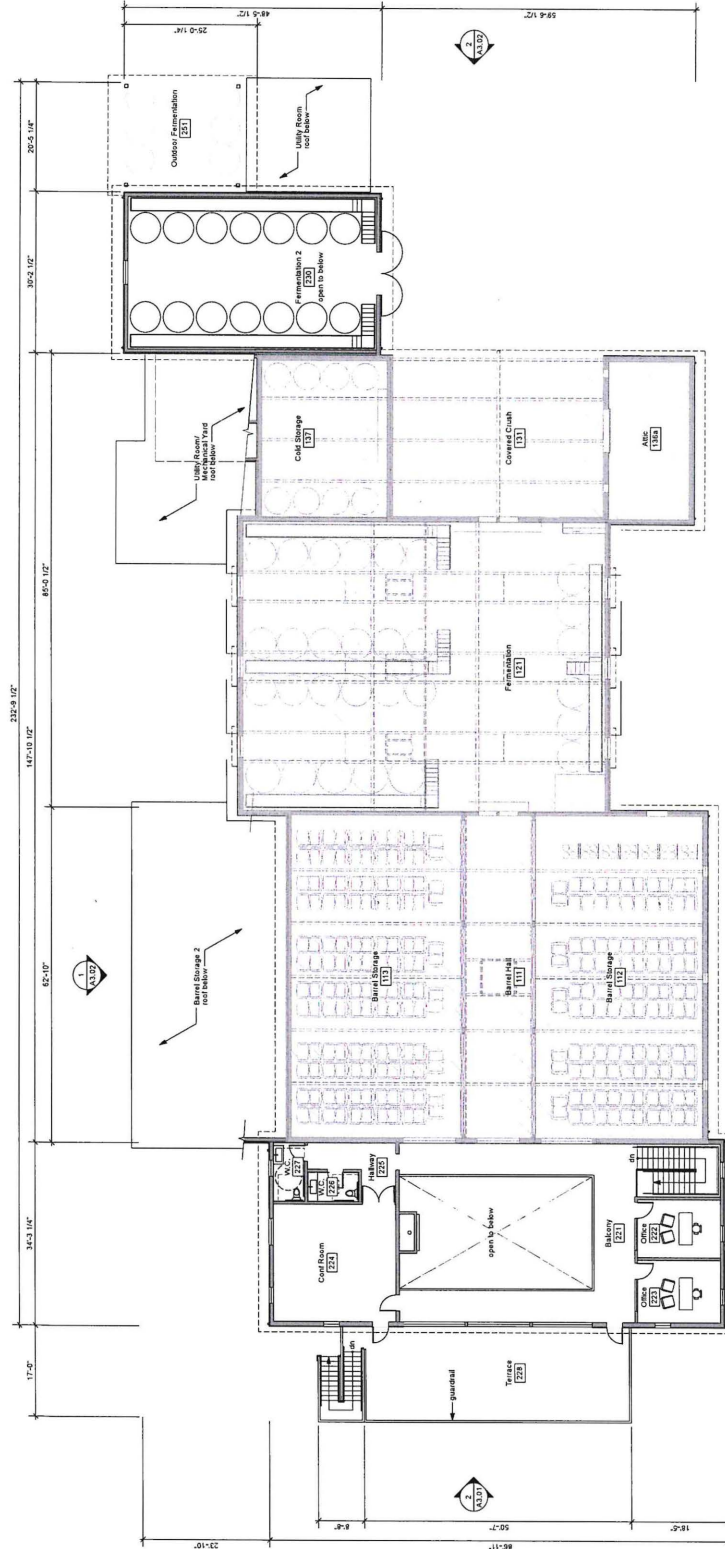
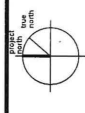


1 Site Plan
Scale: 1" = 20'-0"

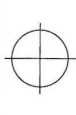


LEGEND

Building area approved under Minor Use
Building Permit BC-24-03 TMS-EN,
BC-24-03 TMS-EN

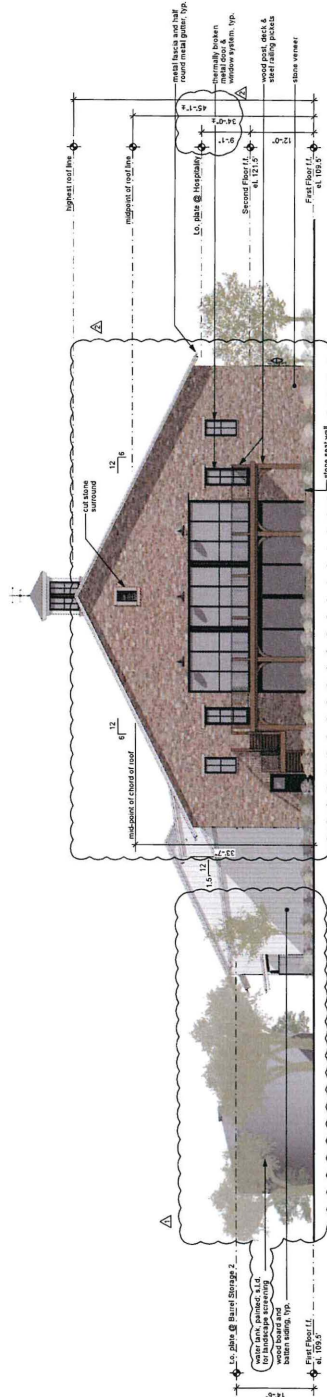


Legend
Building area approved under Minor Use
Building area approved under Major Use
Building area approved under Special Use
Building area approved under Other Use
Building area approved under Other Use



Arrow & Branch Winery
Phase 2 Building
5215 Solano Avenue
Napa, CA 94558
APN 034-190-040

2 Side Elevation (West)



1 Front Elevation (South)



Exterior Elevations

Not drawing on the property of Taylor
Combination Architects Ltd. Any

scale: 1:32" = 1'-0"

[illegible]

Revision: _____

Major Mod

Permit Resubmit

Permit Resubmit

—

—

1

Job no: 2000

de la Torre El

UNIVERSITY OF FLORIDA

checked: TT

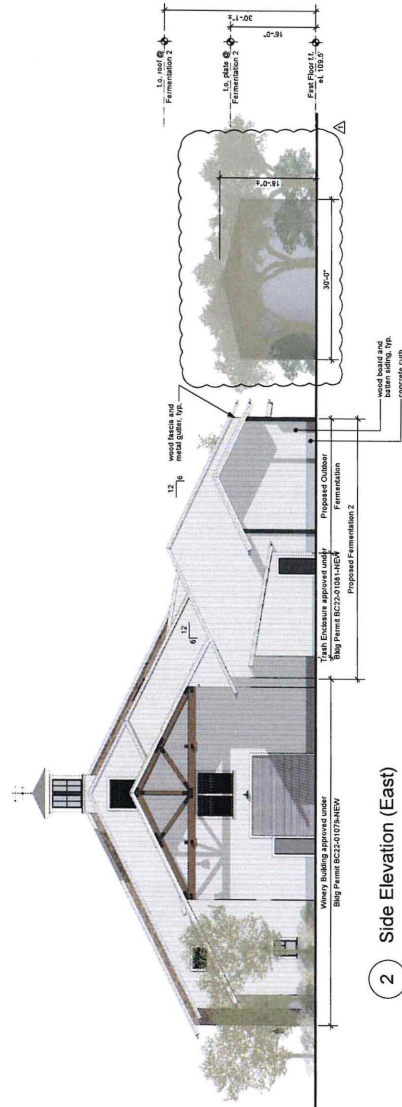
date: 08.03.23

sheet no.:

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2 Side Elevation (East)

| | |
|------------------|--------------|
| scale | 1/2" = 1'-0" |
| revision | date |
| Major Mod | 03.08.13 |
| Permit Revisions | 05.10.23 |
| Permit Revisions | 08.03.23 |
| date | 08.03.23 |
| drawn | FL |
| checked | TF |
| sheet no | |



1 Rear Elevation (North)

Arrow&Branch Winery Major Mod Area Matrix

date: 05.10.2023

Building Area Summary

| Production vs. Accessory | | | |
|--|----------------|-------------------------|---------------|
| Total Net Usable Area by Type (exterior production spaces included) | Net Production | | Net Accessory |
| | 13797 | | 4687 |
| Total Net Usable Areas | | 20124 | |
| Accessory Area as Percentage of Total Net Production Area | | 4687 s.f. / 13797 s.f.= | 33.97% |

Building Area Details

EXISTING BUILDINGS - P21-00087

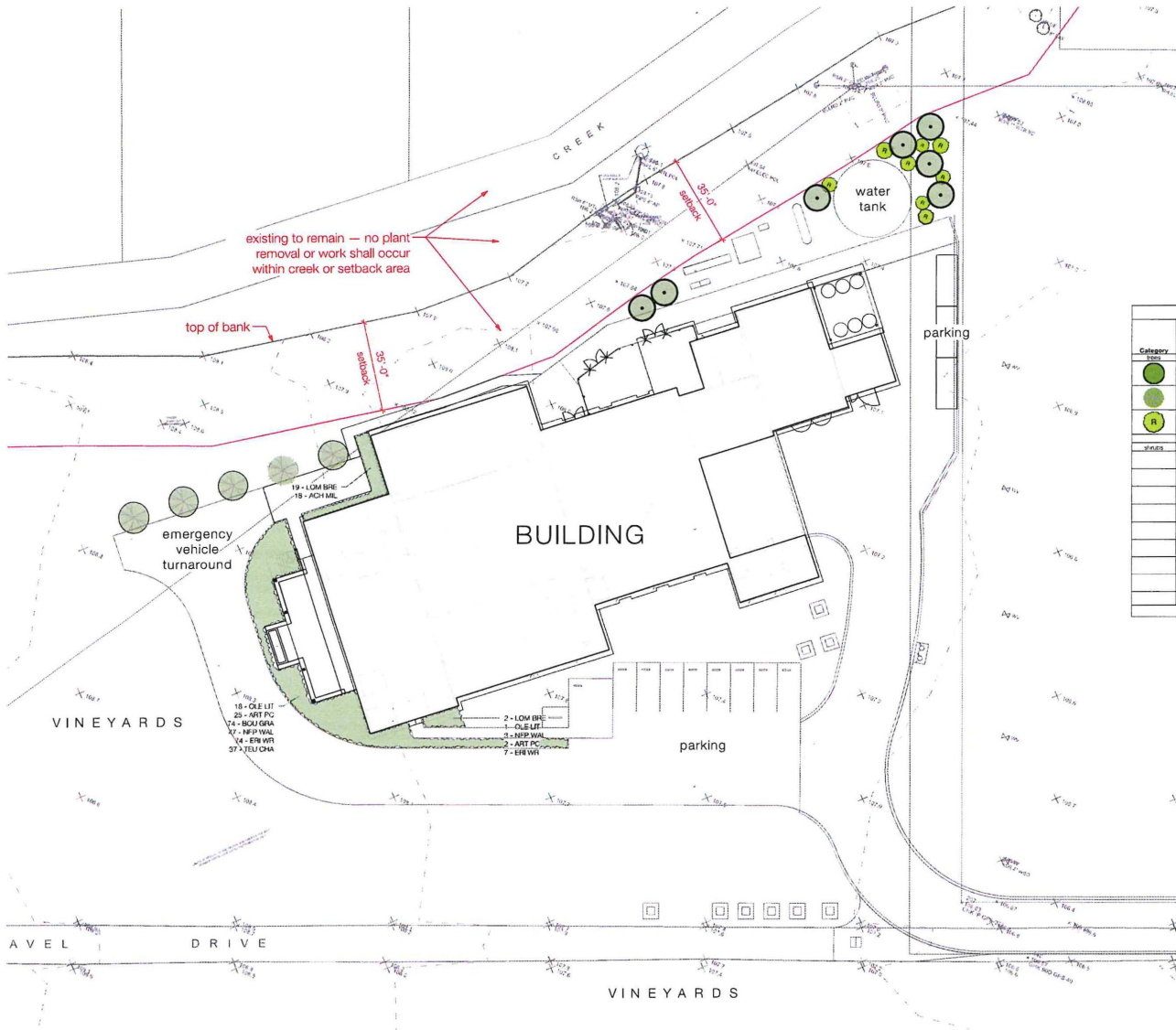
| ROOM NO./ NAME | AREA (SF) | | |
|--|------------|-------|-----------|
| | PRODUCTION | | ACCESSORY |
| Production Building | 9062 | | 379 |
| Outdoor Covered Crush | 1206 | | |
| Fire Pump and Mechanical | | 1307 | |
| Trash and Waste Water Treatment | | 333 | |
| Existing Building Subtotal Net Usable Area | 10268 | 1640 | 379 |
| Existing Building Total Net Usable Area | | 12287 | |

PROPOSED HOSPITALITY AND PRODUCTION ADDITION

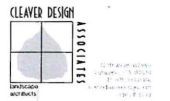
| ROOM NO./ NAME | AREA (SF) | | |
|---|------------|-------|-----------|
| | PRODUCTION | | ACCESSORY |
| 201 Great Room | | | 1,146 |
| 202 Entry | | | 244 |
| 202a Closet | | | 22 |
| 203 W.C. | | | 76 |
| 204 W.C. | | | 66 |
| 205 Stairs | | | 234 |
| 206 Office | | | 117 |
| 206a Hallway | | | 58 |
| 207 Conference Room/Tasting | | | 244 |
| 208 Case Goods | | | 54 |
| 209 Storage | | | 37 |
| 210 Catering (Staging) | | | 212 |
| * 211 Covered Terrace | | | 870 |
| 221 Balcony | | | 700 |
| 222 Office | | | 172 |
| 223 Office | | | 185 |
| 224 Conference Room/Tasting | | | 505 |
| 225 Hallway | | | 121 |
| 226 W.C. | | | 51 |
| 227 W.C. | | | 64 |
| * 228 Terrace | | | 880 |
| 230 Fermentation 2 | 1,336 | | |
| 240 Barrel Storage 2 | 1,573 | | |
| 251 Covered Outdoor Fermentation | 620 | | |
| Proposed Outdoor Area | 620 | | 1,750 |
| Proposed Building Subtotal Net Usable Area including Outdoor Covered Area | 3,529 | | 4,308 |
| Proposed Building Total Net Usable Area | | 7,837 | |

*Outdoor Hospitality Area are not counted toward net Accessory Area

| TOTAL | | | |
|--|------------|--------|-----------|
| | AREA (SF) | | |
| | PRODUCTION | | ACCESSORY |
| (E) PRODUCTION, FIRE PUMP, MECH., TRASH, WATER TREATMENT | 10,268 | 1,640 | 379 |
| PROPOSED HOSPITALITY | | | 4,308 |
| PROPOSED PRODUCTION | 3,529 | | |
| Subtotal Net Usable Area | 13,797 | 1,640 | 4,687 |
| Total Net Usable Area | | 20,124 | |



| Plant List | | | | | | | |
|------------|---------|------------------------------------|-----------------------|----------|----------|-------|--------|
| Category | ID | Latin Name | Common Name | Size | Quantity | Notes | WUOLLS |
| OLE | OLE AG | Quercus agrifolia | Coast Live Oak | 24" box | 7 | Y | VL |
| OLE | OLE EUR | Olea europaea | Olive | 24" box | 5 | Y | VL |
| RHA | RHA CAL | Rhamnus californica | Colt's Cane | 24" box | 8 | Y | VL |
| Grasses | | | | | | | |
| ACH | ACH ML | Achillea millefolium | Yarrow | 1 gallon | 18 | Y | Y L |
| ART | ART PC | Artemisia "Pinnatifida" | Pinnatifida Artemisia | 1 gallon | 27 | Y | Y L |
| BCU | BCU GRA | Bouteloua gracilis | Blue grama grass | 1 gallon | 74 | Y | Y L |
| ERB | ERB WAL | Eriogonum glaucum "Wynne Rosebush" | Wynne Rosebush | 1 gallon | 81 | Y | Y L |
| LOM | LOM BRE | Lonicera longifolia "Shreve" | Shreve's Honeysuckle | 1 gallon | 21 | Y | Y L |
| NFP | NFP WAL | Nerophila "Walker's Low" | Walker's Low Catmint | 1 gallon | 50 | Y | Y L |
| OLE | OLE LIT | Olea europaea "Little Ole" | Little Ole | 3 gallon | 19 | Y | Y L |
| TEL | TEL CHA | Teucrium chamaedrys | Wall Germander | 1 gallon | 37 | | L |



Sheet Schedule
 L-001-M Cover Sheet
 L-101-M Landscape Plan
 L-102-M Hydrozone Plan / AMWLO
 L-103-M Irrigation Plan
 L-501-M Irrigation Details

A & B Vineyards
 LLC

Phase 2
 Building

5715 Solano Avenue
 Napa, CA 94558

APN: 034-190-040

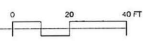
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 Permit Resubmit Date: 03/AUG/2023

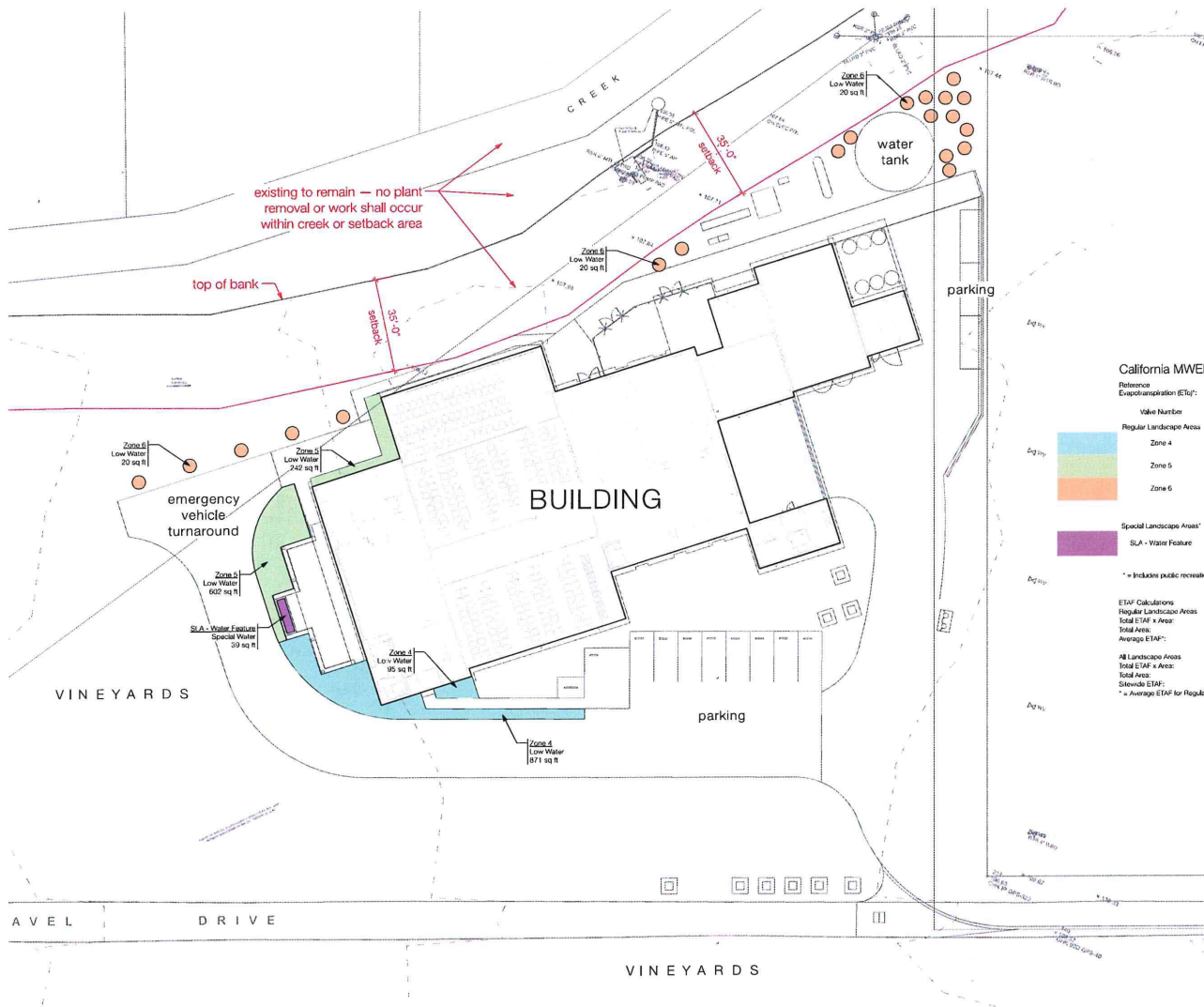
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 Plot Date:
 Drawn By: LD
 Scale: As Noted

Landscape Plan

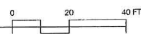
L-101-M

Partial Site Plan
 Scale: 1" = 20'-0"





Partial Site Plan
Scale: 1" = 20'-0"



California MWEO Water Budget

| Reference | Value Number | Plant / Feature Type | Plant Factor (PF) | Irrigation Method | Irrigation Efficiency (IE) | ETAP (PPH) | Landscape Area (sq ft) | ETAP x Area | Estimated Total Water Usage (ETU) |
|--|--------------|-----------------------|-------------------|-------------------|----------------------------|------------|------------------------|-------------|-----------------------------------|
| Regular Landscape Areas | | | | | | | | | |
| Zone 4 | 816 | Shrubs | 0.3 | Drip | 0.81 | 0.37 | 900 | 338 | 9,830 |
| Zone 5 | 844 | Shrubs | 0.3 | Drip | 0.81 | 0.37 | 844 | 313 | 8,569 |
| Zone 6 | 383 | Trees | 0.3 | Drip | 0.81 | 0.37 | 383 | 145 | 2,995 |
| Totals: | | | | | | | 2,203 | 816 | 22,414 |
| Special Landscape Areas* | | | | | | | | | |
| SLA - Water Feature | 39 | Pond or Water Feature | 1 | Unspecified | 1 | 1 | 39 | 39 | 1,063 |
| Totals: | | | | | | | 39 | 39 | 1,063 |
| ETAP Calculations: | | | | | | | | | |
| Regular Landscape Areas | 816 | | | | | | | | |
| Total ETAP x Area | 2,203 | | | | | | | | |
| Average ETAP: | 0.37 | | | | | | | | |
| All Landscape Areas | 855 | | | | | | | | |
| Total ETAP x Area | 2,243 | | | | | | | | |
| Site-wide ETAP: | 0.38 | | | | | | | | |
| * = Average ETAP for Regular Landscape Areas must be 0.50 or below for residential areas, and 0.45 or below for non-residential areas. | | | | | | | | | |

* = Includes public recreational areas, water features using recycled water, areas dedicated to edible plants, and areas irrigated with recycled water.

ETU x Total Maximum Applied Water Allowance (MAWA) Percentage: 23,497 gal/y 28,315 gal/y 83%

CLEVER DESIGN



Sheet Schedule
L-001-M Cover Sheet
L-101-M Landscape Plan
L-102-M Hydrozone Plan / MWEO
L-103-M Irrigation Plan
L-501-M Irrigation Details

A & B Vineyards LLC

Phase 2 Building

5215 Solano Avenue
Napa, CA 94558

APN: 034-100-040

Issue:
Major Mod Submittal
Permit Resubmit

Date:
06/04/2023
09/04/2023

Project ID: 25436
File Name: arrow and branch v2023.vic
Plot Date:
Drawn By: LD
Scale: As Noted

Hydrozone Plan /
MWEO
L-102-M

I have compiled with the criteria of the Water Efficient Landscape Ordinance and applied them accordingly for the efficient use of water in the Planning Plan.

signature of landscape architect

