

“E”

Use Permit Application Packet



file No PI7-00394

Napa County  
Conservation, Development, and Planning Department  
1195 Third Street, Suite 210, Napa, California, 94559 phone (707) 253-4417  
web www.countyofnapa.org/cdp/ email cdp@countyofnapa.org

A Tradition of Stewardship  
A Commitment to Service

Use Permit Application

To be completed by Planning staff...

Application Type: Use Permit

Date Submitted: 11-17-2017 Resubmittal(s): \_\_\_\_\_ Date Complete: \_\_\_\_\_

Request: \_\_\_\_\_

\*Application Fee Deposit: \$ 5000- Receipt No. 124116 Received by: 82 Date: 11-17-2017

\*Total Fees will be based on actual time and materials

To be completed by applicant...

Project Name: Matthiasson Family Winery This is an application for a development permit

Assessor's Parcel No: 035-460-022 Existing Parcel Size: 5.78 +/- ac.

Site Address/Location: 3171 Dry Creek Road Napa, California 94558  
No. Street City State Zip

Primary Contact:  Owner  Applicant  Representative (attorney, engineer, consulting planner, etc.)

Property Owner: Squirrel Hill Vineyards LLC

Mailing Address: 73 Luke Drive Napa, California 94558  
No. Street City State Zip

Telephone No: (707) 265 - 9349 E-Mail: jill@matthiasson.com

Applicant (if other than property owner): Jill Klein

Mailing Address: 73 Luke Drive Napa, California  
No. Street City State Zip

Telephone No: (707) 265 - 9349 E-Mail: jill@matthiasson.com

Representative (if applicable): Land Use Planning Services

Mailing Address: 2423 Renfrew Street Napa, California 94558  
No. Street City State Zip

Telephone No: (707) 255 - 7375 E-Mail: jreddingaicp@comcast.net

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## Use Permit Information Sheet

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### Use

Narrative description of the proposed use (please attach additional sheets as necessary):

The Matthiasson family recently acquired the Chateau Phoenix Winery, a small winery approved in 1986. The property contains 3.85 acres of vineyards; 0.2 acres would be removed as part of this project. Steve Matthiasson, winemaker and Jill Klein owners of Matthiasson Wines currently produce their wines at Bin to Bottle in the AIA. With acquisition of the Chateau Phoenix winery and associated vineyards, the owners propose to expand production to 18,000 gallons, increase the number of daily visitors and establish a marketing plan. The proposed winery is located on a 5.78 acre parcel on a east facing hillside overlooking the Napa Valley. An existing driveway from Dry Creek Road provides access to the winery and 4 existing residences, the residences through an existing easement. This driveway will be improved to commercial road standards as part of this project. The existing winery building will be renovated and upgraded, an outdoor tasting venue provided, existing parking area improved and landscaping added to screen proposed water tanks and entry driveway approach. An existing storage building permitted and built prior to 1991 will be converted to winery storage use. Following renovation, the winery building will be approx. 3,590 feet. A 3,790 s.f. cave to be used for wine production is also proposed. The owners propose to host a maximum of 17 visitors daily, similar to wineries of comparable production. Architectural plans for the building and cave were prepared by James Jeffery AIA; landscape plans by Ron Lutskco Associates. The civil engineering plans, water and wastewater feasibility studies were prepared by Madrone Engineering. All plans are attached to this application.

What, if any, additional licenses or approvals will be required to allow the use?

District \_\_\_\_\_

Regional \_\_\_\_\_

State ABC

Federal TTB

### Improvements

Narrative description of the proposed on-site and off-site improvements (please attach additional sheets as necessary):

1. Improve existing driveway to commercial standards
2. Construct approved connection to Dry Creek Road
3. Construct on site turnaround
4. Improve existing parking area to county standards
5. Remodel interior of existing winery building
6. Convert existing storage building to wine storage
7. Construct 3,790 +/- s.f. cave with portals
8. Construct ADA compliant rest room
9. Construct water and wastewater treatment and disposal systems
10. Install domestic and fire water storage tanks and associated infrastructure
11. Install property and entry driveway landscaping structures and improvements

**Improvements, cont.**

Total on-site parking spaces: 5 existing 7 proposed

Loading areas: 1 existing 1 proposed

Fire Resistivity (check one; if not checked, Fire Marshal will assume Type V – non rated):

- Type I FR     Type II 1 Hr     Type II N (non-rated)     Type III 1 Hr     Type III N  
 Type IV H.T. (Heavy Timber)     Type V 1 Hr.     Type V (non-rated)  
*(for reference, please see the latest version of the California Building Code)*

Is the project located in an Urban/Wildland Interface area?     Yes     No

Total land area to be disturbed by project (include structures, roads, septic areas, landscaping, etc): 0.83 acres

**Employment and Hours of Operation**

Days of operation: Monday-Saturday existing    Sunday-Saturday proposed

Hours of operation: 8:00 a.m.--6:00 pm existing    8:00 a.m.--6:00 pm proposed

Anticipated number of employee shifts: 2 existing    1 proposed

Anticipated shift hours: 8:00 a.m.--6:00 pm existing    8:00 a.m.--6:00 pm proposed

Maximum Number of on-site employees:

- 10 or fewer     11-24     25 or greater (specify number) \_\_\_\_\_

*Alternately, you may identify a specific number of on-site employees:*

other (specify number) 4 FT & 3 PT

## 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.

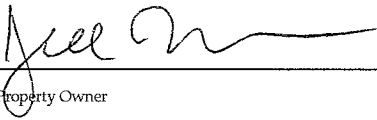
In the event any such proceeding is brought, County shall promptly notify the Applicant of the proceeding, and County shall cooperate fully in the defense. If County fails to promptly notify the Applicant of the proceeding, or if County fails to cooperate fully in the defense, the Applicant shall not 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.

Squirrel Hill Vineyards, LLC

Print Name of Property Owner

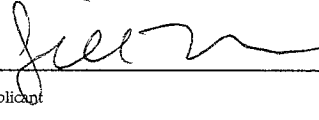
Matthiasson Family Vineyards

Print Name Signature of Applicant (if different)



Signature of Property Owner

Date



Signature of Applicant

Date

## Supplemental Application for Winery Uses

### 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 checked="" type="checkbox"/> Existing	<input 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 type="checkbox"/> Expanded	<input checked="" type="checkbox"/> Newly Proposed	<input type="checkbox"/> None
Marketing Events*	<input type="checkbox"/> Existing	<input type="checkbox"/> Expanded	<input checked="" type="checkbox"/> Newly Proposed	<input type="checkbox"/> None
Food at Marketing Events	<input type="checkbox"/> Existing	<input type="checkbox"/> Expanded	<input checked="" 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 type="checkbox"/> Existing	<input type="checkbox"/> Expanded	<input checked="" type="checkbox"/> Newly 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 production capacity: 5,000 gal/y Per permit No: SWE Permit date: 11/26/86

Current maximum actual production: 7,200 gal/y For what year? 2017

Proposed production capacity: 18,000 gal/y

\* For this section, please see "Winery Production Process," at page 11.

### Visitation and Hours of Operation

Please identify the winery's...

Maximum daily tours and tastings visitation:	<u>2</u> existing	<u>17</u> proposed
Average daily tours and tastings visitation <sup>1</sup> :	<u>1</u> existing	<u>15</u> proposed
Visitation hours (e.g. M-Sa, 10am-4pm):	<u>8:00 am-6:00 pm</u> existing	<u>10:00 am-6:00 pm</u> proposed
Non-harvest Production hours <sup>2</sup> :	<u>8:00 am-6:00 pm</u> existing	<u>7:30 am-5:30 pm</u> proposed

<sup>1</sup> Average daily visitation is requested primarily for purposes of environmental review and will not, as a general rule, provide a basis for any condition of approval limiting allowed winery visitation.

<sup>2</sup> It is assumed that wineries will operate up to 24 hours per day during crush.

## **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).

## **Marketing Program**

Please describe the winery's proposed marketing program. Include event type, maximum attendance, food service details, etc. Differentiate between existing and proposed activities. (Attach additional sheets as necessary.)

Four (4)/year for a maximum of 30 guests

Participation in Napa Valley Charity Wine Auction for a maximum of 50 guests. Portable toilets will be brought in and used for this event.

Portable toilets will be brought in for use for all marketing events

## **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. (Attach additional sheets as necessary.)

Food and wine pairings will be offered to daily visitors. Any necessary food permits will be obtained as part of the building permit process, following use permit approval. Food service at marketing events will be catered using a county-licensed local caterer. No on-site food preparation is proposed.

## Winery Coverage and Accessory/Production Ratio

**Winery Development Area.** Consistent with the definition at "a.," at page 11 and with the marked-up site 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>4,825</u> sq. ft.	<u>0.10</u> acres
Proposed	<u>6,486</u> sq. ft.	<u>0.15</u> acres

**Winery Coverage.** Consistent with the definition at "b.," at page 11 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>31,510</u> sq. ft.	<u>0.72</u> acres	<u>12.5</u> % of parcel
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**Production Facility.** Consistent with the definition at "c.," at page 11 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>3,541 +/-</u> sq. ft.	Proposed	<u>7,951</u> sq. ft.
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**Accessory Use.** Consistent with the definition at "d.," at page 11 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>501</u> sq. ft.	<u>14.1</u> % of production facility
Proposed	<u>501</u> sq. ft.	<u>6.3</u> % of production facility

## Caves and Crushpads

If new or expanded caves are proposed please indicate which of the following best describes the public accessibility of the cave space:

- 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	Existing: <u>N/A</u> sq. ft.	Proposed: <u>3,790 +/-</u> sq. ft.
Covered crush pad area	Existing: <u>636 +/-</u> sq. ft.	Proposed: <u>636 +/-</u> sq. ft.
Uncovered crush pad area	Existing: <u>0</u> sq. ft.	Proposed: <u>0</u> sq. ft.

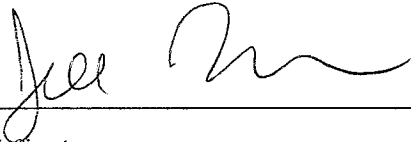


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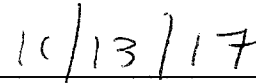
## Initial Statement of Grape Source

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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



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.*

## Water Supply/ Waste Disposal Information Sheet

### Water Supply

Please attach completed Phase I Analysis sheet.

	Domestic	Emergency
Proposed source of water (e.g., spring, well, mutual water company, city, district, etc.):	<u>well #01</u>	<u>well #01</u>
Name of proposed water supplier (if water company, city, district):	_____	_____
Is annexation needed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Current water use:	<u>1,500</u> gallons per day (gal/d)	
Current water source:	<u>well</u>	<u>n/a</u>
Anticipated future water demand:	<u>520</u> gal/d	<u>n/a</u> gal/d
Water availability (in gallons/minute):	<u>1.5</u> gal/m	<u>200 at hydrant</u> gal/m
Capacity of water storage system:	<u>8,000</u> gal	<u>12,000</u> gal
Type of emergency water storage facility if applicable (e.g., tank, reservoir, swimming pool, etc.):	<u>tank</u>	

### Liquid Waste

Please attach Septic Feasibility Report

	Domestic	Other
Type of waste:	<u>sewage</u>	<u>winery process</u>
Disposal method (e.g., on-site septic system, on-site ponds, community system, district, etc.):	<u>on-site drip</u>	<u>on-site drip</u>
Name of disposal agency (if sewage district, city, community system):	_____	_____
Is annexation needed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Current waste flows (peak flow):	<u>30</u> gal/d	<u>250</u> gal/d
Anticipated future waste flows (peak flow):	<u>156</u> gal/d	<u>900</u> gal/d
Future waste disposal design capacity:	<u>516</u> gal/d	<u>900</u> gal/d

### Solid Waste and Recycling Storage and Disposal

Please include location and size of solid waste and recycling storage area on site plans in accordance with the guidelines available at [www.countyofnapa.org/dem](http://www.countyofnapa.org/dem).

### Hazardous and/or Toxic Materials

If your facility generates hazardous waste or stores hazardous materials above threshold planning quantities (55 gallons liquid, 500 pounds solid or 200 cubic feet of compressed gas) then a hazardous materials business plan and/or a hazardous waste generator permit will be required.

### Grading Spoils Disposal

Where will grading spoils be disposed of?

(e.g. on-site, landfill, etc. If off-site, please indicate where off-site): off-site at a County-approved location

## Winery Traffic Information / Trip Generation Sheet

### Traffic during a Typical Weekday

Number of FT employees: <u>4</u> x 3.05 one-way trips per employee	=	<u>12.20</u>	daily trips.
Number of PT employees: <u>0</u> x 1.90 one-way trips per employee	=	<u>0</u>	daily trips.
Average number of weekday visitors: <u>17</u> / 2.6 visitors per vehicle x 2 one-way trips	=	<u>13.08</u>	daily trips.
Gallons of production: <u>18,000</u> / 1,000 x .009 truck trips daily <sup>3</sup> x 2 one-way trips	=	<u>0.32</u>	daily trips.
<b>Total</b>	<b>=</b>	<b><u>25.60</u></b>	<b>daily trips.</b>
(No of FT employees) + (No of PT employees/2) + (sum of visitor and truck trips x .38)	=	<u>7.09</u>	<b>PM peak trips.</b>

### Traffic during a Typical Saturday

Number of FT employees (on Saturdays): <u>2</u> x 3.05 one-way trips per employee	=	<u>3.05</u>	daily trips.
Number of PT employees (on Saturdays): <u>0</u> x 1.90 one-way trips per employee	=	<u>0</u>	daily trips.
Average number of Saturday visitors: <u>17</u> / 2.8 visitors per vehicle x 2 one-way trips	=	<u>6.07</u>	daily trips.
<b>Total</b>	<b>=</b>	<b><u>9.12</u></b>	<b>daily trips.</b>
(No of FT employees) + (No of PT employees/2) + (visitor trips x .57)	=	<u>4.46</u>	<b>PM peak trips.</b>

### Traffic during a Crush Saturday

Number of FT employees (during crush): <u>2</u> x 3.05 one-way trips per employee	=	<u>6.10</u>	daily trips.
Number of PT employees (during crush): <u>3</u> x 1.90 one-way trips per employee	=	<u>3.80</u>	daily trips.
Average number of Saturday visitors: <u>17</u> / 2.8 visitors per vehicle x 2 one-way trips	=	<u>6.07</u>	daily trips.
Gallons of production: <u>18,000</u> / 1,000 x .009 truck trips daily x 2 one-way trips	=	<u>0.32</u>	daily trips.
Avg. annual tons of grape on-haul: <u>90</u> / 144 truck trips daily <sup>4</sup> x 2 one-way trips	=	<u>1.25</u>	daily trips.
<b>Total</b>	<b>=</b>	<b><u>17.54</u></b>	<b>daily trips.</b>

### Largest Marketing Event- Additional Traffic

Number of event staff (largest event): <u>1</u> x 2 one-way trips per staff person	=	<u>2</u>	trips.
Number of visitors (largest event): <u>30</u> / 2.8 visitors per vehicle x 2 one-way trips	=	<u>10.71</u>	trips.
Number of special event truck trips (largest event): <u>1</u> x 2 one-way trips	=	<u>2</u>	trips.

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

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



A Tradition of Stewardship  
A Commitment to Service

Planning, Building & Environmental Services - Hillary Gitelman, Director  
1195 Third Street, Napa, CA 94559 - (707) 253-4417 - www.countyofnapa.org

Project name & APN: Matthiasson Winery  
Project number if known: 17-017  
Contact person: Jeffery Redding  
Contact email & phone number: jreddingaicp@comcast.net  
Today's date: \_\_\_\_\_

## 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"/>	<b>BMP-1</b>	<b>Generation of on-site renewable energy</b> <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>  PV panels are proposed on the roof of the new equipment storage shed roof.
<input type="checkbox"/>	<input type="checkbox"/>	<b>BMP-2</b>	<b>Preservation of developable open space in a conservation easement</b> <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>  n/a

Already Plan  
Doing To Do

**BMP-3 Habitat restoration or new vegetation (e.g. planting of additional trees over 1/2 acre)**

*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.*

Planning to establish native plant wildlife habitat along roads and fences. We are already working with Healthy Soils Program of the CDFA

**BMP-4 Alternative fuel and electrical vehicles in fleet**

*The magnitude of GHG reductions achieved through implementation of this measure varies depending on the analysis year, equipment, and fuel type replaced.*

<b>Number of total vehicles</b>	2
<b>Typical annual fuel consumption or VMT</b>	
<b>Number of alternative fuel vehicles</b>	2
<b>Type of fuel/vehicle(s)</b>	(1) Electric and (1) Hybrid
<b>Potential annual fuel or VMT savings</b>	1,125 US gallons

**BMP-5 Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 2**

n/a

*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 I and CALGREEN Tier II. 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 I 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).*

**BMP-6 Vehicle Miles Traveled (VMT) reduction plan**

n/a

*Selecting this BMP states that the business operations intend to implement a VMT reduction plan reducing annual VMTs by at least 15%.*

Tick box(es) for what your Transportation Demand Management Plan will/does include:

- employee incentives
- employee carpool or vanpool
- priority parking for efficient transportation (hybrid vehicles, carpools, etc.)
- bike riding incentives
- bus transportation for large marketing events
- Other:

Estimated annual VMT \_\_\_\_\_

Potential annual VMT saved \_\_\_\_\_

% Change \_\_\_\_\_

Already Plan  
Doing To Do

- BMP-7 Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 1**  
*See description below under BMP-5.*
- 
- 

- BMP-8 Solar hot water heating**  
n/a  
*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.*
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- BMP-9 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 1/4 the energy of an ordinary incandescent bulb and lasting 8-12 times longer. Typical payback from the initial purchase is about 18 months.*
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- 

- BMP-10 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.*
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- BMP-11 Bicycle Incentives**  
*Napa County Zoning 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!*
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- 

- BMP-12 Bicycle route improvements**  
n/a  
*Refer to the Napa County Bicycle Plan (NCPTA, 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 any proposed improvements as part of the project on the site plan or describe below.*
- 
-

Already Plan  
Doing To Do

**BMP-13 Connection to recycled water**

n/a

*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.*

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**BMP-14 Install Water Efficient fixtures**

*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%.*

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**BMP-15 Low-impact development (LID)**

*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.*

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**BMP-16 Water efficient landscape**

*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).*

*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.*

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**BMP-17 Recycle 75% of all waste**

*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 this goal in mind.*

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Already Plan  
Doing To Do

**BMP-18 Compost 75% food and garden material**

*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.*

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**BMP-19 Implement a sustainable purchasing and shipping programs**

*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.*

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**BMP-20 Planting of shade trees within 40 feet of the south side of the building elevation**

*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 use the site or landscape plan to indicate where trees are proposed and which species you are using.*

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**BMP-21 Electrical Vehicle Charging Station(s)**

*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.*

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**BMP-22 Public Transit Accessibility**

n/a

*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.*

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Already Plan  
Doing To Do

**BMP-23**

**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.**

*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 buried 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.*

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**BMP-24 Limit the amount of grading and tree removal**

*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.*

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**BMP-25 Will this project be designed and built so that it could qualify for LEED?**

n/a

**BMP-25 (a)**

**LEED™ Silver** (check box BMP-25 and this one)

**BMP-25 (b)**

**LEED™ Gold** (check box BMP-25, BMP-25 (a), and this box)

**BMP-25 (c)**

**LEED™ Platinum** (check all 4 boxes)

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## Practices with Un-Measured GHG Reduction Potential

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**BMP-26 Are you, or do you intend to become a Certified Green Business or certified as a "Napa Green Winery"?**

*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](http://www.countyofnapa.org).*

**BMP-27 Are you, or do you intend to become a Certified "Napa Green Land"?**

*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.*

Already Plan  
Doing To Do

**BMP-28 Use of recycled materials**

*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.*

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**BMP-29 Local food production**

*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.  
(2) Fruit tree orchards for local restaurants and farmer's market.*

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**BMP-30 Education to staff and visitors on sustainable practices**

*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.*

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**BMP-31 Use 70-80% cover crop**

*Cover crops reduce erosion and the amount of tilling which is required, which releases carbon into the environment.*

**BMP-32 Retain biomass removed via pruning and thinning by chipping the material and reusing it rather than burning on-site**

*By selecting this BMP, you agree not to burn the material pruned on site.*

**BMP-33 Are you participating in any of the above BMPS at a 'Parent' or outside location?**

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**BMP-34 Are you doing anything that deserves acknowledgement that isn't listed above?**

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**Comments and Suggestions on this form?**

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**NAPA COUNTY UNIFIED PROGRAM CONSOLIDATED FORM  
FACILITY INFORMATION  
BUSINESS ACTIVITIES**

Page 1 of

**I. FACILITY IDENTIFICATION**

FACILITY ID # (Agency Use Only)																EPA ID # (Hazardous Waste Only)	2
BUSINESS NAME (Same as Facility Name of DBA-Doing Business As)																	3
BUSINESS SITE ADDRESS <b>Matthiasson Family Winery</b>																	103
BUSINESS SITE CITY <b>3175 Dry Creek Road Napa</b>														104	CA	ZIP CODE <b>94558</b>	105
CONTACT NAME <b>Jill Klein</b>														106	PHONE <b>707-265-9349</b>	107	

**II. ACTIVITIES DECLARATION**

**NOTE: If you check YES to any part of this list, please submit the Business Owner/Operator Identification page.**

Does your facility...	If Yes, please complete these pages of the UPCF....
<p><b>A. HAZARDOUS MATERIALS</b> Have on site (for any purpose) at any one time, hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?</p>	<p><input type="checkbox"/> YES <input type="checkbox"/> NO 4</p> <p>HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION</p>
<p><b>B. REGULATED SUBSTANCES</b> Have Regulated Substances stored onsite in quantities greater than the threshold quantities established by the California Accidental Release prevention Program (CalARP)?</p>	<p><input type="radio"/> YES <input checked="" type="radio"/> NO 4a</p> <p>Coordinate with your local agency responsible for CalARP.</p>
<p><b>C. UNDERGROUND STORAGE TANKS (USTs)</b> Own or operate underground storage tanks?</p>	<p><input type="radio"/> YES <input checked="" type="radio"/> NO 5</p> <p>UST FACILITY (Formerly SWRCB Form A) UST TANK (one page per tank) (Formerly Form B)</p>
<p><b>D. ABOVE GROUND PETROLEUM STORAGE</b> Own or operate ASTs above these thresholds: Store greater than 1,320 gallons of petroleum products (new or used) in aboveground tanks or containers.</p>	<p><input type="radio"/> YES <input checked="" type="radio"/> NO 8</p> <p>NO FORM REQUIRED TO CUPAs</p>
<p><b>E. HAZARDOUS WASTE</b> Generate hazardous waste?</p> <p>Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?</p> <p>Treat hazardous waste on-site?</p> <p>Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?</p> <p>Consolidate hazardous waste generated at a remote site?</p> <p>Need to report the closure/removal of a tank that was classified as hazardous waste and cleaned on-site?</p> <p>Generate in any single calendar month 1,000 kilograms (kg) (2,200 pounds) or more of federal RCRA hazardous waste, or generate in any single calendar month, or accumulate at any time, 1 kg (2.2 pounds) of RCRA acute hazardous waste; or generate or accumulate at any time more than 100 kg (220 pounds) of spill cleanup materials contaminated with RCRA acute hazardous waste.</p> <p>Household Hazardous Waste (HHW) Collection site?</p>	<p><input type="radio"/> YES <input checked="" type="radio"/> NO 9</p> <p>EPA ID NUMBER – provide at the top of this page</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO 10</p> <p>RECYCLABLE MATERIALS REPORT (one per recycler)</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO 11</p> <p>ON-SITE HAZARDOUS WASTE TREATMENT – FACILITY ON-SITE HAZARDOUS WASTE TREATMENT – UNIT (one page per unit)</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO 12</p> <p>CERTIFICATION OF FINANCIAL ASSURANCE</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO 13</p> <p>REMOTE WASTE / CONSOLIDATION SITE ANNUAL NOTIFICATION</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO 14</p> <p>HAZARDOUS WASTE TANK CLOSURE CERTIFICATION</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO 14a</p> <p>Obtain federal EPA ID Number, file Biennial Report (EPA Form 8700-13A/B), and satisfy requirements for RCRA Large Quantity Generator.</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO 14b</p> <p>See CUPA for required forms</p>

**F. LOCAL REQUIREMENTS**

(You may also be required to provide additional information by your CUPA or local agency.)

UPCF Rev. (12/2007)

# FIRE WATER STORAGE CALCULATION

COMMERCIAL PROJECT

MATTHIASSEN FAMILY VINEYARDS  
3175 DRY CREEK RD, NAPA, CA 94558  
APN: 035-460-022

MAY 2, 2018



PREPARED BY:  
MADRONE ENGINEERING  
1485 MAIN STREET, SUITE 302  
ST. HELENA, CA 94574

Project: Matthiasson Winery  
 3175 Dry Creek Rd  
 Napa, CA 94558  
 APN: 035-460-022

**Project Description:**

The following calculations are for the fire protection water storage for non-residential buildings on the Matthiasson project.

**Commercial Fire Sprinkler Water Storage Calculations**

Need Fire Sprinklers?	No	per Napa County Code 15.32.090
Building Classification		per CBC Part 2, Chapter 3, Section 310
NFPA Standard for Sprinklers	NFPA 13	per CBC Part 9, Chapter 9, Section 903.3.1.1
Occupancy Hazard Level	Ordinary Hazard - Group 1	see NFPA 13
Minimum Flow Requirement		GPM/SF per NFPA 13 Figure 11.2.3.1.1
Size Of Largest Sprinkler Area		SF, essentially largest compartment
Minimum Sprinkler GPM required	0	GPM
Hose Stream Allowance		GPM, per NFPA 13 Table 11.2.3.1.2
Minimum Water Supply		minutes, per NFPA 13 Table 11.2.3.1.2

**Total Sprinkler Storage Requirement** 0 gallons

**Commercial Fire Hydrant Water Storage Calculations**

County Fire Hazard Occupancy Type	Moderate Fire Hazard	loosely defined in County Code
Is the building sprinklered?	No	if yes, 50% reduction in fire flow
Is building separation less than 20 feet?	No	if yes, 10% addition to storage volume
Minimum Fire Flow	200	GPM, from table (total SF of ALL site buildings)
Minimum Duration	60	minutes, from table
<b>Total Hydrant Storage Requirement</b>	<b>12000</b>	gallons
<b>Total Fire Protection Water Storage</b>	<b>12000</b>	



# STORMWATER CONTROL PLAN

REGULATED PROJECT

MATTHIASSEN FAMILY VINEYARDS  
3175 DRY CREEK RD, NAPA, CA 94558  
APN: 035-460-022

NOVEMBER 13, 2017  
REVISION 1: MAY 2, 2018



PREPARED BY:  
MADRONE ENGINEERING  
1485 MAIN STREET, SUITE 302  
ST. HELENA, CA 94574



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## I. Introduction & General Requirements

### A. Report Overview

Madrone Engineering has prepared this report to assist the Matthiasson Family Vineyards project in complying with current storm water regulations, specifically the Phase II NPDES Permit for Small Municipal Storm Sewer Systems (MS4s). As of June 30, 2015, development projects that create or replace 2,500 square feet or more of impervious surface (roofs or pavement) must incorporate specific measures to reduce runoff.

As the total new or reconstructed impervious area for this project is more than 5,000 square feet, and the project is not in the "Single-Family Home" category, the project is required to submit a complete Storm Water Control Plan for Regulated Projects. This report follows the Bay Area Stormwater Management Agencies Association (BASMAA) guidelines found in Appendix D (Regulated Projects) of the Post-Construction Manual.

### B. Project Description

Matthiasson Family Vineyard is requesting a Use Permit Major Modification to increase production and visitation for an existing winery on a 5.78 acre parcel located at 3175 Dry Creek Road, Napa, by owners and applicants Steve and Jill Matthiasson. Existing wine production is approved for 5,000 gallons, and is requested to be expanded to 18,000 gallons annually. The property will be improved as follows: the existing winery building will be renovated and upgraded with addition of a small outdoor tasting venue, the existing parking area will be reconstructed and improved, new fire water storage tanks will be constructed, an existing agricultural barn will be converted and improved for winery storage use, and the existing driveway will be improved to meet current Road and Street Standards.

The project location is up a slight rise above the Napa Valley Floor just west of Dry Creek Rd, and includes existing buildings and an existing driveway (see Appendix B, Vicinity Map). The project is proposing only minor earthwork - the existing building will undergo a minor remodel, and existing parking areas will be resurfaced and the existing driveway will be widened. The natural ground is moderately sloping, ranging from 5%-20%. Stormwater is currently transported from west to east across the parcel by sheet flow and an existing flow line and storm drain system. The storm drain outfalls to an unnamed drainage ditch along the western edge of Dry Creek that eventually travels east and south and joins an unnamed blue-line tributary to Salvador Channel, which is about 3,300 feet southeast of the parcel.

### C. Opportunities and Constraints for Stormwater Control

As much of the project area has already been developed, there are no proposed revisions to the existing paths of stormwater flow. The project proposes small landscaped areas throughout the new impervious areas that can be used for bioretention and stormwater treatment.





## II. Project Data Form

Table 1: Project Data Form

Project Name/Number	Matthiasson Family Vineyards
Application Submittal Date	November 13, 2017
Project Location (street address + APN)	3175 Dry Creek Rd Napa, CA 94558 APN: 035-460-022
Name of Owner or Developer	Steve Matthiasson and Jill Klein
Project Type and Description	Regulated Project (> 5,000 square feet) New roof, new concrete sidewalk, and new asphalt and chip seal parking areas.
Total Project Site Area (acres)	5.78 acres (parcel)
Total New or Replaced Impervious Surface Area (square feet)	~15,290 square feet (~8,265 new, ~7,025 replaced)
Total Pre-Project Impervious Surface Area	~25,000 square feet
Total Post-Project Impervious Surface Area	~33,265 square feet



### III. Low Impact Development (LID) Design Strategies

Appendix D of the BASMAA Post-Construction Manual provides the following guidelines for reducing storm water runoff:

1. Optimization of Site Layout
2. Use of Permeable Pavements
3. Dispersal of Runoff to Pervious Areas
4. Stormwater Control Measures

See below for specific details showing the implementation of LID design strategies for this project.

#### A. Guideline 1: Optimization of Site Layout

The following items (if checked) have been included in the design and are shown on the project plans.

- Limitation of development envelope.
- Preservation of natural drainage features.
- Setbacks from creeks, wetlands, and riparian habitats.
- Minimization of imperviousness
- Use of drainage as a design element.

#### B. Guideline 2: Use of Pervious Pavement

Not used.

#### C. Guideline 3: Dispersal of Runoff to Pervious Areas

The proposed downspouts for the new areas covered by roof will be outlet to adjacent landscaping/bioretention areas.

#### D. Guideline 4: Stormwater Control Measures

No additional stormwater control measures are proposed beyond those described above.



## IV. Documentation of Drainage Design

### A. Descriptions of Each Drainage Management Area

**Table 2: DMA Descriptions**

DMA Name	Surface Type	Area (square feet)
DMA #01	Asphalt	7,390
DMA #02	Roof/Asphalt	1,200
DMA #03	Roof/Concrete	1,300
DMA #04	Asphalt	1,100
DMA #05	Asphalt	3,500
DMA #06	Asphalt	800
DMA #LO1	Landscaping	400
DMA #LO2	Landscaping	580
DMA #SO1	Self-Treating	234,880

DMA #01, totaling 7,390 square feet, drains a reconstructed driveway and parking area via sheet flow to a proposed bioretention facility (BF #1) to the west.

DMA #LO1, totaling 400 square feet, drains a proposed landscaped area to a proposed bioretention facility (BF #1) to the west.

DMA #02, totaling 1,200 square feet, drains a portion of the reconstructed driveway and the new pole barn via sheet flow to a proposed bioretention facility (BF #2) to the east.

DMA #03, totaling 1,300 square feet, drains the new portion of roof via sheet flow to a proposed bioretention facility (BF #3) to the southeast.

DMA #LO2, totaling 580 square feet, drains a proposed landscaped area to a proposed bioretention facility (BF #3) to the southeast.

DMA #04, totaling 1,100 square feet, drains a portion of the new chip seal and asphalt driveway via sheet flow to a proposed bioretention facility (BF #4) to the east.

DMA #05, totaling 3,500 square feet, drains a portion of the new chip seal and asphalt driveway via sheet flow to a proposed bioretention facility (BF #5) to the east.

DMA #06, totaling 800 square feet, drains a portion of the new chip seal and asphalt driveway via sheet flow to a proposed bioretention facility (BF #6) to the northeast.



DMA #S01, totaling 231,695 square feet, is a self-treating area that drains via sheet flow, existing ditches, and existing storm drains to the east.

See Appendix B, Drainage Management Areas, for a detailed map of the DMAs and proposed bioretention facilities.

## B. Tabulation and Sizing Calculations

**Table 3: Summary for Bioretention Facility Design**

DMA Name	Area (square feet)
DMA #01	7,390
DMA #02	1,200
DMA #03	1,300
DMA #04	1,100
DMA #05	3,500
DMA #06	800
DMA #L01	400
DMA #L02	580
DMA #S01	234,880

1. Self-Treating Areas  
DMA #S01, consisting of approximately 93% of the parcel, is unaltered by the proposed project, consists of more than 95% vineyard or native plants, and can be considered to be a self-treating area.
2. Self-Retaining Areas  
Not applicable to this project.
3. Areas Draining to Self-Retaining Areas  
Not applicable to this project.
4. Areas Draining to Bioretention Facilities  
Please see below for a summary of the DMAs that drain to bioretention facilities, and the proposed size of each bioretention facility.



a. DMA #01 and DMA #L01 drains to proposed bioretention facility #01 (see Table 4).

**Table 4: Bioretention Facility #1 Sizing Calculation**

DMA Name	DMA Area (square feet)	Post-Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	Bioretention Facility #1		
					Facility Sizing Factor	Minimum Facility Size	Proposed Facility Size
DMA #01	7390	Roof/Concrete	1.0	7390	0.04	295.6	
DMA #L01	400	Landscaping	0.1	40	0.04	1.6	
Total>				7430	0.04	297.2	300

b. DMA #02 drains to proposed bioretention facility #02 (see Table 5).

**Table 5: Bioretention Facility #2 Sizing Calculation**

DMA Name	DMA Area (square feet)	Post-Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	Bioretention Facility #2		
					Facility Sizing Factor	Minimum Facility Size	Proposed Facility Size
DMA #02	1200	Asphalt	1.0	1200	0.04	48	
Total>				1200	0.04	48	50

c. DMA #03 and DMA #L02 drains to proposed bioretention facility #03 (see Table 6).

**Table 6: Bioretention Facility #3 Sizing Calculation**

DMA Name	DMA Area (square feet)	Post-Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	Bioretention Facility #3		
					Facility Sizing Factor	Minimum Facility Size	Proposed Facility Size
DMA #03	1300	Roof/Concrete	1.0	1300	0.04	52.0	
DMA #L02	580	Landscaping	0.1	58	0.04	2.3	
Total>				1358	0.04	54.3	55



d. DMA #04 drains to proposed bioretention facility #04 (see Table 7).

**Table 7: Bioretention Facility #4 Sizing Calculation**

DMA Name	DMA Area (square feet)	Post-Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	Bioretention Facility #4		
					Facility Sizing Factor	Minimum Facility Size	Proposed Facility Size
DMA #04	1100	Chip Seal, Asphalt	1.0	1100	0.04	44	
Total>				1100	0.04	44	50

e. DMA #05 drains to proposed bioretention facility #05 (see Table 8).

**Table 8: Bioretention Facility #5 Sizing Calculation**

DMA Name	DMA Area (square feet)	Post-Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	Bioretention Facility #5		
					Facility Sizing Factor	Minimum Facility Size	Proposed Facility Size
DMA #05	3500	Chip Seal, Asphalt	1.0	3500	0.04	140	
Total>				3500	0.04	140	140

f. DMA #06 drains to proposed bioretention facility #06 (see Table 9).

**Table 9: Bioretention Facility #6 Sizing Calculation**

DMA Name	DMA Area (square feet)	Post-Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor	Bioretention Facility #6		
					Facility Sizing Factor	Minimum Facility Size	Proposed Facility Size
DMA #06	800	Chip Seal, Asphalt	1.0	800	0.04	32	
Total>				800	0.04	32	32

## V. Source Control Measures

### A. Site Activities and Potential Sources of Pollutants

Please see Appendix A for the completed Stormwater Pollutant Sources/Source Controls Checklist.



B. Source Control Table

See below for a table summarizing the potential pollutant sources and the proposed source controls to be implemented by the project.

**Table 10: Source Control Measures**

Potential Source of Runoff Pollutants	Structural Source Control BMPs	Operational Source Control BMPs
A. On-site storm drain inlets	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Mark all inlets with the words "No Dumping! Flows to Napa River".</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Maintain and periodically repair or replace inlet markings.</li> <li><input checked="" type="checkbox"/> Provide stormwater pollution prevention information to new site owners, lessees, or operators.</li> <li><input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbook.</li> </ul>
D2. Landscape/ Outdoor Pesticide Use/Building and Grounds Maintenance	<p>Final landscape plans will accomplish all of the following:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Preserve existing native trees, shrubs, and ground cover to the maximum extent possible.</li> <li><input checked="" type="checkbox"/> Design landscaping to minimize irrigation and runoff, to promote surface infiltration, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.</li> <li><input checked="" type="checkbox"/> Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions.</li> <li><input checked="" type="checkbox"/> Consider using pest-resistant plants, especially adjacent to hardscape.</li> <li><input checked="" type="checkbox"/> To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Maintain landscaping using minimum or no pesticides.</li> <li><input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbook.</li> <li><input checked="" type="checkbox"/> Provide IPM information to new owners, lessees, and operators.</li> </ul>
P. Plazas, sidewalks, and parking lots.	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> N/A</li> </ul>	<ul style="list-style-type: none"> <li><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 discharge to the sanitary sewer not to a storm drain.</li> </ul>



- C. Features, Materials, and Methods of Construction of Source Control BMPs  
See Table 10, above, for a detailed description of how source control BMPs will be implemented on this project.

## VI. Stormwater Facility Maintenance

### A. Ownership and Responsibility for Maintenance in Perpetuity

The owner shall execute all necessary maintenance agreements as required by the County of Napa. The owner accepts responsibility for interim operation and maintenance of stormwater treatment and flow-control facilities until such time as this responsibility is formally transferred to a subsequent owner.

### B. Summary of Maintenance Requirements For Each Stormwater Facility

The owner, or owner's delegated representative, shall perform the following maintenance activities a minimum of once annually, or more frequently if required by the County of Napa.

1. Clean Up - Remove soil or debris blocking bioretention facility inlets or overflows. Remove trash that typically collects near inlets or gets caught in vegetation.
2. Prune - Prune or cut back plants for health and to ensure flow into inlets and across the surface of the bioretention facility.
3. Control Weeds - Control weeds by manual methods and soil amendment. Selectively use natural herbicides if necessary.
4. Add Mulch - Add aged mulch (compost mulch) to reduce the ability of weeds to establish, keep soil moist, and replenish soil nutrients. Ensure that the top of the mulch layer is below the facility overflow.
5. Check Signage
6. Check Irrigation - Confirm irrigation is adequate but not excessive.

The owner and landscape maintenance personnel should be aware of the following:

1. Do not add fertilizer to bioretention facilities.
2. Do not use synthetic pesticides on bioretention facilities.

## VII. Construction Checklist

See below for a stormwater construction checklist to ensure that the stormwater requirements outlined in this document are included in final design/construction documents.

**Table 11: Construction Checklist**

Page Number in Stormwater Control Plan	Structural Source Control BMPs	Plan Sheet #
10	<input checked="" type="checkbox"/> Mark all inlets with the words "No Dumping! Flows to Napa River".	





Page Number in Stormwater Control Plan	Structural Source Control BMPs	Plan Sheet #
10	Final landscape plans will accomplish all of the following: <input checked="" type="checkbox"/> Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. <input checked="" type="checkbox"/> Design landscaping to minimize irrigation and runoff, to promote surface infiltration, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. <input checked="" type="checkbox"/> Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. <input checked="" type="checkbox"/> Consider using pest-resistant plants, especially adjacent to hardscape. <input checked="" type="checkbox"/> To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	
10	<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 discharge to the sanitary sewer not to a storm drain.	

## VIII. Certifications and Conclusion

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the current edition of the BASMAA Post-Construction Manual. Specifically, this report demonstrates that the project design is in compliance with current stormwater regulations and follows the recommendations of Appendix D of the BASMAA Post-Construction Manual for a Regulated Project.



# APPENDICES

**APPENDIX A: SOURCE CONTROL CHECKLIST**

**APPENDIX B: VICINITY MAP & DRAINAGE MANAGEMENT AREAS**



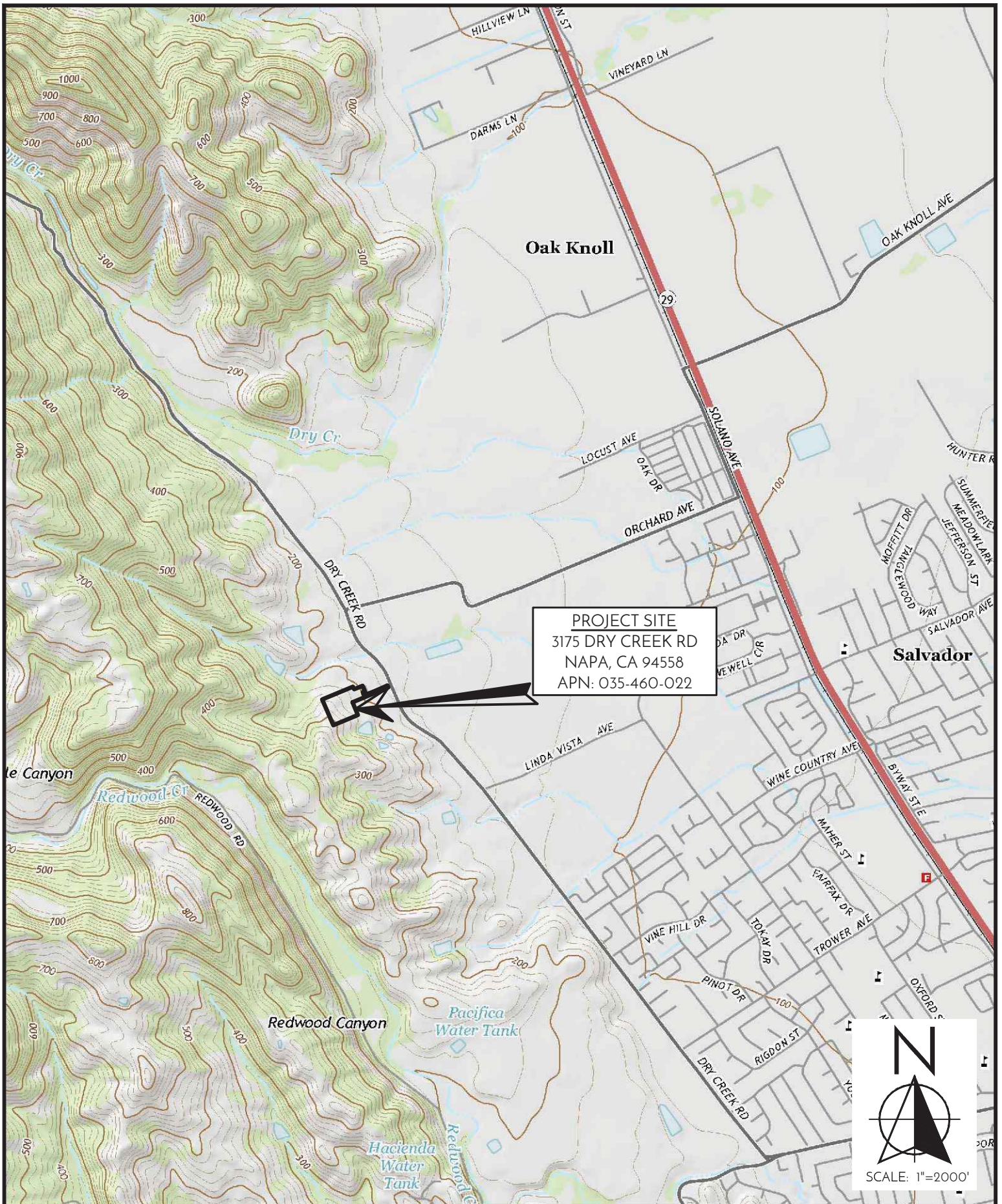
# APPENDIX A

# SOURCE CONTROL CHECKLIST



# APPENDIX B VICINITY MAP & DRAINAGE MANAGEMENT AREAS





PROJECT SITE  
 3175 DRY CREEK RD  
 NAPA, CA 94558  
 APN: 035-460-022



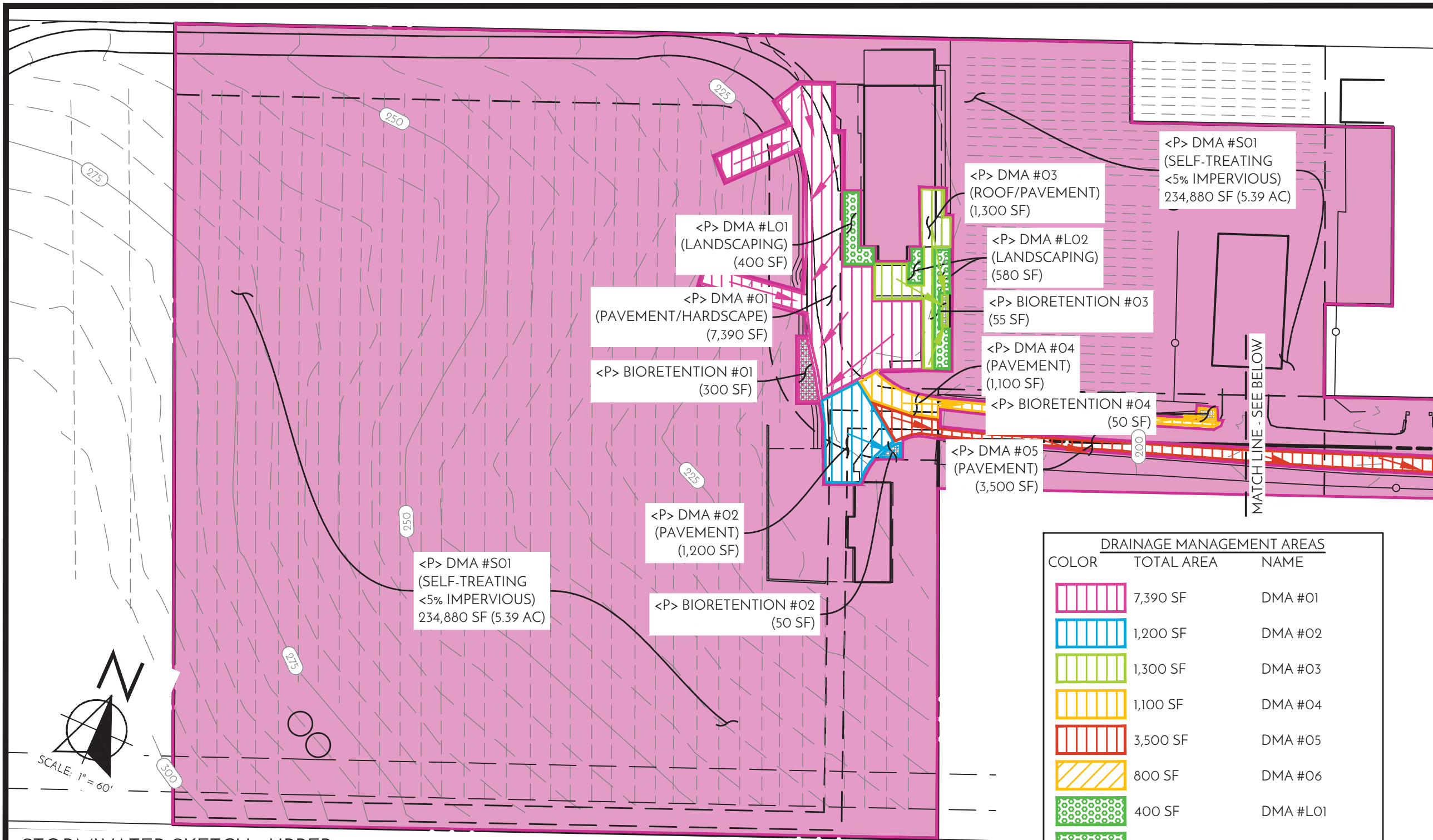
# MATTHIASSEN FAMILY VINEYARDS VICINITY MAP



1485 MAIN ST, SUITE 302  
 ST. HELENA, CA 94574  
 (707) 302-6280

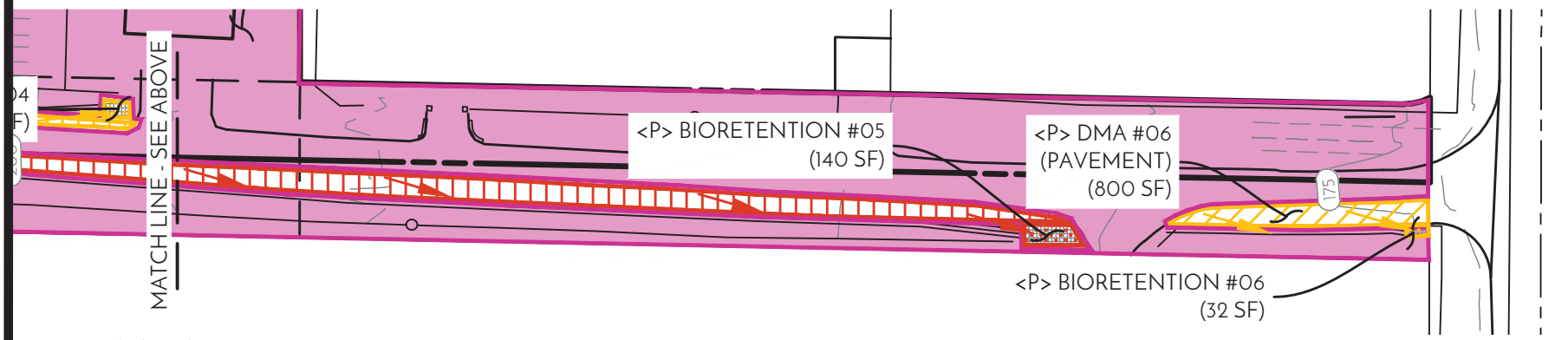
DATE:	06/29/17	SHEET 1 OF 1
SCALE:	1"=2,000'	
JOB #	17.014	
APN:	035-460-022	





DRAINAGE MANAGEMENT AREAS		
COLOR	TOTAL AREA	NAME
	7,390 SF	DMA #01
	1,200 SF	DMA #02
	1,300 SF	DMA #03
	1,100 SF	DMA #04
	3,500 SF	DMA #05
	800 SF	DMA #06
	400 SF	DMA #L01
	580 SF	DMA #L02
	234,880 SF	DMA #S01

STORMWATER SKETCH - UPPER



STORMWATER SKETCH - LOWER

Emily Hedge, Planner  
Planning Division  
Napa County  
1195 Third Street  
Napa, CA 94559

Subject:

Squirrel Hill Vineyard 3175 Dry Creek Road winery permit modification and water tank installation—  
Spotted Owl habitat suitability assessment

Squirrel Hill is an approximately six-acre parcel comprised of vineyard and winery infrastructure. Exclusive of grape and olive, site vegetation consists of regionally typical non-native landscape species. The site lacks Spotted Owl habitat.

The California Natural Diversity Database records Spotted Owl in both the Napa and Sonoma quadrangles. As of December 2017, the nearest known Spotted Owl observation is 3.7 miles northwest of the Squirrel Hill project site.

Murray Berner  
Consulting ornithologist  
210 Monte Vista Drive  
Napa, CA 94559  
707-224-5897