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Stormwater Control Plan

Barnett Vineyards Winery Use Permit (P19-00125-UP), Viewshed Protection Program (P20-00121-VIEW), and Exception to the Road and Street Standards
Planning Commission Hearing Date January 7, 2026

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STORMWATER CONTROL PLAN

REGULATED PROJECT

BARNETT VINEYARDS

4070 SPRING MOUNTAIN ROAD, ST. HELENA, CA 94574

APN:020-300-047

MARCH 27, 2019

PREPARED BY:

MADRONE ENGINEERING

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I. Introduction & General Requirements

A. Report Overview

Madrone Engineering has prepared this report to assist the Barnett Vineyards Building 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

This project is requesting a Use Permit modification for the construction of a new winery building at Barnett Vineyards at 4070 Spring Mountain Road, St. Helena, CA (APN 020-300-047). The project will include the construction of a new building, updated driveway with additional parking as required by Napa County Road and Standards, and driveway and infrastructure improvements to the south western portion of the parcel.

The project location is near the most southwestern end of the parcel which includes multiple existing buildings, access roads, and a parking area (see Appendix B, Vicinity Map). The parcel is situated just off of Spring Mountain Road near the Napa/Sonoma County line, and includes existing cuts, fills, and level building pads. The natural ground is gently sloping, ranging from 2%-30%. Stormwater is currently transported from south to north across the parcel by sheet flow and an existing flow line and storm drain. The storm drains outfall to an unnamed drainage along the north west property line that eventually joins Ritchie Creek. The nearest blue-line stream is Ritchie Creek, which is about 1000 feet north of the proposed project site.

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. Fortunately, the level pad that will be used for the new parking and hardscape areas naturally drains to the north to an existing vegetated area (vineyard), which provides a natural spot for the construction of bioretention facilities. Also, the project proposes small landscaped areas throughout the new parking areas that can be used for bioretention and stormwater treatment.

II. Project Data Form

Table 1: Project Data Form

Project Name/Number	Barnett Vineyard
Application Submittal Date	March 27, 2019
Project Location (street address + APN)	4070 Spring Mountain Road St. Helena, CA 94558 APN: 020-300-047
Name of Owner or Developer	Hal and Fiona Barnett
Project Type and Description	Regulated Project (> 5,000 square feet) New roof, new concrete sidewalk, and new asphalt driveway & parking areas.
Total Project Site Area (acres)	40 acres
Total New or Replaced Impervious Surface Area (square feet)	~11,370 square feet
Total Pre-Project Impervious Surface Area	~17,500 square feet
Total Post-Project Impervious Surface Area	~23,185 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 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 #101	AC Pavement	3,610
DMA #102	Roofs, ACPavement	4,090
DMA #103	AC Pavement	3,950
DMA #104	AC Pavement	7,920
DMA #S01	Self-Treating	1,722,800

DMA #101, totaling 3,610 square feet, drains a new AC pavement and concrete parking area for Barnett Vineyards via sheet flow to a proposed bioretention facility (BF #01) to the northeast.

DMA #102, totaling 4,090 square feet, drains new roof and AC pavement areas via sheet flow to a proposed bioretention facility (BF #02) to the north.

DMA #103, totaling 3,950 square feet, drainage a new AC pavement parking area via sheet flow to a proposed bioretention facility (BF #03) to the west.

DMA #104, totaling 7,920 square feet, drains new and existing AC pavement via sheet flow to a proposed bioretention facility (BF #04) to the northwest.

DMA #S01, totaling 1,722,800 square feet, is a self-treating area that drains via sheet flow, existing ditches, and existing storm drains to the north.

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 #101	3,610
DMA #102	4,090
DMA #103	3,950
DMA #104	7,920
DMA #S01	1,722,800

1. Self-Treating Areas
   DMA #S01, consisting of approximately 99% of the parcel, is unaltered by the proposed project, consists of more than 95% vineyard or native vegetation, 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 #101 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 #2		
					Facility Sizing Factor	Minimum Facility Size	Proposed Facility Size
DMA #101	3,610	Pavement	1.0	3610	0.04	144	
Total>				3610	0.04	144	145

b. DMA #102 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 #102	4090	Roof / Pavement	1.0	4090	0.04	164	
Total>				4090	0.04	164	165

c. DMA #103 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 #103	3950	Pavement	1.0	3950	0.04	158	
Total>				3950	0.04	158	160

d. DMA #104 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	7920	AC Pavement	1.0	7920	0.04	317	
Total>				7920	0.04	317	320

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	☒ Mark all inlets with the words "No Dumping! Flows to Napa River".	☒ Maintain and periodically repaint or replace inlet markings. ☒ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ☒ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbook.
D2. Landscape/ Outdoor Pesticide Use/Building and Grounds Maintenance	Final landscape plans will accomplish all of the following: ☒ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ☒ 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.	☒ Maintain landscaping using minimum or no pesticides. ☒ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbook.

Potential Source of Runoff Pollutants	Structural Source Control BMPs	Operational Source Control BMPs
	☒ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ☒ Consider using pest-resistant plants, especially adjacent to hardscape. ☒ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	☒ Provide IPM information to new owners, lessees, and operators.
G. Refuse areas	☒ The project includes construction of a new trash enclosure that will have adequate space for at least two 2-yard bins (one for trash, one for recycling). ☒ Post signs on or near dumpsters with the words "Do not dump hazardous materials here."	☒ Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbook.
P. Plazas, sidewalks, and parking lots.	☒ N/A	☒ 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.

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 #
8	☒ Mark all inlets with the words "No Dumping! Flows to Napa River".	
8	Final landscape plans will accomplish all of the following: ☒ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ☒ 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.	

Page Number in Stormwater Control Plan	Structural Source Control BMPs	Plan Sheet #
	☐ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ☐ Consider using pest-resistant plants, especially adjacent to hardscape. ☐ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	
9	☒ The project includes construction of a new trash enclosure that will have adequate space for at least two 2-yard bins (one for trash, one for recycling). ☐ Post signs on or near dumpsters with the words "Do not dump hazardous materials here."	
9	☒ 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.

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APPENDICES

APPENDIX A: SOURCE CONTROL CHECKLIST
APPENDIX B: VICINITY MAP & DRAINAGE MANAGEMENT AREAS

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APPENDIX A
SOURCE CONTROL CHECKLIST

Appendix A. Stormwater Pollutant Sources/Source Controls Checklist

How to use this worksheet (also see instructions on page 3-6 of the *BASMAA Post-Construction Manual*):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable Structural Source Control BMPs in your Stormwater Control Plan drawings.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable Structural Source Control BMPs and Operational Source Control BMPs in a table in your Stormwater Control Plan. Use the format shown in Table 3-1 on page 3-6 of the *BASMAA Post-Construction Manual*. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs.

IF THESE SOURCES WILL BE ON THE PROJECT SITE …	… THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	**2** Structural Source Controls—Show on Stormwater Control Plan Drawings	**3** Structural Source Controls—List in SCP Table and Narrative	**4** Operational Source Control BMPs—Include in SCP Table and Narrative
☐ **A.** On-site storm drain inlets (unauthorized non-stormwater discharges and accidental spills or leaks)	☐ Locations of inlets.	☐ Mark all inlets with the words "No Dumping! Flows to Bay" or similar.	☐ Maintain and periodically repaint or replace inlet markings. ☐ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ☐ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks ☐ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."

IF THESE SOURCES WILL BE ON THE PROJECT SITE …	… THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
❑ **B.** Interior floor drains and elevator shaft sump pumps	Show drains and pump locations	❑ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **C.** Interior parking garages	Show drain locations	❑ State that parking garage floor drains will be plumbed to the sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **D_1.** Need for future indoor & structural pest control		❑ Note building design features that discourage entry of pests.	❑ Provide Integrated Pest Management information to owners, lessees, and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE …	… THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	**2** Structural Source Controls—Show on Stormwater Control Plan Drawings	**3** Structural Source Controls—List in SCP Table and Narrative	**4** Operational Source Control BMPs—Include in SCP Table and Narrative
☒ **D_2.** Landscape/ Outdoor Pesticide Use/Building and Grounds Maintenance	☒ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ☐ Show self-retaining landscape areas, if any. ☒ Show bioretention facilities. (See instructions in Chapter 4.)	State that final landscape plans will accomplish all of the following. ☒ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ☒ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. ☒ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ☒ Consider using pest-resistant plants, especially adjacent to hardscape. ☒ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	☐ Maintain landscaping using minimum or no pesticides. ☒ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks ☒ Provide IPM information to new owners, lessees and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE …	… THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
❑ **E.** Pools, spas, ponds, decorative fountains, and other water features.	❑ Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet.	❑ If the local municipality requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	❑ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks The sanitary sewer operator must be notified and a clean out identified when pools are to be drained to the sanitary sewer.
❑ **F.** Food service	❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	❑ Describe the location and features of the designated cleaning area. ❑ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	State maintenance schedule for grease interceptor

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☒ **G.** Refuse areas	☒ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. ☒ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ☒ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	☒ State how site refuse will be handled and provide supporting detail to what is shown on plans. ☒ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	☒ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks
☐ **H.** Industrial processes.	☐ Show process area.	☐ If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	☐ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

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❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. ❑ Where appropriate, reference documentation of compliance with the requirements of programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank	❑ 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

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❑ **J.** Vehicle and Equipment Cleaning	❑ Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle/ equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	❑ If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): ❑ Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. ❑ Car dealerships and similar may rinse cars with water only. See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

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❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the Stormwater Control Plan, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. ❑ 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. ❑ 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.

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❑ **L.** Fuel Dispensing Areas	❑ Fueling areas shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.		❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.casqa.org/resources/bmp-handbooks

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1 Potential Sources of Runoff Pollutants	2 Structural Source Controls—Show on Stormwater Control Plan Drawings	3 Structural Source Controls—List in SCP Table and Narrative	4 Operational Source Control BMPs—Include in SCP Table and Narrative
❑ **M.** Loading Docks	❑ Show the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer. ❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. ❑ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.		❑ 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
❑ **N.** Fire Sprinkler Test Water		❑ Provide a means to drain fire sprinkler test water to the sanitary sewer.	❑ 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

IF THESE SOURCES WILL BE ON THE PROJECT SITE …	… THEN YOUR STORMWATER CONTROL PLAN (SCP) SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	**2** Structural Source Controls—Show on Stormwater Control Plan Drawings	**3** Structural Source Controls—List in SCP Table and Narrative	**4** Operational Source Control BMPs—Include in SCP Table and Narrative
O. Miscellaneous Drain or Wash Water or Other Sources ❑ Boiler drain lines ❑ Condensate drain lines ❑ Rooftop equipment ❑ Drainage sumps ❑ Roofing, gutters, and trim. ❑ Other sources	Show drain lines and drainage sumps	❑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ❑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ❑ Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ❑ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ❑ Include controls for other sources as specified by local reviewer.	If architectural copper is used, implement the following BMPs for management of rinsewater during installation: ❑ If possible, purchase copper materials that have been pre-patinated at the factory. ❑ 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. ❑ Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. Implement the following BMPs during routine maintenance: ❑ Prevent rinse water from entering storm drains by discharging to landscaping or by collecting in a tank and hauling off-site.
❑ **P.** Plazas, sidewalks, and parking lots.	Show extent of permeable paving materials		❑ 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.

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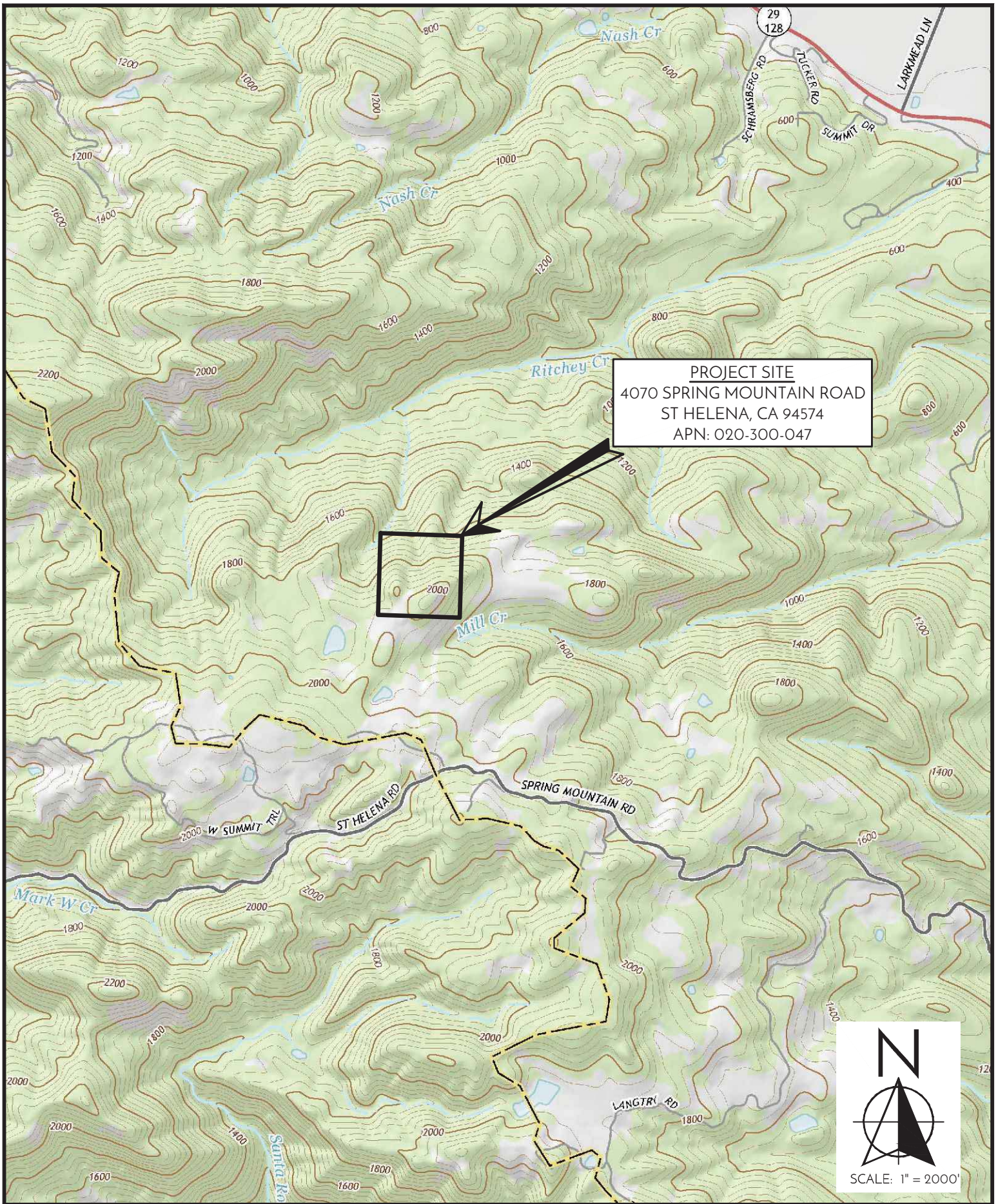
APPENDIX B
VICINITY MAP &
DRAINAGE MANAGEMENT AREAS



BARNETT VINEYARD
VICINITY MAP

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

DATE:	3/27/2019
SCALE:	1"=2000'
JOB #	19.005
APN:	020-300-047

SHEET 1 OF 1

OVERALL DMA EXHIBIT MAP

BARNETT VINEYARDS
OVERALL DMA EXHIBIT MAP

ST. HELENA CA

1485 Main Street, Suite 302
St. Helena, California 94574
707.302.6280

madrone engineering

DATE:	03/27/2019
SCALE:	1"=150'
JOB #:	19.005
APN:	020-300-047

DRAINAGE MANAGEMENT AREAS

COLOR	TOTAL AREA	NAME
	3,610 SF	DMA #101
	4,090 SF	DMA #102
	3,950 SF	DMA #103
	7,920	DMA #104
	1,722,800 SF	DMA #S01

<P> DMA # S01
(SELF - TREATING <5% IMPERVIOUS)
1,722,800 SF (39.55) AC

<P> BIORETENTION #02
165 SF

<P> DMA #102
(ROOF / CONCRETE)
4,090 SF

<P> DMA #103
(DRIVEWAY / PAVEMENT)
3,950 SF

<P> BIORETENTION #03
160 SF

<P> BIORETENTION #04
320 SF

<P> BIORETENTION #01
145 SF

<P> DMA #101
(DRIVEWAY / PAVEMENT)
3,610 SF

<P> DMA #104
(AC PAVEMENT)
7,920 SF

N

SCALE: 1" = 50'

0 50'
SCALE IN FEET

DMA EXHIBIT MAP

BARNETT VINEYARD
DMA EXHIBIT MAP

ST. HELENA CA

1485 Main Street, Suite 302
St. Helena, California 94574
707.302.6280

madrone engineering

DATE: 03/27/2019
SCALE: 1"=50'
JOB #: 19.005
APN: 020-300-047