DELTA CONSULTING & ENGINEERING OF ST. HELENA



STORMWATER RUNOFF MANAGEMENT PLAN (SRMP)

FOR THE

FEATHERED HORSE VINEYARDS LAKE RIDGE WINERY USE PERMIT MODIFICATION

PROJECT LOCATED AT

90 LONG RANCH ROAD ST. HELENA, CA 94574

County: NAPA APN: 032-010-068

FEBRUARY 17, 2010

PREPARED FOR REVIEW BY:

NAPA COUNTY DEPARTMENT OF PUBLIC WORKS 1195 THIRD STREET, ROOM 201 NAPA, CA 94559



A. PLANNING AND ORGANIZATION

- 1. Completed Post-Construction BMP Applicability Checklist (Appendix A) See Appendix.
- 2. Completed SRMP General Information Form (Appendix B) See Appendix.
- 3. Vicinity Map See Appendix.
- 4. Other Applicable Regulatory Permits Not applicable.
- 5. Nature and Purposed Use of the Project The purpose of this project is to construct a new winery, with a maximum wine production level of 10,000 gallons per year. The winery shall consist of one two-story building for production, storage, offices, and visitors and a cave for barrel storage.

B. IDENTIFY POLLUTANTS AND CONDITIONS OF CONCERN

- Drainage Study (Projects > 10,000 ft² new impervious surface) A hydrology report was submitted with the Use Permit Application for this project.
- 2. Source Control BMP Selection Worksheet (Appendix E) See Appendix.

3. Storm water Conveyance Systems

The storm water conveyance system within 150 feet of the project footprint consists of sheet flow, open channel flow and closed system. Much of the site is graded to flow to sheet flow to the surrounding landscaping which shall provide infiltration and minimize the post-development runoff in comparison to the pre-development runoff. The area that cannot be graded to flow to the surround landscaping, such as the loading area and exterior work area, shall be graded to collect the storm water in a series of drop inlets. As the winery building is built into the hillside, swales have been designed to collect the run-off from the up-hill side of the winery building in order to divert the storm water around the building for its protection. The storm water collected in the swale is then transferred to the closed storm drain system. This storm drain system also collects the rain water that falls on the roofs of the winery building. The outfall of the this storm drain system shall be to an existing culvert which then flows to an existing drainage swale located across Long Ranch Road from the project site. **DELTA CONSULTING & ENGINEERING** OF ST. HELENA

 Post-Construction BMP Selection Worksheet (Appendix F – Treatment Control) Not Applicable

C. POST-CONSTRUCTION BMPs

Site Design BMP's

1. Maintain Storm water Runoff Volumes to Pre-Development Levels

Site Design RMP

ite Design BMP	BMP Activity	
Minimize Impervious Footprint	Winery is a 2-story structure to minimize the footprint of the building. Parking areas and driveways are minimal. The use of impervious surfaces will be researched as to their applicability to this project	
Conserve natural areas	Construction shall occur to minimize the disturbance of natural areas to allow much of the remaining land in an undisturbed and natural condition. Natural drainage systems shall be used.	

- Storm water Outfall Structures within Jurisdiction of DFG, RWQCB, and/or ACE Not Applicable.
- 3. Slopes and Distances between Project Footprint and Open Storm Water Conveyance Systems

Project footprint is outside all applicable stream setbacks. The minimum distance between the project footprint and the existing drainage swale across Long Ranch Road is 120 feet.

Source Control BMPs

Source Control Measures (Appendix E)

Roads and Driveways – Two new driveways shall be constructed totaling approximately 300 feet. The driveways will be used to access the winery and upper loading area and will comply with Napa County Road and Street Standards.

Parking Areas – Two new parking areas consisting of ten total parking spaces shall be constructed. The upper parking area will sheet flow to nearby landscaping areas for infiltration and treatment.

New or Reconstructed Storm water Conveyance Systems - All new swales will be fabric-lined and vegetated. The final storm drain outfall shall consist of a rock energy dissipater.

Trash Storage Areas – The trash and recycling area shall be contained in a walled area to prevent off-site transport of trash. The trash area is adjacent to the upper parking area and shall be paved either of concrete or asphalt. Each trash and recycle bin shall have a lid that excludes rain.

Roofs, Gutters and Downspouts – All roofs, gutters, and downspouts shall be constructed with PVC or HDPE.

Processing Areas – All wine processing activities shall be conducted indoors and waste produced shall be collected and plumbed to the sewer system.

Interior Floor Drains – All interior floor drains shall be plumbed to the sewer system and not connected to the storm drain system.

Treatment Control BMP's

- 5. Treatment Control BMP Selection Worksheet (Appendix F) Not Applicable.
- 6. BMP Treatment Control Calculations Not Applicable.

D. SITE PLAN

See Appendix.

E. POST-CONSTRUCTION BMP IMPLEMENTATION AND MAINTENANCE AGREEMENT

There are no Post-Construction BMP's to be maintained at this site. All BMP's are either used during construction only or do not need to be maintained after construction.

DELTA CONSULTING & ENGINEERING OF ST. HELENA

F. OWNER'S CERTIFICATION

I, the undersigned, certify that all land clearing, construction and development shall be done pursuant to the approved plan.

Signed: Twank (the Date: 2/19/10 Title:



APPENDIX

- 1. Post-Construction Runoff Management Applicability Checklist (Appendix A)
- 2. Application for SRMP Reveiw (Appendix B)
- 3. SRMP Checklist for a Complete Application (Appendix C)
- 4. Source Control BMP Selection Worksheet (Appendix E)
- 5. Vicinity Map
- 6. Site Plan

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS APPENDIX A – APPLICABILITY CHECKLIST

		LICADIENT ONLONE	<u> </u>	
M	ost-Construction Runoff anagement pplicability Checklist	County of Napa Department of Public Works 1195 Third Street Napa, CA 94559 (707) 253-4351 for information		
Pro	oject Address: Assessor F	Parcel Number(s):	Project Number:	
90) Long Ranch Rd, St. Helena	032-010-068	(for County use Only)	
Ins	tructions:			
Structural projects requiring a use permit, building permit, and/or grading permit must complete the following checklist to determine if the project is subject to the Post-Construction Runoff Management Requirements. In addition, the impervious surface worksheet on the reverse page must also be completed to calculate the amount of new and reconstructed impervious surfaces proposed by your project. This form must be completed, signed, and submitted with your permit application(s). Definitions are provided in the Post-Construction Runoff Management Requirements are required for a common plan of development, the total project shall be considered for the purpose of filling out this checklist.				
PO ✓	 POST-CONSTRUCTION STORMWATER BMP REQUIREMENTS (Parts A and B) ✓ If any answer to Part A are answered "yes" your project is a "Priority Project" and is subject to the Site Design, Source Control, and Treatment Control design standards described in the Napa County Post-Construction Runoff Management Requirements. 			
1	If all answers to Part A are "No" and any answers to Part B are "Yes" your project is a "Standard Project" and is subject to the Site Design and Source Control design standards described in the Napa County Post-Construction Runoff Management Requirements.			
~	 If every question to Part A and B are answered "No", your project is exempt from post-construction runoff management requirements. 			
Pai	rt A: Priority Project Categories			
Do	pes the project meet the definition of one or more of the priorit	ty project categories?		
1.	Residential with 10 or more units			Yes No
2.	Commercial development greater than 100,000 square feet			Yes 🔊
3.	Automotive repair shop		••••••	Yes 😡
4.	Retail Gasoline Outlet		•••••	Yes No
5.	Restaurant	•••••		Yes 🔊
6.	Parking lots with greater than 25 spaces or greater than 5,0	000 square feet		Yes Ň
	efer to the definitions section for expanded definitions of the p rt B: Standard Project Categories	priority project categories.		
Do	pes the project propose:			
1.	A facility that requires a NPDES Permit for Stormwater Disc	charges Associated with Industr	ial Activities?	Yes No
2.	New or redeveloped impervious surfaces 10,000 square fee	et or greater, excluding roads?		Yes No
3.	Hillside residential greater than 30% slope			Yes 🔊
4.	Roadway and driveway construction or reconstruction whicl	h requires a Grading Permit		Yes No
5.	Installation of new storm drains or alteration to existing store	m drains?		Yes No
6.	Liquid or solid material loading and/or unloading areas?			Yes No
7.	Vehicle and/or equipment fueling, washing, or maintenance	e areas, excluding residential use	s?	Yes Ň
8.	Commercial or industrial waste handling or storage, excludi	ing typical office or household wa	aste?	Yes No
	te: To find out if your project is required to obtain an individua Justrial Activities, visit the State Water Resources Control Boa			iated with

•

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS APPENDIX A – APPLICABILITY CHECKLIST

Impervious Surface Worksheet

Project phasing to decrease impervious surface area shall not exempt the project from Post-Construction Runoff Management requirements. A new development or redevelopment project must comply with the requirements if it is part of a larger common plan of development that would result in the creation, addition and/or reconstruction of one acre or more of impervious surface. (For example, if 50% of a subdivision is constructed and results in 0.9 acre of impervious surface, and the remaining 50% of the subdivision is to be developed at a future date, the property owner must comply with the Post-Construction Runoff Management requirements.

	Impervious Surface (Sq Ft)		Total New and	
Type of Impervious Surface	Pre-Project (if applicable)	New (Does not replace any existing impervious area)	Reconstructed (Replaces existing impervious area)	Reconstructed Impervious Surfaces (Sq Ft)
Buildings, Garages, Carports, other Structures with roofs		8271		8271
Patio, Impervious Decking, Pavers and Impervious Liners		4497		4497
Sidewalks and paths		296		296
Parking Lots		2069		2069
Roadways and Driveways,		9687		9687
Off-site Impervious Improvements				
Total Area of Impervious Surface (Excluding Roadways and Driveways)		15133		15133

Incorrect information on proposed activities or uses of a project may delay your project application(s) or permit(s).

I declare under penalty of perjury, that to the best of my knowledge, the information presented herein is accurate and complete.

Name of Owner or Agent (Please Print):	Title: agent / attorney for owner
Kelly Berryman	
Signature of Owner or Agent:	Date:
Killen Berryman	02/17/10

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS APPENDIX B – APPLICATION FOR SRMP REVIEW

FOR OFFICE USE ONLY				
SUBMITTAL DATE: FILE #: APN #:				
USGS QUAD: CalWatershed:				
REQUEST:				
USE PERMIT CATEGORY: Hillside Residence Subdivision Commercial Facilit	y TYPE: Private Public			
BUILDING AND/OR GRADING PERMIT: Structure Driveway Road Rese	rvoir Cave Other			
FINAL APPROVAL: Date:				
Deposit: \$ Deposit Receipt Number Received By	Date			
TO BE COMPLETED BY APPLICANT	Dale			
(Please type or print legibly) Applicant's Name: Feathered Horse Partners, LLC Company:				
Telephone #: (707) 942-0750 Fax #: (707) 942-6755 E-Mage	ail:			
Mailing Address: C/o Berryman & Montalbano P.O. Box 513, C No Street City	alistoga, CA 94515			
No Street City Status of Applicant's Interest in Property:	State Zip			
Property Owner's Name:Ed Fitts				
Telephone #: () Fax #: () E-Mail: Mailing Address: 90 Long Ranch Road St. Helen				
Mailing Address:90 Long Ranch RoadSt. HelenNoStreetCity	State Zip			
	St. Helena			
No. Street	City			
Assessor's Parcel #(s):032-010-068				
SIGNATURE: I hereby certify that all the information contained in this application, including but not limited to, this application form, the Stormwater Runoff Management Plan (SRMP), the supplemental information sheets, site plan, plot plan, cross sections/elevations, is complete and accurate to the best of my knowledge. I hereby authorize such investigations including access to County Assessor's Records as are deemed necessary by the Department of Public Works for evaluation of this application and preparation of reports related thereto, including the right of access to the				
works for evaluation of this application and preparation of reports related thereto, inclu property involved.	raing the right of access to the			
signature of Applicant Date Signature of Property O	115 2/19/10			
Signature of Applicant Date Signature of Property C	Winer Date			

NAPA COUNTY CONSTRUCTION SITE RUNOFF CONTROL REQUIREMENTS APPENDIX C – SRMP CHECKLIST FOR A COMPLETE APPLICATION

FOR OFFICIAL USE ONLY		
PLAN REVIEWER:	DATE RECEIVED:	
PROJECT NAME:	PROJECT NUMBER:	
PERMIT CATEGORY: Use Permit Building Permit Grading Permit		
Project Category (check all applicable Priority or Standard Project categories)		
Priority Project	Standard Project	
Residential with 10 or more units	Industrial NPDES permit	
100,000 sq ft commercial	Impervious surface > 10,000 sq ft (excluding roads)	
Automotive repair shop	Hillside residential on slopes 30% or more	
Restaurant	Roadways and driveways that require a grading permit	
Retail Gasoline Outlet	New or alteration of storm drains	
Parking Lot (>25 spaces or >5,000SF)	Liquid or solid material loading areas	
	Vehicle or equipment fueling, washing, or maintenance	
	Commercial or industrial waste handling and storage	

At a minimum, the Stormwater Runoff Management Plan must cover the areas listed below.

$\sqrt{}$ = Complete, X = Incomplete, NA = Not Applicable

A. Planning and Organization

- 1. ____ Completed Post-Construction BMP Applicability Checklist (Appendix A)
- 2. \checkmark Completed SRMP General Information Form (Appendix B).
- 2. $\sqrt{}$ Vicinity map showing the site in relation to the surrounding area.
- <u>na</u> If applicable, incorporate or reference other regulatory permits and their requirements. Note: All State and Federal Permits (1600, 401/404, General Permit, etc) must be approved prior to any construction within State Waters.
- 4. $\underline{/}$ Describe the nature of the proposed use of the development project.

B. Identify Pollutants and Conditions of Concern

- 1. _/ Standard and Priority Projects proposing 10,000 or more sq. ft. of new impervious surface, excluding roadways and driveways or projects directly discharging to tidally-influenced receiving waters, must prepare a drainage study that calculates the pre-development runoff volume according to the criteria in Chapter 3.1.
- 2. ____ Standard and Priority Projects must provide a completed Source Control BMP Selection Worksheet (Appendix E) that lists all anticipated activities associated with the use of the proposed project that have the potential to generate pollutants.
- 3. ____ Standard and Priority Projects must list and describe all stormwater conveyance systems (e.g. storm drain, ditch, creek, etc) within 150 feet of the project footprint. Discretionary projects must also provide an analysis for all open stormwater conveyance systems. At a minimum, the analysis must consider the criteria in Chapter 3.3.

NAPA COUNTY CONSTRUCTION SITE RUNOFF CONTROL REQUIREMENTS APPENDIX C – SRMP CHECKLIST FOR A COMPLETE APPLICATION

4. <u>na</u> Priority Projects required to incorporate Treatment Control BMPs into the project design shall provide a completed Post-Construction BMP Selection Worksheet (Appendix F).

D. Post-Construction BMPs

Site Design BMPs

- 1. ____ List and describe all Site Design BMPs used to maintain stormwater runoff volumes to predevelopment conditions according to the criteria described in Chapter 4.1. If structural controls are required to maintain pre-development peak runoff conditions, a description of why Site Design BMPs alone are not practicable for maintaining runoff conditions is required.
- 2. ____ List and describe all structures (outfalls, culverts, etc.) proposed within the jurisdiction of the DFG, RWQCB, and/or ACE. The description must include the structure's specifications and designed storm capacity. The structure must be constructed in accordance with all applicable State and Federal permits.
- 3. ____ Provide the average slope and minimum and maximum distance between the project footprint and all open stormwater conveyance systems (e.g. ditches, creeks, etc.). Ministerial projects must establish setbacks that comply with the stream setback requirements in the Conservation Regulations and Floodplain Management Regulations. Discretionary projects may establish and/or restore wider buffers zones to protect aquatic resources and structures.

Source Control BMPs

4. <u>J</u> List and describe all source control measures included in the project design to eliminate pollutant contact with stormwater from the anticipated activities identified in the Source Control BMP Selection worksheet (Appendix E). The description must include the location and design specifications for each source control BMP.

Treatment Control BMPs

- 5. <u>na</u> Priority Projects provide a completed Treatment Control BMP Selection Worksheet (Appendix F) and include a description of the location and design specifications for each treatment control BMP.
- 6. <u>na</u> Provide the calculations used to design the treatment control BMPs to satisfy the numeric sizing treatment standards in Chapter 4.3. Applicants may count the site design BMPs toward meeting these numeric standards.

F. Site Plan

The site plan shall be neat and legible and shall be drawn on a 24" X 36" sheet and shall be folded to 8 $\frac{1}{2}$ " by 11" prior to submittal. When two or more sheets are used to illustrate the plan view, an index sheet is required, illustrating the entire project on one (1) 24" x 36" (minimum) sheet. The entire parcel shall be identified on the plan. If only a portion of the site will be developed, the entire parcel may be shown as a detail, with the area to be developed, cleared, and/or graded drawn to an appropriate scale.

The site plan shall include all of the following:

- 1. \checkmark Provide and legend and north arrow on the plan.
- 2. $\sqrt{}$ Maximum plan scale of 1" = 100'.
- 3. / An outline of the entire property.
- 4. ____ Provide a "limit of disturbance" line which shows the limit of soil disturbance and areas where existing vegetation is preserved.

NAPA COUNTY CONSTRUCTION SITE RUNOFF CONTROL REQUIREMENTS APPENDIX C – SRMP CHECKLIST FOR A COMPLETE APPLICATION

- 5. _/ All open stormwater conveyance systems (e.g. ditches, creeks) and setback distances must be delineated.
- 6. <u>na</u> State and Federal wetlands must be accurately delineated.
- 7. <u>na</u> The National Flood Insurance Program 100 Year Flood Zone and Flood Way must be delineated.
- 8. ____ Drainage areas on the property and direction of flow. Map must extend as far outside the site perimeter as necessary to illustrate relevant drainage areas. Where relevant drainage areas are too large to depict on the map, map notes or inserts are sufficient.
- 9. $\underline{ } / \underline{ }$ All storm drain inlets and outlets must be located on the plan.
- 10. $\underline{/}$ Anticipated stormwater discharge locations.
- 11. ____ Location of existing and future Site Design and source Control BMPs.
- 12. <u>na</u> Location of existing and future Treatment Control BMPs.
- 13. __/ Location of existing and future "impervious" areas paved areas, buildings, covered areas.

G. Post-Construction BMP Implementation and Maintenance Agreement

- 1. <u>na</u> One of the maintenance mechanisms described in Chapter 5A, which is satisfactory to the Director, must be signed and executed.
- 2. _/ Include a signed Owner's Certification that states "I, the undersigned, certify that all land clearing, construction and development shall be done pursuant to the approved plan." This must be signed in ink on each plan submitted or on an original reproducible.

NAPA COUNTY POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS APPENDIX E – SOURCE CONTROL BMP SELECTION WORKSHEET

All Standard and Priority Projects must complete and sign the Source Control BMP Selection Worksheet and submit it with their Stormwater Runoff Management Plan (SRMP). Date of Application: <u>02/17/10</u> Project Number: **Type of Application:** Cuse Permit Dialiding Permit Grading Permit (For County Use Only) Project Location or Address: 90 Long Ranch Road, St. Helena Project Name: Feathered Horse Vineyards Property Owner Name: Ed Fitts Feathered Horse Partners, LLC Applicant's Name: ☑ Owner ལț4), Contractor □ Engineer/Architect □ Developer Applicant's Address: c/o Berryman & Montalbano P.O. Box 513, Calistoga, CA 94515 Applicant's Phone: 707-942-0750 Fax: 70<u>7-942-6755</u> E-mail: _____ _____ Lot #: _____ APN: _____32-010-068 Parcel/Tract #: Fill out the table below to indicate which Source Control BMPs in Chapter 4.2 apply to your project. Check box to indicate Limited Exclusion (Check box if project is Source Control proposed activity Land Use/Activities excluded) BMP Standard Roads and driveways. х None 4.2.A х Parking Areas None 4.2.B New or Reconstructed Stormwater Conveyance 4.2.C None х Systems Storm drain Inlets and open channels or creeks. 4.2.D □ Detached Residential Homes Landscaping None 4.2.E Trash Storage Areas. 4.2.F Detached Residential Homes х Pools, Spas, and Fountains. 4.2.G None х Roofs, Gutters, and Downspouts. None 4.2.H Loading and Unloading Dock Areas None 4.2.1 Outdoor Material Storage Areas. 4.2.J Detached Residential Homes х Processing Areas. None 4.2.K Vehicle and Equipment Repair and Maintenance 4.2.L Detached Residential Homes

Incorrect information on proposed activities or uses of a project may delay your project application(s) or permit(s).

I declare under penalty of perjury, that to the best of my knowledge, the information presented herein is accurate and complete.

Name of Owner or Agent (Please Print):	Title:
Kelly Berryman	attorney for applicant agent
Signature of Owner or Agent: Kelly, J. Derry	Date: 02/17/10

Draft Date: June 3, 2008

Areas

 \mathbf{x}

Vehicle and Equipment Wash Areas

Food Service Equipment Cleaning

Interior Floor Drains.

Fueling Areas.

4.2.M

4.2.N

4.2.0

4.2.P

□ Detached Residential Homes

None

None

None



