BARTELT engineering

September 24, 2007
#07-14

Hilary Gitelman, Director
Napa County Conservation, Development
and Planning Department
1195 Third Street, Room 210
Napa, CA 94559

Re: Phase One Water Availability Analysis for the Cimarossa Winery, 1185 Friesen Drive, Angwin, CA, APN 018-060-069

Dear Ms. Gitelman:

As required by the Napa County Public Works Department and the interim policy approved by the Planning Commission on March 6, 1991, this letter summarizes the attached Phase One Water Availability Analysis for the proposed winery at 1185 Friesen Drive, Angwin.

As outlined in the interim policy a reconnaissance level report for this site has been prepared with the following items being pertinent to the study:

Site Plan

This analysis is based on the Cimarossa Winery Conceptual Site Improvement Plan prepared by Bartelt Engineering which shows topographic features in the vicinity of the proposed project. A site reconnaissance was performed to verify existing conditions.

Project Description

The project proposes to develop a new winery with an annual production of 10,000 gallons of wine on a portion of the existing 56.8 ± acre parcel (APN 018-060-069). The maximum staffing level at the winery will consist of two full-time employees and two part-time employees. The winery will have a very limited marketing program.

Following is a summary of the proposed marketing plan:

Description	Frequency	Number of Visitors
Private Tours & Tastings	5 to 7 per week	4 to 8 per day
Food & Wine Pairings	2 per month	20 per event
Industry Open House Events	2 per year	40 per event
Auction Related Events	2 per year	100 per event

civil engineering
land planning
1303 jefferson street, 200 B
napa, california 94559
(707) 258-1301
(707) 258-2926 fax

There is currently a main residence on the property as well as 12.8 ± acres of vineyard and 1.4 ± acres of olive orchard.

Water Consumption

The total water requirement for the existing and proposed uses on the parcel is calculated below using the estimated water use guidelines prepared by the Napa County Public Works Department.

Estimated Current Water Use

Existing Main Residence	0.5 ± acre-feet/year
Existing Vineyard 12.8 acres x 4 acre-feet/acre/year	12.8 ± acre-feet/year
Existing Orchard 1.4 acres x 4 acre-feet/acre/year	5.6 ± acre-feet/year
Total	18.9 ± acre-feet/year

Estimated Proposed Water Use

Existing Main Residence	0.5 ± acre-feet/year
Existing Vineyard 12.8 ± acres x 1 acre-foot/acre/year	12.8 ± acres-feet/year
Existing Orchard 1.4 acres x 4 acre-feet/acre/year	5.6 ± acre-feet/year
Proposed Winery	0.3 ± acre-feet/year
Total	19.2 ± acre-feet/year

Acceptable Water Use Using Napa County Interim Policy for Water Usage in Hillside Areas

0.50 acre-feet/acre of site

56.8 acres x 0.50 acre-feet/year = 28.4 acre-feet/year

The above analysis shows that the projected water usage is much less than the threshold water usage for hillside land use.

Proposed Water Source

Domestic, fire protection and vineyard water requirements will continue to be provided through the use of existing onsite wells. Water is stored in a storage tank located near the main residence. Additional tanks will be added as necessary to meet the domestic and fire protection requirements for the new winery.

Summary and Conclusions

The water use requirement for the existing and proposed uses on the parcel is projected to be less than the threshold usage levels specified in the Interim Water Availability Policy. Therefore, neither a Phase Two nor a Phase Three Analysis is required. If you have any questions regarding the information provided please feel free to call me.

Sincerely,

Michael R. Muelrath

Michael R. Muelrath, P.E.
Project Engineer

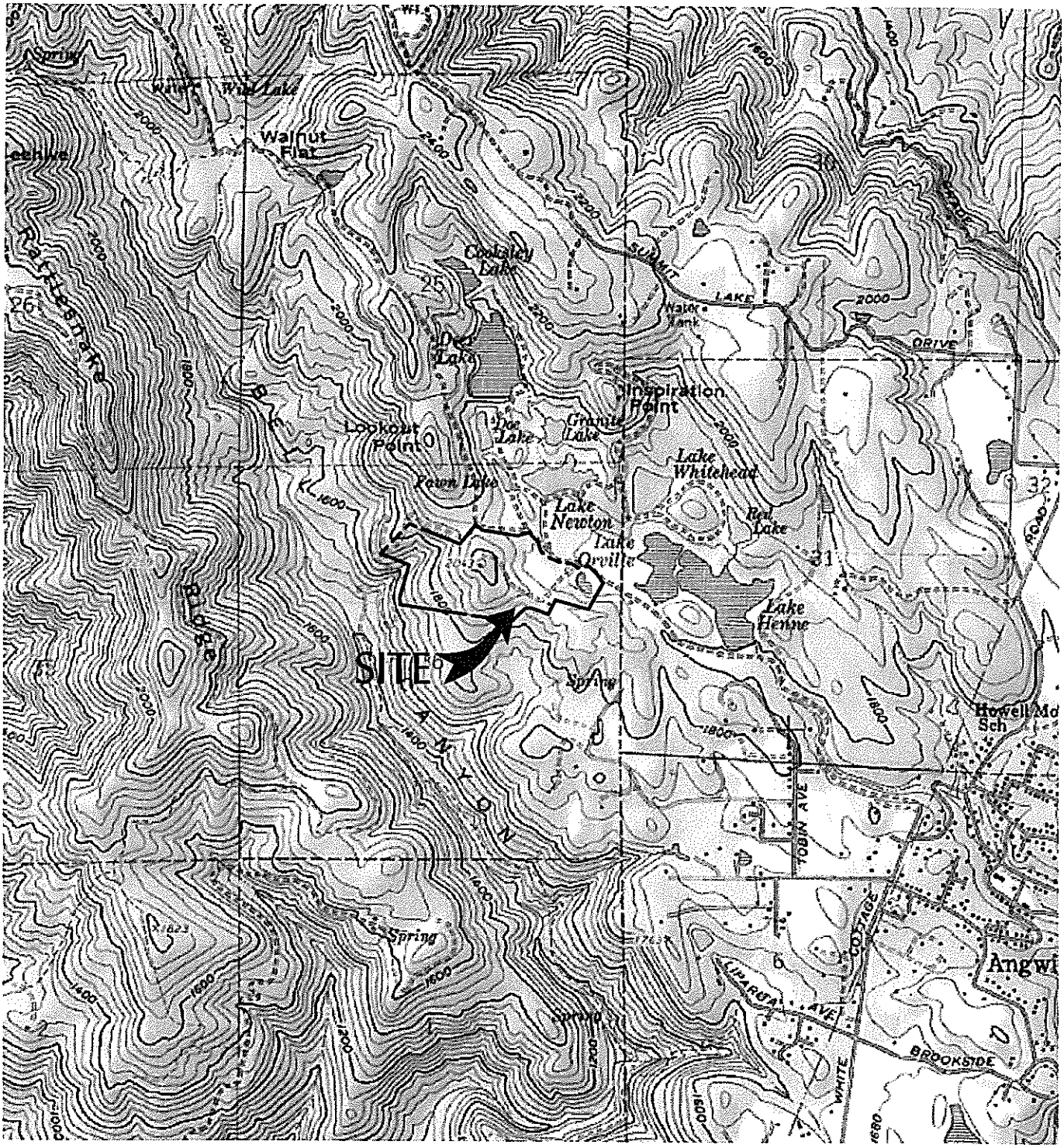
MRM:sd

cc: Dino Dina, M.D. & Cornelia Dekker
Cary Gott
Tom Faherty
Donna Oldford

TOPOGRAPHIC SITE LOCATION INFORMATION

USGS 7.5 MINUTE QUADRANGLE "ST. HELENA"

Scale: 1" = 2000'



BARTELT engineering

civil engineering · land planning

1303 jefferson street, 200 B, napa, ca 94559

(707) 258-1301 · fax (707) 258-2926

Cimarossa Winery

1185 Friesen Drive

Angwin, California

APN 018-060-069

Job no. 07-14

September 2007

NAPA COUNTY

DEPARTMENT OF PUBLIC WORKS

1195 THIRD STREET • ROOM 201 • NAPA, CALIFORNIA 94559-3092
PHONE 707-253-4351 • FAX 707-253-4627
www.co.napa.ca.us/PublicWorks/Default.htm

ROBERT J. PETERSON
Director of Public Works
County Surveyor-County Engineer
Road Commissioner

WATER AVAILABILITY ANALYSIS

PHASE 1 STUDY

Introduction: As an applicant for a permit with Napa County, It has been determined that Chapter 13.15 of the Napa County Code is applicable to approval of your permit. One step of the permit process is to adequately evaluate the amount of water your project will use and the potential impact your application might have on the static groundwater levels within your neighborhood. The public works department requires that a Phase 1 Water Availability Analysis (WAA) be included with your application. The purpose of this form is to assist you in the preparation of this analysis. You may present the analysis in an alternative form so long as it substantially includes the information required below. Please include any calculations you may have to support your estimates.

The reason for the WAA is for you, the applicant, to inform us, to the best of your ability, what changes in water use will occur on your property as a result of an approval of your permit application. By examining the attached guidelines and filling in the blanks, you will provide the information we require to evaluate potential impacts to static water levels of neighboring wells.

Step #1:

Provide a map and site plan of your parcel(s). The map should be an 8-1/2"x11" reproduction of a USGS quad sheet (1:24,000 scale) with your parcel outlined on the map. Include on the map the nearest neighboring well. The site plan should be an 8-1/2"x11" site plan of your parcel(s) with the locations of all structures, gardens, vineyards, etc in which well water will be used. If more than one water source is available, indicate the interconnecting piping from the subject well to the areas of use. Attach these two sheets to your application. If multiple parcels are involved, clearly show the parcels from which the fair share calculation will be based and properly identify the assessors parcel numbers for these parcels. Identify all existing or proposed wells.

Step #2: Determine total parcel acreage and water allotment factor. If your project spans multiple parcels, please fill a separate form for each parcel.

Determine the allowable water allotment for your parcels:

Parcel Location Factors

The allowable allotment of water is based on the location of your parcel.

There are 3 different location classifications. Valley floor areas include all locations that are within the Napa Valley, Pope Valley and Carneros Region, except for areas specified as groundwater deficient areas. Groundwater deficient areas are areas that have been determined by the public works department as having a history of problems with groundwater. All other areas are classified as Mountain Areas. Please circle your location classification below (Public Works can assist you in determining your classification if necessary):

Valley Floor 1.0 acre feet per acre per year
Mountain Areas 0.5 acre feet per acre per year
MST Groundwater Deficient Area 0.3 acre feet per acre per year

Assessors Parcel Number(s)	Parcel Size (A)	Parcel Location Factor (B)	Allowable Water Allotment (A) X (B)
018-060-069	56.8 ± acres	0.5 acre feet/acre	28.4 acre-feet

Step #3:

Using the guidelines in Attachment A, tabulate the existing and projected future water usage on the parcel(s) in acre-feet per year (af/yr). Transfer the information from the guidelines to the table below.

EXISTING USE:		**PROPOSED USE:**	
Residential	0.5 af/yr	Residential	0.5 af/yr
Farm Labor Dwelling	-0- af/yr	Farm Labor Dwelling	-0- af/yr
Winery	-0- af/yr	Winery	0.3 af/yr
Commercial	-0- af/yr	Commercial	-0- af/yr
Vineyard*	12.8 af/yr	Vineyard*	12.8 af/yr
Other Agriculture	5.6 af/yr	Other Agriculture	5.6 af/yr
Landscaping	-0- af/yr	Landscaping	-0- af/yr
Other Usage (List Separately):		Other Usage (List Separately):	
_____	_____ af/yr	_____	_____ af/yr
_____	_____ af/yr	_____	_____ af/yr
_____	_____ af/yr	_____	_____ af/yr
TOTAL:	18.9± af/yr	**TOTAL:**	19.2± af/yr
TOTAL:	6,158,584 gallons**	**TOTAL:**	6,256,339 gallons**

*Water use for vineyards should be no lower than 0.2 AF—unless irrigation records are available that show otherwise.

**To determine your existing and proposed total water use in gallons, multiply the totals (in acre- feet) by 325,821 gal/AF. (325,851)

Is the proposed use less than the existing usage ( ) Yes (x) No ( ) Equal

Step #4:

Provide any other information that may be significant to this analysis. For example, any calculations supporting your estimates, well test information including draw down over time, historical water data, visual observations of water levels, well drilling information, changes in neighboring land uses, the usage if other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.

_____

_____

_____

Conclusion: Congratulations! Just sign the form and you are done! Public works staff will now compare your projected future water usage with a threshold of use as determined for your parcel(s) size, location, topography, rainfall, soil types, historical water data for your area, and other hydrogeologic information. They will use the above information to evaluate if your proposed project will have a detrimental effect on groundwater levels and/or neighboring well levels. Should that evaluation result in a determination that your project may adversely impact neighboring water levels, a phase two water analysis may be required. You will be advised of such a decision.

Signature: Michael R. Muelrath **Date:** 9/24/2007 **Phone:** (707) 258-1301