

#4108060.0  
October 1, 2008

**RECEIVED**

OCT 03 2008

NAPA CO. CONSERVATION  
DEVELOPMENT & PLANNING DEPT.

John McDowell  
Napa County Planning Department  
1195 Third Street, Rm, 210  
Napa, California 94559

RE: Bennett Lane Winery

Dear John,

The purpose of this letter is to address fire flow storage and water availability for the Bennett Lane Winery Project. The current project proposes 17,550 square foot of winery and accessory buildings built as fire rating Type V-N construction. Napa County Code Section 15.32.805 specifies winery's as "Light Fire Hazard Occupancy". Moreover, Table B105.2 of this section specifies fire storage requirements for this occupancy and fire rating as 300 gallons per minute for 60 minutes duration with a storage volume of 9,000 gallons. This is consistent with the memo dated June 20, 2007 from Napa County Fire to Napa County Conservation, Development, and Planning Department.

The Napa County Fire Department Commercial Development Guide specifies that "an automatic sprinkler system shall be installed during a building addition when the new floor area is equal to or greater than 50% of the existing building." Moreover, this Guide also states that "...most projects that are not served by a community water system will require a fire pump to meet the required fire flow and or sprinkler flows. Fire pumps will be installed in accordance with NFPA 20 and requires a UL listing or FM approval." Therefore, the well discharge rates on this project have no direct affect on meeting fire suppression requirements for this project. Additional expected to be accommodated by additional tanks, as required, and sufficient pumping capacity met fire water storage is to accommodate the sprinkler demand.

With respect to water availability and well service, a new Phase 1 Water Availability Analysis has been prepared for this project and is attached. This Analysis shows that the existing use requires 4.94 acre-feet of water annually, whereas the proposed expansion would require 5.05 acre-feet, a 2.2% increase. The total water available to the property under current County Guidelines is 10 acre-feet, 4.95 acre-feet above its projected demand. This 4.95 acre-feet is 3,258,288 gallons of water – well beyond the expected fire fighting storage requirement.

In summary, it is expected that the project would be conditioned to meet the requirements set forth in the June 20, 2007 memo from Napa County Fire. In addition, the Phase 1 Water

Availability Analysis shows that, under current Napa County Guidelines, there is sufficient water to meet vineyard, production and fire suppression needs of the proposed development.

Please feel free to call with any questions.

Sincerely,



Carl Butts, P.E.  
Associate Principal  
RCE # 70562



cc: Donna Oldford w/ 1 copy Water Availability Analysis





# NAPA COUNTY

## DEPARTMENT OF PUBLIC WORKS

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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 Number(s)	Parcel	Parcel Size (A)	Parcel Factor (B)	Location	Allowable Water Allotment (A) X (B)
017-160-002		10 acres	1.0 acre ft/acre/yr		10.0 acre ft/yr

### 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:

Residential NA af/yr  
Farm Labor Dwelling 0.75 af/yr  
Winery 1.05 af/yr  
Commercial NA af/yr  
Vineyard\* 3.16 af/yr  
Other Agriculture NA af/yr  
Landscaping NA af/yr  
Other Usage (List Separately):

\_\_\_\_\_ af/yr  
\_\_\_\_\_ af/yr  
\_\_\_\_\_ af/yr

#### PROPOSED USE:

Residential NA af/yr  
Farm Labor Dwelling 0.75 af/yr  
Winery 1.14 af/yr  
Commercial NA af/yr  
Vineyard\* 3.16 af/yr  
Other Agriculture NA af/yr  
Landscaping NA af/yr  
Other Usage (List Separately):

\_\_\_\_\_ af/yr  
\_\_\_\_\_ af/yr  
\_\_\_\_\_ af/yr

**TOTAL:** 4.96 af/yr  
**TOTAL:** 1,616,072 gallons\*\*

**TOTAL:** 5.05 af/yr  
**TOTAL:** 1,645,396 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.

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 of other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.

The only water use increase is due to the increased number of guests visiting the winery.

Existing peak number of guests per day = 75

Proposed peak number of guests per day = 125

Existing winery domestic water use = 0.13 ac-ft/yr

Proposed winery domestic water use = 0.22 ac-ft/yr

**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:  Date: Oct 1, 2008 Phone: 107.252.3301



## **Attachment A: Estimated Water Use Guidelines**

### **Typical Water Use Guidelines:**

Primary Residence	0.5 to 0.75 acre-feet per year (includes some landscaping)
Secondary Residence	0.20 to 0.30 acre-feet per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year

### **Non-Residential Guidelines:**

#### **Agricultural:**

Vineyards	
Irrigation only	0.2 to 0.5 acre-feet per acre per year
Heat Protection	0.25 acre feet per acre per year
Frost Protection	0.25 acre feet per acre per year
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year
Irrigated Pasture	4.0 acre-feet per acre per year
Orchards	4.0 acre-feet per acre per year
Livestock (sheep or cows)	0.01 acre-feet per acre per year

#### **Winery:**

Process Water	2.15 acre-feet per 100,000 gal. of wine
Domestic and Landscaping	0.50 acre-feet per 100,000 gal. of wine

#### **Industrial:**

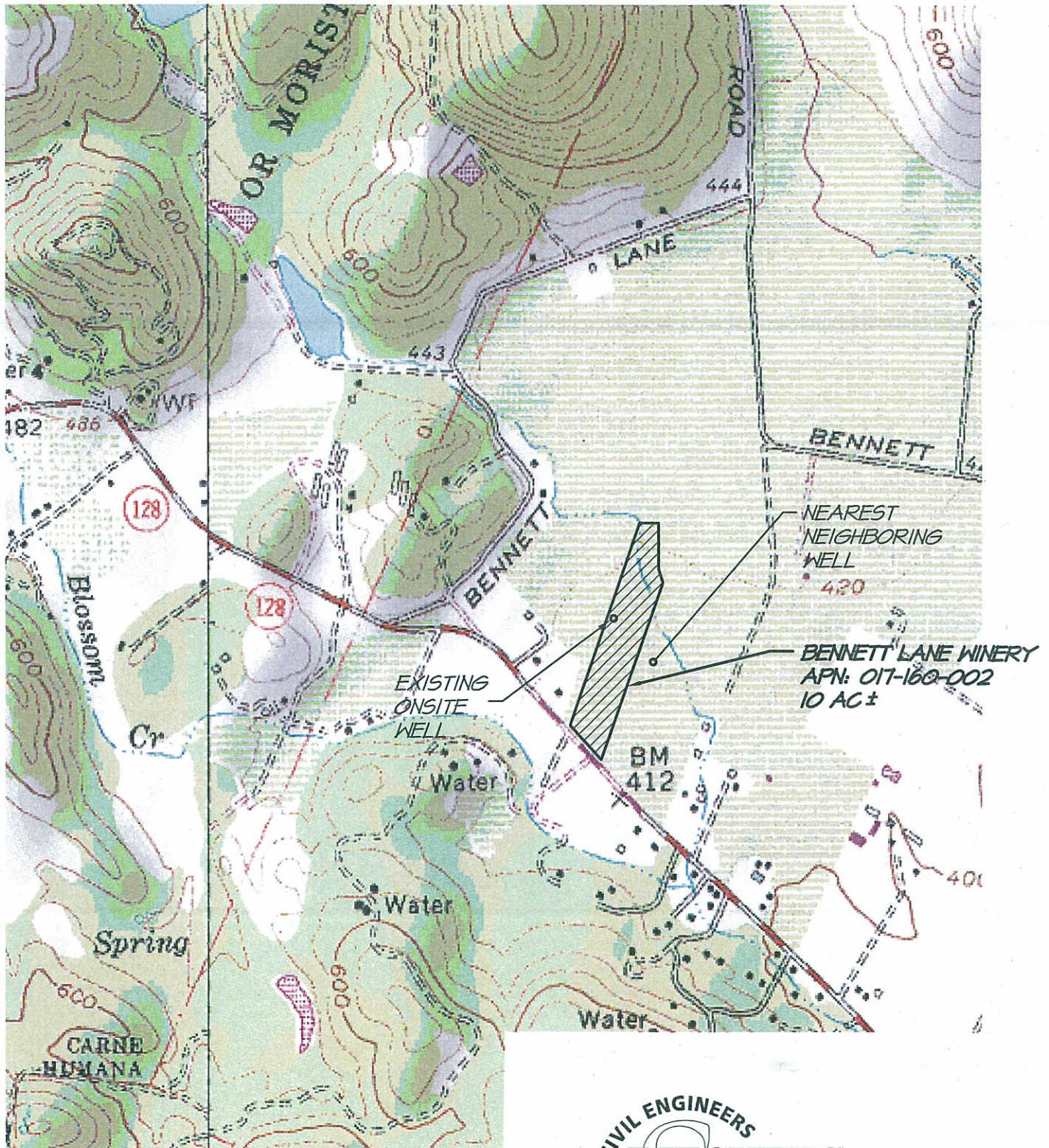
Food Processing	31.0 acre-feet per employee per year
Printing/Publishing	0.60 acre-feet per employee per year

#### **Commercial:**

Office Space	0.01 acre-feet per employee per year
Warehouse	0.05 acre-feet per employee per year



BENNETT LANE WINERY  
SITE PLAN  
NAPA COUNTY CALIFORNIA  
SCALE: 1" = 1,000'



MAP

SCALE: 1" = 1,000'

CONSULTING CIVIL ENGINEERS  
**RIECHERS  
& SPENCE**  
ASSOCIATES

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OCT 1, 2008

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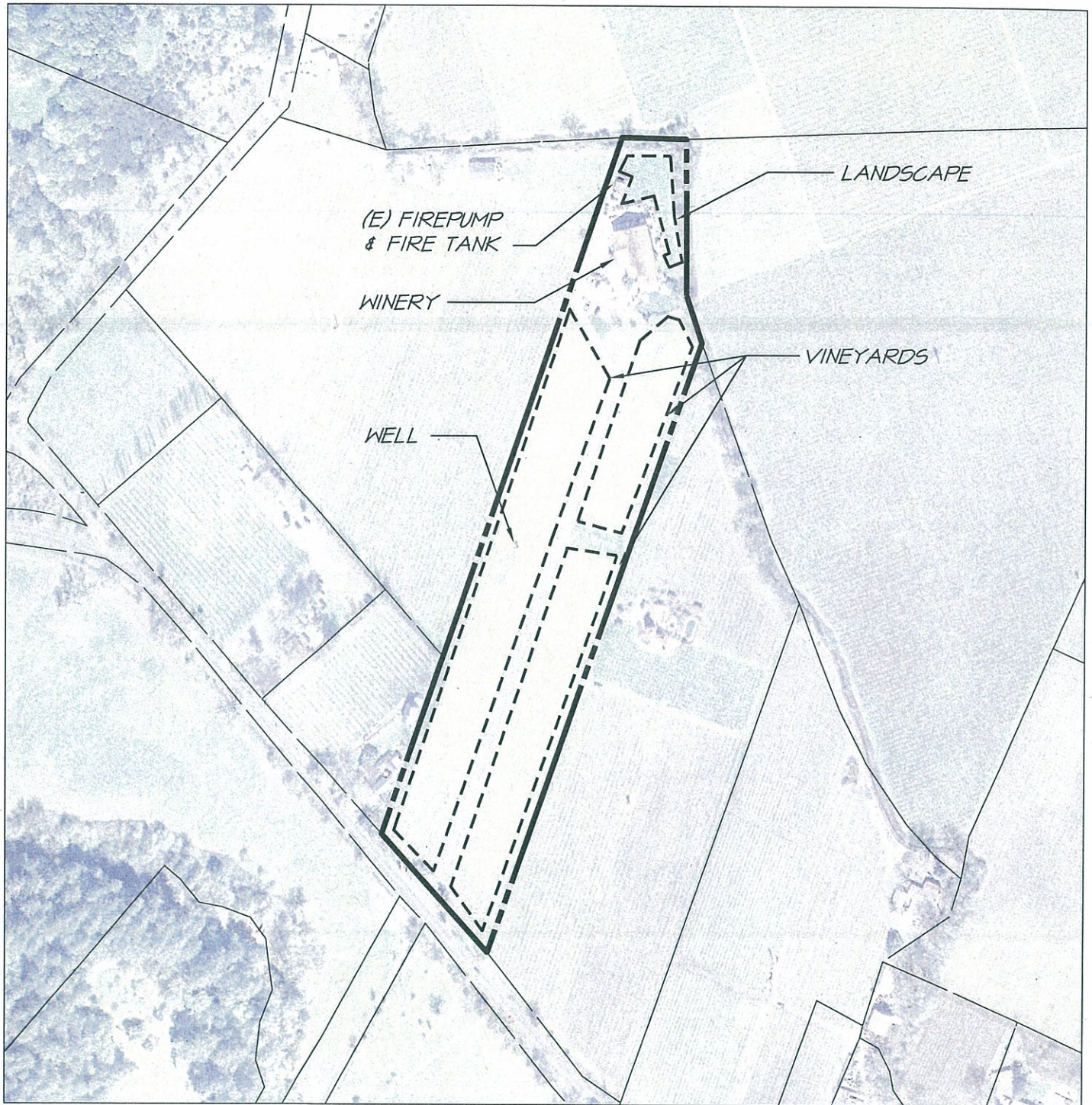
USGS.dwg

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BENNETT LANE WINERY  
SITE EXHIBIT  
NAPA COUNTY CALIFORNIA

SCALE: 1" = 300'



1541 Third Street  
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SEPT 29, 2008

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