

March 31, 2010

lob No. 09-124

Rick Marshall, P.E.
Napa County Public Works Department
1195 Third Street, Suite 201
Napa, California 94559

Re: Sight Distance Analysis for Relic Wine Cellars, 2400 Soda Canyon Road, Napa, CA NCAPN 032-090-024

Dear Mr. Marshall:

Applied Civil Engineering has prepared an analysis of the sight distance for the proposed driveway that will serve the Relic Wine Cellars located at 2400 Soda Canyon Road in Napa County, California. In order to analyze the site distance we performed the following activities:

- 1. Drove past the site on Soda Canyon Road, travelling in both directions, several times to determine an appropriate design speed based on our driving preferences and that of other drivers in the area at that time
- 2. Reviewed Caltrans Highway Design Manual to determine recommended sight distance
- 3. Measured site distance to the east and west from the proposed driveway location

Following is a summary of our findings:

#### **Design Speed**

We did not observe a posted speed limit on Soda Canyon Road in the immediate vicinity of the project site. Based on our observations we determined that a design speed of 45 miles per hour (mph) is appropriate for this location on Soda Canyon Road.

### **Required Sight Distance**

Table 201.1 of the Caltrans Highway Design Manual indicates that the minimum stopping sight distance for a design speed of 45 mph is 360 feet.

# **Actual Sight Distance**

We observed the following sight distances at the proposed driveway location:

Looking South (Left) 475 feet Looking West (Right) 425 feet

Our observations assume that the two small trees located on the Relic Wine Cellars property just north of the proposed driveway are removed as indicated on the proposed site plan and that the existing fence will be moved back to increase visibility along Soda Canyon Road.

#### Conclusion

The above analysis shows that the available sight distance will exceed Caltrans' requirements for stopping sight distance provided that the two small trees are removed as noted on the proposed site plan.

If you have any questions about this analysis please feel free to contact me at (707) 320-4968.

No. 67435

Exp. 12/31/10

Sincerely,

Michael R. Muelrath, P.E.

Michael R. Muchath

Principal

Enclosure:

Sight Distance Photographs



View looking left (south) from proposed driveway location



View looking right (north) from proposed driveway location

# Hornisher, Trish

From: Mike Muelrath [Mike@appliedcivil.com]

Sent: Monday, July 05, 2010 4:29 PM

To: Hornisher, Trish

Subject: Relic Sight Distance

Hi Trish,

Just wanted to let you know that I verified that there is sufficient sight distance for the scenario where a southbound truck is stopped in Soda Canyon Road at the driveway and a car is coming downhill behind him.

The stopping sight distance is 360 feet and there is at least 400 feet of available sight distance.

Just wanted to get back to you so you had this information.

Thanks,

Mike

Mike Muelrath, P.E. Principal



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