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May 14, 2014

Mr. Eric Sklar
CS2 Wines, LLC
PO Box 47
Oakville, CA 94562

SUBJECT: FOCUSED COLLISION HISTORY ANALYSIS CONDUCTED FOR THE PROPOSED YOUNTVILLE HILL WINERY FACILITY IN THE COUNTY OF NAPA, CA.

Dear Mr. Sklar:

This letter report presents the findings of the collision history analysis we conducted for the proposed Yountville Hill Winery facility to be located at 7400 State Route 29 (SR-29) in Napa County, California.

The purpose of the study was to evaluate the accident rate on SR-29 in the vicinity of the project in comparison to the accident rate along a longer representative segment of SR-29 overall. The accident rates were also compared to statewide rates and Napa County rates as identified by the California State Department of Transportation (Caltrans). A review of accidents near the project driveway is also presented.

The calculated accident rate in the project vicinity is lower than the accident rate for the overall SR-29 corridor that was evaluated, and both SR-29 rates are lower than the statewide average and Napa County average rates, indicating the evaluated roadway segments of SR-29 are experiencing fewer accidents than average based on the volumes and roadway characteristics.

STUDY METHODOLOGY

The accident data was derived from the California Statewide Integrated Traffic Records System (SWITRS). The recorded accident history is the source used by transportation engineers in assessing accident history. A location may have unrecorded accidents in addition to the recorded ones. However, unrecorded accidents cannot be scientifically evaluated.

In order to provide a standardized measure of accident frequency, an "accident rate" calculation can be conducted which accounts for the number of accidents relative to the amount of traffic and the length of the segment being evaluated. The accident rate calculation is stated in terms of "accidents per million vehicle miles" (a.m.v.m.) and is based on the number of accidents occurring within the chosen segment, the segment length, and the average daily traffic volumes.

The accident rates are derived from the following equation:

$$\text{Roadway Segments} = \frac{\text{No. of Accidents (3 year average)} \times 1{,}000{,}000}{\text{Average Daily Traffic} \times \text{Segment Length (miles)} \times 365 \text{ days/year}}$$

The average number of accidents per year for the three year period was used in calculating the accident rate. The average daily traffic volumes were obtained from Caltrans volume databases and reflect average annual daily traffic (AADT) volumes.[1]

The access driveway to the proposed winery is located on the east side of State Route 29 north of the Town of Yountville between Washington Street (to the south) and Yount Mill Road (to the north). Specifically, the driveway is located approximately 1,500 feet south of Yount Mill Road and 3,330 feet north of Washington Street. SR-29 north of Washington Street functions primarily as a two lane rural arterial road with intermittent left-turn lanes or center two-way turn lanes extending to the Town of St. Helena. Within the vicinity of the project driveway there is a mix of private/commercial driveways and public cross streets, including the Mustard's Grill Restaurant and Cosentino Winery driveways located on the west side of SR-29.

To calculate the accident rate within the project vicinity, the segment of SR-29 between the Washington Street and Oakville Grade intersections was evaluated. This segment encompasses the project driveway as well as the other nearby driveways and cross streets.

An accident rate was also calculated for the "overall" SR-29 corridor between the towns of Yountville and St. Helena for comparison to the "project vicinity" accident rate. For the "overall" calculation, the SR-29 corridor between Washington Street (near Yountville) and Zinfandel Lane (near St. Helena) was evaluated. SR-29 north of Zinfandel Lane was not included in the analysis because vehicle queuing frequently influences traffic flows between Zinfandel Lane and Pope Street in St. Helena.

COLLISION HISTORY

The study evaluated the collision history for the three year period from 2010-2012. (These are the most recent three full calendar years for which SWITRS accident records are available.) The accident locations on SR-29 between Washington Street and Zinfandel Lane were plotted. Then the number of accidents that occurred from Washington Street to Oakville Grade and also from Washington Street to Zinfandel Lane were counted. The accident totals excluded accidents occurring at or within 100 feet of a public cross street since these are considered "intersection" accidents for which the accident rate is calculated differently because they are influenced by side street traffic volumes and the intersection design characteristics (such as lane geometries and type of traffic controls).

For the "project vicinity" segment (between Washington Street and Oakville Grade), there were 27 total accidents over the three year period (8 recorded accidents in 2008, 8 in 2009, and 11 in 2012) for an average of 9.0 accidents per year. The segment is 1.88 miles long and has an AADT volume of 23,433 trips (the average AADT for years 2010-2012).

The "project vicinity" segment has a calculated accident rate of 0.56 accidents per million vehicle miles.

For the "overall" SR-29 segment (between Washington Street and Zinfandel Lane), there was a total of 89 recorded accidents (24 in 2010, 29 in 2011, and 36 in 2012) representing an average of 29.67 accidents per year. The segment was measured to be 5.93 miles long and to have an AADT of 22,533 trips (the average of all Caltrans AADT volumes between Washington Street and Zinfandel Lane from 2010 to 2012).

The "overall" SR-29 segment has a calculated accident rate of 0.61 accidents per million vehicle miles.

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[1] California Department of Transportation, Traffic Data Branch, AADT Volumes on SR 29 between Washington Street and Zinfandel Lane for Years 2010-2012, Division of Traffic Operations, Sacramento, CA.

ACCIDENT RATES

The calculated accident rate in the project vicinity of 0.56 a.m.v.m. is lower than the rate calculated for the SR-29 corridor of 0.61 a.m.v.m., indicating the number of accidents experienced in the vicinity of the project site is less than, though similar to, the overall accident rate along the SR-29 corridor between Yountville and St. Helena.

The calculated accident rates were also compared with statewide average rates compiled by Caltrans as published in their most recent document 2010 Collision Data on California State Highways.[2] The document provides average accident rates for various types of roadways categorized by number of lanes, travel speed, etc., and are derived from the California Statewide Integrated Traffic Records System.

The statewide average accident rate for a conventional, flat, two-lane rural road with speed limit of 55 mph or less is 0.82 accidents per million vehicle miles. The calculated accident rates for SR-29 are lower than the statewide average rate, indicating the segment is experiencing fewer accidents than the statewide average for this type of roadway and volumes. In addition to the statewide rates, collision data are also provided by County. The accident rate in Napa County for two and three lane rural roads is 1.50 a.m.v.m. (2010 data). Therefore, the accident rates on SR-29 near the project driveway as well as the overall segment between Washington Street and Zinfandel Lane are lower than the countywide rate for similar roadways.

COLLISION HISTORY NEAR THE PROJECT DRIVEWAY

The collision history in the immediate area of the project driveway, including the Mustard's Grill Restaurant driveway and the Cosentino Winery facility, was evaluated. Between 2010 and 2012 there was one recorded accident within 100 feet of the project driveway (vehicle hitting an object due to unsafe northbound turn 100 feet north at mile marker 21.35). As the nearby restaurant and winery driveway intersections have experienced a low number of recorded accidents over the surveyed time period, it is reasonable to expect the collision potential to be similar to these neighboring driveways.

FINDINGS/CONCLUSIONS

The collision analysis calculated the accident rate on State Route 29 in the vicinity of the project driveway based on the average number of accidents per year, segment length, and daily traffic volumes. This rate was compared to the calculated accident rate for the SR-29 corridor between Yountville (Washington Street) and St. Helena (Zinfandel Lane). The accident rate in the project vicinity is slightly lower than the accident rate for the entire SR-29 corridor that was evaluated, indicating the number of accidents experienced in the project vicinity is lower than the number of accidents experienced by the entire SR-29 corridor segment that was analyzed.

The accident rates were also compared to the statewide average rate for similar roadway types. The-SR 29 accident rates are lower than the statewide average rate, indicating the analyzed segments of SR-29 are not experiencing accidents above the statewide average rate for similar road types.

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[2] California Department of Transportation, 2010 Collision Data on California State Highways (road miles, travel, collisions, collision rates), Division of Traffic Operations, Sacramento, CA.

Other active driveways in the area have experienced very few recorded accidents during the survey period. Based on the winery volumes and roadway characteristics similar to the neighboring driveways, the accident potential at the proposed Yountville Hill Winery would be expected to be comparable.

We trust that this report addresses the requested analysis. Please call if you have any comments or questions.

Sincerely,

OMNI-MEANS, Ltd.
Engineers & Planners

George Nickelson

George W. Nickelson, P.E.
Branch Manager

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June 6, 2014

Mr. Eric Sklar
CS2 Wines, LLC
P.O. Box 47
Oakville, CA 94562

RE: Addendum Letter Addressing Reduced Winter Winery Operations; Focused Traffic Analysis for the Proposed Yountville Hill Winery – Located at 7400 St. Helena Highway (SR-29) in Napa County (September 19, 2013)

Dear Mr. Sklar:

The following addendum letter is in response to proposed reductions in winery operations during the winter activity period. Based on our conversations with Mr. Lester Hardy, the proposed winery would have reduced operating hours from November 1 through February 28.[1] Specifically, the tasting room's hours would be reduced from 10:00 a.m. – 6:00 p.m. to 10:00 a.m. - 4:00 p.m. In addition, all non-production employees would be leaving the site by 5:00 p.m. The goal would be to reduce overall winery traffic volumes and to prevent winery operations from extending into early/late evening hours. Proposed changes to winery operations (with regard to traffic flow) would primarily affect the weekday PM peak hour since visitor hours would no longer extend into the 4:00 – 6:00 p.m. time period. Weekend operations evaluate the mid-day period (between 1:00 – 3:00 p.m.) and traffic flows would not be affected by these proposed changes to winery operating hours.

Based on the proposed changes to winery operations described above, the following weekday PM peak hour trip generation could be expected:

110 weekday daily visitors / 6 hours operation	=	18 visitors/hr.
Weekday PM Peak Hour Traffic:		
18 visitors / 2.6 persons per vehicle x 1 trip (outbound)	=	7 peak hour trips
1 daily truck trip x 0.38 peak (outbound)	=	1 peak hour trip
14 full time employees x 1 trip/employee (outbound)	=	14 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekday PM Peak Hour Trips	=	**22 trips (0 in, 22 out)**

As calculated above, the reduced winery operations would result in 22 peak hour trips (all outbound from the proposed winery). Compared to previous calculations for winery operations extending to 6:00 p.m., weekday PM peak hour trip generation would be reduced from 39 trips to 22 trips.[2] This calculation uses the same methodology for auto occupancy and peaking factors as outlined in the County of Napa's

[1] *Mr. Lester Hardy, Attorney at Law, St. Helena, Proposed Yountville Hill Winery operations during Winter months, Personal communication June 2, 2014.*
[2] *Omni-Means Ltd. Focused Traffic Analysis for the Proposed Yountville Hill Winery – Located at 7400 St. Helena Highway (SR-29) in Napa County, September 19, 2013.*

"Winery Traffic Information / Trip Generation Sheet" for winery use modifications and/or applications and assumes 18 visitors per hour.

Please contact me if you have any questions or input.

Sincerely,

OMNI-MEANS, Ltd.
Engineers & Planners

Peter J. Galloway
Project Manager/Transportation Planner

Cc: Mr. Lester Hardy, Attorney at Law, St. Helena
Mr. George Nickelson, P.E., Omni-Means

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