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January 20, 2015

Via E-Mail

Commissioner Phillips and Members of the
Planning Commission
Napa County
1195 Third Street, Suite 210
Napa, CA 94559

Attn: David Morrison, Department Director
David.Morrison@countyofnapa.org

Re: Girard Winery Use Permit P14-00053 Initial Study/Proposed Negative Declaration.

Dear Commissioners:

On behalf of the Tofanelli family, we submit these comments on the Initial Study/proposed Negative Declaration ("IS") for the proposed Girard Winery Use Permit ("Project"). Substantial evidence shows that the Project could have a number of potentially significant impacts on the environment. Accordingly, and as a matter of law, the Planning Commission would be in violation of the California Environmental Quality Act, Pub. Res. Code § 21000 et seq. ("CEQA") if it adopts the proposed Negative Declaration and approves the Project without first requiring the preparation of an environmental impact report ("EIR").

As discussed below, the IS neither accurately identifies nor analyzes the extensive project-specific and cumulative environmental impacts that will accompany the Project. The document lacks the necessary evidentiary support that the Project will not adversely impact water supply, water quality, transportation, parking, noise, and visual resources. Furthermore, the mitigation measures the IS relies on are vague, deferred and unenforceable. In the absence of an enforceable and proven plan for mitigation for the extensive significant environmental impacts, there remains more than a fair argument that the Project will have significant environmental effects not analyzed nor acknowledged in the IS.

In addition to these CEQA deficiencies, the Project violates the Winery Definition Ordinance and significant provisions of the Napa County General Plan. Thus, approval of the Project would not just violate CEQA, but would also violate California Planning and Zoning Law, Gov't Code § 65000 et seq.

As an initial matter, we request that the Planning Commission delay consideration of this Project for a minimum of 30 days. The abbreviated public review period for a project of this magnitude, and with such potentially severe environmental consequences, is particularly troubling. As we explained in our December 15, 2014 letter to the Commission, the County released the IS on November 25, 2014, just two days before Thanksgiving with an initial public hearing date of December 17, 2014. The County granted a brief extension of the comment period –till January 21, 2014 -- but the extension included the holiday season when members of the public were otherwise occupied. In essence, therefore, the County is providing only 12 additional days since the end of the holiday season to complete our review, retain experts and prepare a letter for submission. Of critical importance, the Commission is being asked to consider approval of this Project, without having the opportunity to review the public comment on the IS.

This letter, along with the hydrologic report prepared by Tom Myers, Ph.D., (Exhibit 1), as well as a separate letter and/or oral testimony to be submitted by the Tofanelli family, constitute the Tofanelli family's comments on the IS.

I. The Project Violates CEQA and the Project's Potentially Significant Impacts Prohibit the County From Approving the Project Without First Preparing an EIR.

A. Legal Standard

It is well settled that CEQA establishes a "low threshold" for initial preparation of an EIR, especially in the face of conflicting assertions concerning the possible effects of a proposed project. Pocket Protectors v. City of Sacramento, 124 Cal. App. 4th 903, 928 (2005). CEQA provides that a lead agency may issue a negative declaration and avoid preparing an EIR only if "[t]here is no substantial evidence, in light of the whole record before the lead agency, that the Project may have a significant effect on the environment." CEQA § 21080(c)(1). A lead agency may adopt a negative declaration only when all potentially significant impacts of a project will be avoided or reduced to insignificance. Pub. Res. Code § 21080(c)(2); Guidelines § 15070(b).[1] A

[1] The CEQA Guidelines, 14 Cal. Code Regs. § 15000 *et seq.*, are referred to as "Guidelines."

negative declaration will also be set aside if its conclusions are not based on substantial evidence in the record. *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 311 (1988).

An initial study must provide the factual and analytic basis for an agency's determination that no significant impact will result from the project. Guidelines § 15063(d)(3). An agency must prepare an EIR whenever it is presented with a "fair argument" that a project may have a significant effect on the environment, even if there is also substantial evidence to indicate that the impact is not significant. *No Oil, Inc. v. City of Los Angeles*, 13 Cal. 3d 68, 75 (1974); Guidelines § 15064(f)(1). Where there are conflicting opinions regarding the significance of an impact, the agency must treat the impact as significant and prepare an EIR. Guidelines § 15064(f)(1); *Stanislaus Audubon Soc'y v. County of Stanislaus*, 33 Cal. App. 4th 144, 150-51 (1995).

Further, where the agency fails to study an entire area of environmental impacts, deficiencies in the record "enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 311 (1988). In marginal cases, where it is not clear whether there is substantial evidence that a project may have a significant impact and there is a disagreement among experts over the significance of the effect on the environment, the agency "shall treat the effect as significant" and prepare an EIR. Guidelines § 15064(g); City of Carmel-By-The-Sea v. Board of Supervisors, 183 Cal.App.3d 229, 245 (1986). Given this standard, an EIR is required for this Project.[2] As discussed below, there is a fair argument that the proposed Project will have potentially significant environmental impacts.

B. The IS's Hydrology and Water Quality Analysis is Inadequate, and There is a Fair Argument That These Impacts Are Potentially Significant.

1. Water Supply Impacts

The IS asserts that groundwater levels in the Napa Valley Floor exhibit stable long-term trends with shallow depth to water. IS at 13. It then asserts that "because the water demand for the Clos Pegase Winery and the Girald Winery is below the minimum threshold for water use, the Project would not substantially deplete

[2] Although it is our unwavering legal opinion that the County must prepare an EIR for this Project, if the County decides to rely on the IS, but modify the Project or adopt additional mitigation measures, it must, at the very least, recirculate the IS for further public review and comment. Guidelines § 15073.5.

groundwater supplies or interfere substantially with groundwater recharge. *Id.* at 13. As the Myers Report explains, the IS is wrong on both counts. Groundwater pumping for the Project may exceed the rate that groundwater is replenished because the IS appears to substantially overstate groundwater recharge. This pumping would cause depletion of the groundwater table and water to be drawn from the Napa River. In addition, the well proposed to be used for the Project may cause sufficient drawdown which would adversely affect neighboring wells.

(a) There is No Evidence that Napa Valley Has Stable Long Term Water Supply Trends.

According to Tom Myers, hydrographs for a nearby Project well (8N/6W-06L4) show declining groundwater levels commencing in about 2007. Myers Report at 2. In addition, at least four of eleven well hydrographs in the Calistoga area show downward trends in groundwater elevation. *Id.* at 3. Inasmuch as the drought has effectively continued since 2007, the groundwater level may have continued to decrease. *Id.* As Myers explains, in the absence of a detailed hydrogeologic study, there is insufficient support for the IS's determination that Napa Valley has stable long term water supply trends.

(b) Pumping For the Project Could Unacceptably Lower Groundwater Levels Because There is Not as Much Recharge in the Area as the County Assumes.

The Myers' report demonstrates that recharge for the area is likely overestimated. Myers Report pgs. 2 through 9. Consequently, it is possible that the County's water use criteria of 1.0 acre foot per acre per year ("af/y") is too high and that pumping at that rate, or even at a fraction of that rate, will draw down the groundwater table. Drawdown occurs when the pumping rate exceeds the rate recharge is replenishing the water table. Drawdown will also eventually change the flow gradient for discharge to the Napa River and pumping will affect the river. *Id.*

Myers' Report goes on to explain that the well proposed to be used for the Project may also cause sufficient drawdown, thereby potentially affecting neighboring wells. The Project applicant reports that the well that will provide water for the Project, currently serving the Clos Pegase Winery, has a yield of 23 gallons per minute (gpm) but has been fitted with a pump that will provide 18 gpm, or 9,460,800 gallons per year if

operated full time[3], which is 29 af/y. Myers examined the log for this well and determined it is doubtful that this well could actually pump at 18 gpm and yield 29 af/y without going dry. Myers Report at 7,8. "The drawdown shown on the well log, if maintained for a significant period, would likely cause substantial drawdown of neighboring wells." *Id.*

C. Water Quality Impacts

In addition to depleting groundwater levels, the pumping associated with the Project could cause boron and arsenic plumes to expand through the area. According to the Myers Report, very high concentrations of each contaminant exist northwest of the Project site area and along the base of the mountains south of the site. Myers Report at 9 through 11. Pumping groundwater for the Project, especially if it causes substantial drawdown due to too little recharge, could create a drawdown which pulls contaminants toward the Project.

Most boron is due to relatively shallow geothermal water being drawn into the alluvial aquifers. Myers Report at 9. Just northwest of the Project site, the boron concentrations are quite high, as much as 14,000 ug/l, or almost five times the health advisory level of 3 mg/l. Arsenic concentrations range from 40 to 85 ug/l in the same area which are four to eight and a half times the maximum contaminant level. *Id.* One arsenic observation just south of the project site is 75 ug/l. Groundwater water quality in the Project area also shows that chloride, specific conductance, nitrate and total dissolved solids also occasionally exceed standards in the Calistoga area. *Id.*

Cumulative pumping in the Calistoga area controls the flow directions in the area. Additional pumping downgradient of the high concentrations, in what appears to be both an arsenic and boron plume, will draw the contaminants further into Calistoga and beyond to the southeast. *Id.* Additionally, pumping in surface aquifers which increases the gradient from depth to more shallow aquifers may draw boron or metals from geothermal water into shallow waters, thereby increasing the boron concentration.

Ample evidence exists that the Project could deplete groundwater supplies and contaminate groundwater in the Project vicinity. The County must thoroughly analyze these significant impacts in an EIR and identify mitigation measures capable of minimizing these impacts.

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[3] Letter from Robert Osborn, Ben Monroe, Always Engineering, to Stacey Harrington, Napa County Planning, Building and Environmental Services, Project: Girard Wintery – New Winery and Tasting Room Use Permit. February 21, 2014. P 2.

D. The IS's Transportation Analysis is Inadequate, and There is a Fair Argument that the Project May Have Significant Transportation Impacts.

The IS concedes that the Project will have significant impacts relating to the Project's increase in traffic. IS at 20. However, as discussed below, the document fails to adequately identify or analyze these impacts and fails to propose feasible mitigation. Consequently, the IS lacks the evidentiary support to conclude that these impacts would be mitigated to less than significant levels.

First, the IS's traffic analysis fails from its inception because it contains an inadequate study area for determining the Project's traffic impacts as it includes only two intersections -- Silverado Trail/Dunaweal Lane and SR 29/Dunaweal Lane. *Id.* at 20. By focusing only on these two intersections, the IS ignores the Project's contribution to traffic congestion north and south of Dunaweal Lane on both Silverado Trail and SR 29. Visitors to the proposed winery would, of course, not stop at these two intersections but would travel well beyond these points – north to Calistoga or south to Marin, San Francisco or Oakland.[4]

An analysis of other intersections and roadway segments along SR 29 and Silverado Trail is critical because these roadways are projected to operate at LOS F and LOS C, respectively, in 2030. *Id.* at 20. There is no doubt that traffic from the Project will contribute to these deficient service levels. Consequently, the County must evaluate the specific effect the Project's traffic will have along roadway segments and intersections north and south of Dunaweal on Silverado Trail and SR 29 and identify feasible mitigation for these impacts.

Second, the IS does not establish proper thresholds of significance for determining whether traffic from the Project will result in significant impacts on the two intersections it does analyze. The document merely recites the CEQA Appendix G checklist, which, among other things, requires the County to determine whether added traffic is "substantial in relation to the existing traffic load or capacity of the street system." IS at 19. But the IS never offers a specific numerical threshold to determine whether the new traffic from the site will be "substantial." CEQA recognizes that "the significance of an activity may vary with the setting." Guidelines § 15064(b). Without establishing how many new daily trips would constitute a significant traffic impact, it is

[4] The County's General Plan also requires impacts at unsignalized intersections (like those surrounding the Project site) to be evaluated on a case-by-case basis. General Plan at CIR-16.

impossible for the public and County decision makers to evaluate the Project's traffic impact.

Third, notwithstanding the IS's failure to identify proper thresholds of significance, the IS does acknowledge that the Project would contribute to significant impacts at the two intersections it analyzes. Under future (2030) traffic conditions, the northbound Dunaweal approach to Silverado Trail is expected to operate at LOS E and the southbound Dunaweal Lane approach to SR 29 is expected to operate at LOS F in the P.M. peak hour. *Id.* at 20. Unfortunately, the IS relies on vague and unenforceable mitigation measures to conclude the Project's impacts would be reduced to a less than significant level. *Id.*

The IS asserts that these impacts could be mitigated merely by altering employee shifts and the finish times of the nine scheduled events and by installing directional signs at the winery exit directing traffic to turn-right. The document concludes, absent evidence or analysis, that these measures would reduce the Project's traffic impacts to less than significant levels. *Id.* at 20. Yet these measures would be ineffective for numerous reasons. First, by focusing on traffic during the winery's nine marketing events, it does nothing to ensure that the Project's traffic will not impact area intersections and roadways on routine days of winery operation, i.e., the remaining 356 days of operation. Second, the provision calling for the winery to shift finish times during the winery's numerous events is vague and unenforceable. It does not describe how the winery will ensure that all traffic leaves the winery by 4:00 P.M. Indeed such an assertion is nonsensical inasmuch as the hours of operation and visitation extend until 6:00 P.M. daily. Finally, while the installation of directional signs may result in certain visitor's following these directions, unless the traffic is monitored and enforced, visitors will travel in the direction they find most convenient.

Fourth, the IS addresses only average trip generation and ignores the effect that traffic from the winery's events would have on nearby roadways and intersections. Nine marketing events per year are proposed: four with maximum 75 guests; four events with a maximum 200 guests and one harvest event with a maximum 500 guests. *Id.* While the winery would generate 74 weekday trips on an average day, it would generate a substantially greater number of trips during the winery's nine marketing events and during the crush. In fact, according to the IS's traffic study, the harvest event is projected to generate 437 daily trips. Traffic Study at 15. Furthermore, it is not clear if this figure includes the 242 daily truck trips associated with the crush days. *Id.* While we understand that these events would not occur on a daily basis, the IS may not simply ignore the severe traffic congestion that will accompany these events. Moreover, inasmuch as all of the wineries harvest during the same week or two, the cumulative effect of harvest truck trips and harvest events must be taken into account.

It is also critical to note that the Clos Pegase Winery routinely holds weddings despite the fact that such events are explicitly prohibited. Inasmuch as the proposed Project would be operated by the owner of Clos Pegase, the IS must acknowledge the potential for weddings at the Girard Winery and analyze the associated traffic impacts. Alternatively, the County must prohibit weddings as a condition of approval.

Finally, the IS fails entirely to examine the cumulative transportation impacts that will result from the Project and planned or recently approved projects in the County. Notably, the Yountville Hill Winery's September 2013 traffic study identifies 12 planned or approved new wineries or winery expansions that could have cumulatively significant traffic impacts. *See* Yountville Hill Winery's September 2013 Traffic Study, attached as Exhibit 2. But even the Yountville Winery traffic study does not include all of the new or modified wineries. In fact, the County has approved at least 19 new wineries or significant modifications to existing permits since the applicant released its traffic study last September. *See* List of Winery Projects, attached as Exhibit 3. The Girard Winery IS's failure to take into account traffic from any of these winery projects, let alone other planned land use development, is a fatal flaw. The County must properly analyze the Project-specific and cumulative traffic impacts. The appropriate forum for such an analysis is in an EIR.

E. The IS Fails to Adequately Consider Parking-related Impacts From the Project, and There is a Fair Argument That These Impacts Will Be Significant.

The IS ignores aspects of the Project that could worsen parking in the area. For instance, the proposed winery will only contain 22 parking spaces to accommodate 90 visitors and 25 employees per day, an unspecified number of trucks delivering grapes and to be used for bottling purposes, and even marketing events of up to 500 people. IS at 1, 20. The IS never considers whether this amount of parking is adequate to accommodate the maximum number of daily visitors, staff, and trucks serving the winery. Instead, it simply asserts that additional parking at the rear of the winery is available or visitors can be shuttled from off-site lots. *Id.* at 20.

The IS fails as an informational document because it does not identify how many extra vehicles the paved area at the rear of the winery could hold, or whether emergency vehicles will have adequate access with vehicles parked throughout the property. Even if the winery would have extra parking space, the County must condition the approval of the Project or adopt a mitigation measure requiring the applicant to use such space for overflow parking. *See* Guidelines § 15126.4(a) ("Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding

instruments"). The IS must fully analyze the parking issue to adequately inform the public about this potential environmental impact. *Taxpayers for Accountable School Bond Spending v. San Diego Unified School District* 215 Cal.App.4th 1013, 1052-54 (2013).

The IS errs further because it does not identify or analyze the transportation – or other environmental impacts – that would result from these shuttle bus operations. For example, it does not identify the location or size of the off-site parking lot, the number of shuttle buses that would be in operation, or the effect that motorists and buses accessing this parking lot would have on roadway operations. The IS's failure to identify and analyze these impacts is a fatal flaw.

Finally for reasons relating to overflow parking and other nuisances (e.g., noise, litter, vandalism) from visitors to the winery, it is imperative that a secure fence or wall be constructed between the winery and the Tofanelli family property. Such a fence or wall must be included as a condition of approval.

F. The IS's Noise and Air Quality Analyses Are Inadequate, and There is a Fair Argument That These Impacts Would Be Significant.

A particularly glaring inadequacy of the IS is its analysis of and mitigation for the Project's noise impacts. Although construction and operation of the Project is all but certain to result in a significant increase in noise levels, the IS makes no attempt to quantify these impacts. Instead it provides a generic overview, simply stating the obvious: that noise could create additional impacts and that these impacts would be less than significant. IS at 16,17. To conclude as the IS does that an impact is less than significant, the analysis must be supported with substantial evidence. Substantial evidence consists of "facts, a reasonable presumption predicated on fact, or expert opinion supported by fact," not "argument, speculation, unsubstantiated opinion or narrative." Pub. Res. Code § 21080(e)(1)-(2). Once again, the IS fails on many levels.

First, the IS provides no information as to the Project's environmental setting, other than to state that the nearest residences are located about 400 feet to the south. IS at 17. An environmental document "must include a description of the physical environmental conditions in the vicinity of the project." CEQA Guidelines § 15125(a). "Without a determination and description of the existing physical conditions on the property at the start of the environmental review process, [an environmental document] cannot provide a meaningful assessment of the environmental impacts of the proposed project." *Save Our Peninsula Committee v. Monterey County Board of Supervisors*, 87 Cal.App.4th 99, 119 (2001). Moreover, as discussed above, the significance of an impact may vary with the setting. While increased noise levels may not be significant in an

urban area, they may be extraordinarily burdensome in a rural area. Due to the surrounding hills and knolls, the area acts as a natural amphitheater. Noise reverberates from hill to hill. Here, without any information on the area's acoustical setting, including an identification of existing ambient noise levels, an impacts analysis or proposed mitigation become meaningless.

Nor does the IS identify the standard or threshold of significance for determining a significant noise impact.[5] This is critical; without a significance threshold, there is no means by which to conclude whether impacts would or would not be significant. Since the requirement to provide mitigation is triggered by the identification of a significant impact, the IS's failure to identify all of the Project's significant impacts also results in a failure to mitigate these impacts.

Given the failure to describe the existing noise environment and to establish thresholds of significance, it comes as no surprise that the IS fails to identify the noise levels that would accompany construction of the Project. In fact, the document, never even attempts to predict noise levels during each phase of construction at nearby sensitive receivers. As the attached table shows, construction-related equipment and operations can be extraordinarily loud. A typical noise level for a jackhammer, for example, is upwards of 96 decibels, while loaders, backhoes and bulldozers can generate noise upwards of 85 decibels. *See* OSHA Construction-Related Noise levels, attached as Exhibit 4. The County must analyze how construction of the Project will impact noise levels in the vicinity.

Operational noise from the winery can also be quite intrusive. Noise from the winery's marketing events, in particular, such as vehicular traffic, truck traffic, buses and amplified sound could be particularly burdensome to the Project's neighbors, yet the IS provides no analysis of these impacts. Finally, as discussed above, unless weddings are prohibited as a condition of approval, the County is obligated to analyze the increase in noise from wedding-related activities.

The IS also errs in its analysis of air quality impacts because it fails to analyze the threat to neighboring farms from the dust that will accompany Project construction. Dust from Clos Pegase' vineyard operations is already harmful to the Tofanelli family's organic farms. The IS must evaluate the effect that the dust from the

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[5] The IS does refer to the Napa County Noise Ordinance, explaining that it sets a maximum permissible sound level for rural residences as 45 dB between the hours of 10 P.M. and 7 A.M. (at 17), but since the proposed Project will not normally be operating during those hours, this information is not relevant.

Project's construction and operation would have on nearby properties and identify mitigation to reduce these impacts to a less than significant level.

G. The IS's Visual Resources Analysis is Inadequate, and There is a Fair Argument That the Project May Have Significant Aesthetic Impacts.

The proposed Project will result in potentially significant visual impacts. Project construction and operation will require the installation of additional lighting. IS at 4. This light pollution will dramatically alter the visual character of the site and further erode dark skies in the area. Nevertheless, instead of grappling with these readily-apparent aesthetic impacts, the IS largely dismisses them. First, the IS fails to establish a proper baseline for lighting impacts, a flaw that is fatal to any purported analysis of light pollution impacts.

Even if it had established a proper baseline, the IS effectively concedes that light pollution from the Project could create significant impacts: "the installation of additional lighting may have the potential to impact nighttime views." IS at 4. The IS assumes that certain design features for outside lighting could reduce the significance of such impacts (*Id.*), but offers no analysis of how much these measures will reduce light and glare on the Project site. In fact, the IS cannot offer this analysis because the applicant has not even disclosed which types of outdoor lighting it will use or where it will be placed. *See* Conditions of Approval at 7, indicating that a lighting plan has yet to be prepared. This approach directly violates CEQA. An agency is required to fully evaluate potentially significant environmental impacts before it approves a project. *See Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* 6 Cal.4th 1112, 1123 (1993).

The IS identifies measures intended to reduce light and glare such as the use of motion detectors and the low-level lighting. But the record contains no evidence that these measures will be adequate to reduce the site's light pollution to less-than-significant levels. Indeed, the IS does not even adopt a threshold of significance for making this determination, much less account for how much light pollution the building will generate with these lighting techniques. Moreover the use of these lighting techniques are voluntary and unenforceable since they include language such as "to the greatest extent practical." *Id.* Consequently, the IS provides no evidence that the light and glare from the Project would be reduced to a less than significant level.

In addition, the IS concludes that the Project would result in less than significant visual impacts because "the buildings will not obstruct the scenic distant hillsides." IS at 4. Here too, the document does not include any thresholds for

determining the significance of these impacts. Nor does it provide any photographs of the site or any photo simulations of how the Project would look superimposed on the landscape. Consequently, the IS provides no basis whatsoever for this less than significant conclusion. Had the IS included a proper analysis, it would have disclosed that the 35-foot building plus the 45-foot cupola will forever degrade one of the most beautiful parts of the downvalley scenic view. The County must provide a comprehensive analysis of these impacts. The appropriate forum for such an analysis is an EIR.

II. The Project is Inconsistent With the Winery Definition Ordinance and the County General Plan.

A. The Project Is Inconsistent with the Winery Definition Ordinance.

The Winery Definition Ordinance ("WDO") contains several statements of legislative intent directly relevant to this Project. These include a declaration that the ordinance must be interpreted to achieve the goal of protecting agriculture and open space use as the primary land use in the Agricultural Preserve, and to "prohibit" the use of agricultural land for non-agricultural purposes "except to the extent expressly permitted" by the General Plan and County ordinances. *See* WDO, § 6.

The Project is inconsistent with the WDO provisions that restrict the scope and maximum square footage of "accessory uses" such as "marketing of wine" and "tours and tastings." Specifically, all such accessory uses, "in their totality[,] must remain clearly incidental, related and subordinate to the primary operation of the winery as a production facility." *See*, e.g., NCC § 18.08.370; 18.16.030(G)(5); 18.08.020. In addition, the WDO places an absolute numerical cap of the square footage of structures that may be "used for accessory uses." *See* NCC 18.104.200 ("The maximum square footage of structures used for accessory uses that are related to a winery shall not exceed forty percent of the area of the production facility.").

In addition to the 3,800 square feet of accessory uses identified in the staff report, the Project also includes a 13,000 square foot outdoor garden and tasting area, as well as a 2,600 square foot covered veranda.[6] Together these uses constitute 67 percent

[6] It is unclear how the County concludes that the Project's accessory uses comprise only 10.2 percent of the production area. The staff report states that the production area is 28,955 square feet. Other uses identified in the staff report do not meet the definition of production facilities in the WDO and should not be included in that area when determining the total percentage of the Project that is dedicated to accessory, tourist serving uses.

of the area of the production facility – far in excess of the 40 percent limit in the WDO. Both areas are clearly intended to serve visitors. The architect's drawing of the covered veranda depicts tables and chairs in the area and the applicant has designated the 13,000 square foot garden area as a tasting area under AB 2004. Accordingly, excluding them from the 40 percent calculation is inconsistent with NCC section 18.104.200. This exclusion is also inconsistent with the manner in which the Planning Commission calculated accessory use square footage in two recent actions concerning the B Cellars and Titus Vineyards projects. For both projects, the outdoor terraced spaces were counted as part of the percentage of the project used for accessory uses. The County should treat the present Project in the same manner.

Moreover, it is clear from the past activity of the Clos Pegase Winery that the Girard Winery will use these areas for tourist serving uses and other activities that are prohibited by the WDO. As discussed above, the Clos Pegase Winery (which also owns the Girard Winery) holds weddings at its facility throughout the year, even though weddings are not permitted under the WDO. NCC § 18.08.370 (social events are only permitted to the extent they are "directly" related to the education and development of potential customers and only as part of an approved marketing plan.) In adopting the WDO in 1990, the Board of Supervisors made an express factual finding that "[t]he interspersing of non-agricultural structures and activities throughout agricultural areas in excess of what already exists will result in significant increase in the problems and costs of maintaining vineyards and discourage continued use of the land for agricultural purposes." The Board acknowledged this same concern when it amended the WDO just four years ago, finding that the WDO had been successful in achieving its purposes, in part by "limiting commercial uses in agricultural areas by ensuring that wineries remain focused on the business of producing wines, and by ensuring that tours and tastings and marketing of wine play an accessory role."

In addition to violating the letter of the WDO, the Project contravenes the intent expressed in these findings by elevating nonagricultural uses over agricultural uses. The accessory, tourism-focused uses of the Project are not "clearly incidental, related and subordinate" to the Project's primary operation as a winery. Rather, these nonagricultural uses are the Project's core purpose.

Therefore, the Project cannot be approved unless it is modified to reduce the amount of accessory uses and the County expressly prohibits any weddings or social events that are not directly related to the education and development of customers at the facility.

B. The Project is Inconsistent with the County's General Plan.

Contrary to the IS's conclusions, the Project is not consistent with the Napa County General Plan. In particular, the Project is inconsistent with the Plan's Agricultural Preservation and Land Use provisions including but not limited to: Goals AG/LU-1, AG/LU-3, AG/LU-4, the Agricultural Resources ("AR") designation on the General Plan's Land Use Map, and Economic Development Policy E-1. The purpose of these goals and policies, and of the AR designation, is to preserve and promote the existing agricultural land uses on agriculturally designated lands and to support the economic viability of agriculture, including the necessary industries that support agriculture.

Although the IS provides almost no analysis, it appears that its finding that the Project is consistent with the General Plan is predicated on its determination that the Project's accessory uses comply with the WDO and "would allow for the continuation of agriculture as a dominant land use within the County." *Id.* at 15. As demonstrated above, however, the Project's visitor-serving uses do not comply with the WDO and do not qualify as permissible accessory uses. These uses are not necessary to support the economic vitality of agriculture and will, if anything, undermine the continued economic vitality of agriculture by allowing and encouraging excessive reliance on tourism.

Perhaps even more importantly, these uses are clearly inconsistent with the intent of the General Plan's Agricultural Resources designation. As County voters reaffirmed in approving Measure P in 2008, "agriculture is and should continue to be the predominant land use, where uses incompatible with agriculture should be precluded . . .". In short, the offices, tasting rooms, retail storage, catered food prep area, veranda and garden bar are commercial uses, not agricultural ones. Accordingly, they are inconsistent with the General Plan and may not lawfully be approved.

C. The Girard Parcel and The Clos Pegase Winery Parcel Should be Treated as a Single Parcel.

Finally, the County is not required to approve the Project in order to assure the owner an economic use of its property. The Girard parcel is part of a larger holding by the owner of the adjacent Clos Pegase winery, which relies on the Girard property to provide potable water and waste water disposal. Waste water is pumped from Clos Pegase under Dunaweal Road to the Girard Parcel, where it is treated. In addition, the well on the Girard parcel provides water to the Clos Pegase Winery. The well on the Clos Pegase winery is utilized only as back up irrigation water. As a result, the Girard parcel is inextricably linked to the Clos Pegase winery parcel. Indeed, the Clos Pegase winery could not operate without the water and waste disposal provided by the Girard

parcel. Where a "developer treats several legally distinct parcels as a single economic unit, together they may constitute the relevant parcel." *See Forest Props., Inc. v. United States,* 177 F.3d 1360, 1365 (Fed. Cir. 1999) (holding relevant parcel included 53 upland acres and 9 acres of lake bottom where tracts were acquired at different times but "economic reality" was that owner treated the property as single integrated project). Because the Girard parcel and the Clos Pegase parcel are under single ownership and operate as a single unit, the County is not required to approve any development on the Girard property, much less a proposal of the scope and intensity proposed here.

III. Conclusion

For the reasons set forth above, the Tofanelli family requests that the County defer action on the proposed Project until an EIR is prepared that fully complies with CEQA. As described above, there is substantial evidence to indicate that the proposed Project may have a number of significant environmental impacts. Under CEQA, the County must provide an adequate analysis of these adverse effects and include feasible measures to mitigate impacts.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Ellison Folk

Laurel L. Impett, AICP, Urban Planner

Exhibits:

Exhibit 1: Hydrologic Report prepared by Tom Myers, Hydrologic Consultant
Exhibit 2: Yountville Hill Winery's September 2013 Traffic Study
Exhibit 3: List of Winery Projects
Exhibit 4: OSHA Construction-Related Noise Levels

cc: Norma Tofanelli
Vince Tofanelli

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Exhibit 1

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Technical Memorandum

Review of Girard Winery Use Permit P14-00053

January 20, 2015

Prepared for:

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Summary

The proposed expansion of pumping for the Girard Winery project could possibly have two potentially significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. This memorandum considers the river baseflow and suggests that existing recharge estimates may be too high. Pumping could also draw water from the river.

Second, the pumping could affect groundwater flow directions and cause boron and arsenic plumes to expand through a larger portion of the Calistoga area. There are very high concentrations of each contaminant northwest of the project site and along the base of the mountains south of the site. The project pumping, especially if it causes substantial drawdown due to too little recharge, could create a drawdown which pulls contaminants toward the project.

Because of these potentially significant impacts, the project should not be permitted until a much more detailed hydrogeologic study is completed. This would include the completion of a flow and transport model to assess the change in groundwater levels, flow paths, and the extent of the boron and arsenic plumes. If the project goes forward after such a study, the flow and transport model should be used to determine where monitoring is necessary to detect the movement of the plumes.

Introduction

This memorandum reviews the negative declaration for the Girard Winery Use Permit P14-00053 (hereinafter NegDec) and various supporting documents, county studies, and letters, as cited in the reference section or in a footnote. Specifically, this review is of section IX, Hydrology and Water Quality, questions b and f. The review considers whether the project will pump more water than is available, thereby causing a deficit in aquifer volume and the potential for the project to increase pollution in the area under question f.

My experience includes a Ph.D. and M.S. in Hydrology/Hydrogeology from the University of Nevada, Reno, and a B.S. in Civil Engineering from the University of Colorado. I have approximately 20 years of experience consulting and researching hydrogeology, including groundwater modeling and contaminant transport. My curriculum vitae is attached after the reference section.

The project area is on the Napa Valley Floor, Calistoga district (L&S 2013, 2011). Based on the location map, the project is very near a constriction on the valley floor about one mile downvalley from the town of Calistoga (southeast of town). Based on the topographic map, there is a bedrock high just downgradient from the project site. The geology map (L&S 2013) shows this outcrop to be Tst, or tuffs and sediments.

The following sections describe and review questions b and f in detail.

Question b

The statement in the NegDec (p 13) that "recent studies have found that groundwater levels in the Napa Valley Floor exhibit stable long-term trends with shallow depth to water" is incorrect. Figure 4-2 in L&S (2011) shows hydrographs for wells throughout Napa Valley; of relevance to this review is the hydrograph for well 8N/6W-06L4 (129) which shows declining groundwater levels commencing in about 2007 (this hydrograph is reproduced here as Figure 1). Considering that the drought has effectively continued since 2007 through the present, the water level may have continued to decrease. The County should have attempted to obtain a more complete data set for this well.

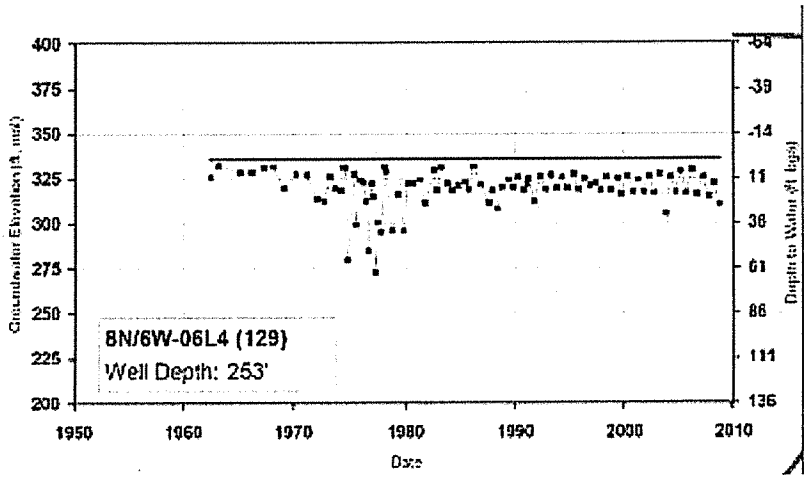

Figure 1: Snapshot of a hydrograph from Figure 4-2 from L&S (2011).

Also, at least four of eleven well hydrographs in the Calistoga area presented in the appendix of L&S (2011) show downward trends in groundwater elevation. In addition to the well cited above (NapaCounty-129), well 08N06W06LL04M decreased from more than 330 ft above mean sea level (AMSL) in the 1960s to near 320 ft amsl around 2008. Well NapaCounty-128 decreased from above 337 ft amsl in the 1960s to about 328 ft amsl in 2008. Well NapaCounty-127 decreased from about 378 in the 1960s to about 365 in 2008. Additionally, well 09N06W31Q001M appears to decrease but the elevations cannot be correct; the hydrograph shows groundwater elevations in the 100s of feet amsl in an area that the ground surface elevation exceeds 300 feet amsl and the depth to water is just two to twelve feet. Also, several well hydrographs have too short a period of record to analyze.

The water level maps in L&S (2011, Figures 4.8 and 4.9) are not sufficiently detailed to compare changes between the 1940s and 2008. Figures 7-1 and 7-2 in L&S (2013) should provide a comparison between 2008 and 2010 but in the Calistoga area appear to be based on different sets of wells so the contours in that area are not comparable.

Additionally, the statement that well levels "recover from dry periods during subsequent wet or normal periods" is not supported by the data shown in the well hydrographs. In fact, several of the wells showed a lack of recovery from the 1970s drought period. The additional statement that wells are "more affected by climatic conditions" is correct based on the seasonal changes shown on the graphs but there is no evidence that the long-term trends are based on climate, except for the drought in the 1970s, but rather based on pumping.

The NegDec also indicates the allotment for the project is 26.53 af/y, based on its area multiplied by the 1 af/y/acre "fair share water use factor" which is also called the allotment for a Napa Valley bottom acre. This allotment is compared with recharge in the area. The average

recharge for the Napa River near Calistoga watershed is 10,500 af/y (L&S 2013)[1], although this is based on the 1975 through 1983 period which includes very dry and very wet years (Figure 2). The recharge averages 19% of precipitation, but that should probably not be considered an annual value but only applied to the overall average. The gage is USGS gage #11455900 and the drainage area is 21.9 square miles. Distributing the entire recharge estimate of 10,500 af/y over the area above the gage yields an average recharge of 0.75 ft/y, which is less than the allotment. However, L&S (2013) notes that recharge varies by surface geology type; their Table 8-10 suggests that only 5867 acres or 42% of the total basin will accept recharge. If that is correct, the recharge is about 1.79 ft/y and the allotment value is conservative.

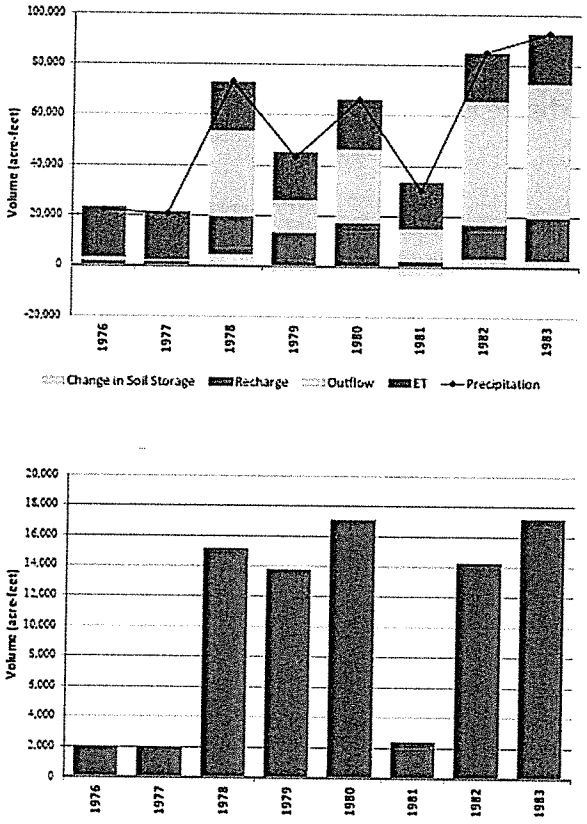

Figure 8-7. Annual Results for Napa River near Calistoga Watershed

Figure 2: Snapshot of Figure 8-7 from L&S (2013) showing the annual water balance (top) and recharge (bottom) for the Napa River near Calistoga watershed.

Recharge for the watershed above the Napa River at Calistoga gage may however be overestimated. The hydrograph for the gage is shown in Figure 3. Average flow is 32.5 cfs or

[1] Reviewing the development of this recharge value is beyond the scope of this review.

23,556 af/y, so the estimated recharge, 14 cfs, equals 44% of the average flow. Recharge is commonly considered to equal baseflow in a river, because groundwater discharge supports a river during baseflow (Cherkauer 2004, Scanlon et al. 2002). For much of the period of record the flow for months is below 0.1 cfs (Figure 3); when the flow is that low it is without doubt baseflow especially since these low flows primarily occur during summer and early fall when there has not been substantial rainfall for months. During 1977, the highest flow was 9.9 cfs (Figure 3) or lower than the estimated recharge for the basin. Observed streamflow is often below the recharge average which indicates that the watershed had dried substantially since the previous significant recharge period; the basin is draining and the gradient for flow entering the river is decreasing as is the discharge to the river. However, even during the driest year with a peak flow of 9.9 cfs, it is likely that some flow is runoff. In summary, because of the wide range in flows at this gage and that very high flows control the average and likely the calculated recharge, it is likely that recharge is overestimated.

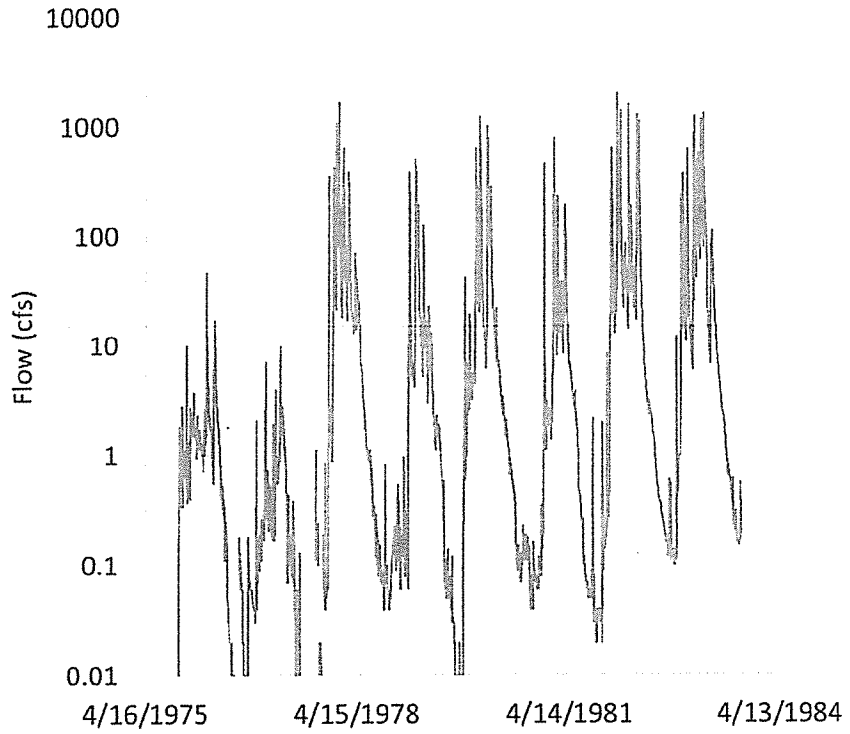

Figure 3: Hydrograph for Napa River at Calistoga gage # 11455900

Because recharge is likely overestimated, it is possible that the allotment of 1 af/y/acre is too high and that pumping at that rate, or even at a fraction of that rate, will draw down the groundwater table. Drawdown occurs when the pumping rate exceeds the rate recharge is replenishing the water table. Also, drawdown will eventually change the flow gradient for discharge to the Napa River and pumping will affect the river.

The groundwater level is above the thalweg[2] of the river through most of the Calistoga section of the valley based on measurements during spring 2010 (Figure 7-8 in L&S 2013). During spring, groundwater levels are at their seasonal highest and the groundwater is likely to discharge to the river. It is not possible to say with certainty that it does, however, because river water level is above the thalweg and the gradient for flow depends on the difference between groundwater and river water level. At times the river flow is very low, the water level would be only a few inches deep, so the approximation is that the locations on Figure 7-8 where the groundwater level exceeds the thalweg are likely locations where the groundwater discharges to the river. However, drawdown of wells, especially near the river, equaling just a few feet could reverse the flow. The effect of pumping on groundwater levels near the river is a cumulative effect based on all of the wells in the area, but it is certain that pumping this project will either prevent groundwater from discharging into the river or at worst will cause river water to enter the aquifer.

The applicant reports that the well that will provide water for the project, currently serving the Clos Pegase Winery, has a yield of 23 gallons per minute (gpm) but has been fitted with a pump that will provide 18 gpm, or 9,460,800 gallons per year if operated full time[3], which is 29 af/y. Presumably, this well is the log attached to the revised permit application[4]. This log shows the well to be 220 feet deep, screened from 80 to 220 feet, in clay or grey ash. It shows an air lift well test with 30 gpm discharge for 3 hours caused drawdown from 25 to 200 feet. This is a significant drawdown and there is no indication whether the well had reached an equilibrium after the three hours. Clay and grey ash do not likely have a high conductivity. Faye (1973) shows the alluvium has conductivity (K) from 30 to 50 ft/d and less than 100 feet thick. Faye's K value seems high based on the description provided on the well log.

There are too many unknown variables for detailed modeling of potential drawdown, but standard Theis computations (Fetter 2001) for a confined aquifer can be completed to consider the order of magnitude of potential drawdown. Treating the aquifer as confined is preferable based on the low conductivity clay in the upper part of the log. Figures 4 through 7 show drawdown with time for pumping 22, 18, 10, and 5 gpm at a radius of 1, 100, 1000, and 10,000 ft to demonstrate drawdown what could occur for continuous pumping. Radius equal to 1 approximates the drawdown at the pumping well and the analysis assumes the pumping is continuous. The transmissivity is 3000 ft^2/d, based on Faye (1973) and storage coefficient of

[2] The thalweg is the lowest point of a river's cross-section. A line drawn along this point is the plan of the thalweg and the elevation is the profilt.

[3] Letter from Robert Osborn, Ben Monroe, Always Engineering, to Stacey Harrington, Napa County Planning, Building and Environmental Services, Project: Girard Wintery – New Winery and Tasting Room Use Permit. February 21, 2014. P 2.

[4] Letter from Always Engineering, to John McDowell, Deputy Planning Direct, Project: Girard Winery Use Permit Application, Revised November 25, 2014.

0.0001. A sensitivity analysis of storage coefficient suggested that an increase to 0.0008 would decrease the drawdown by about 20 feet.

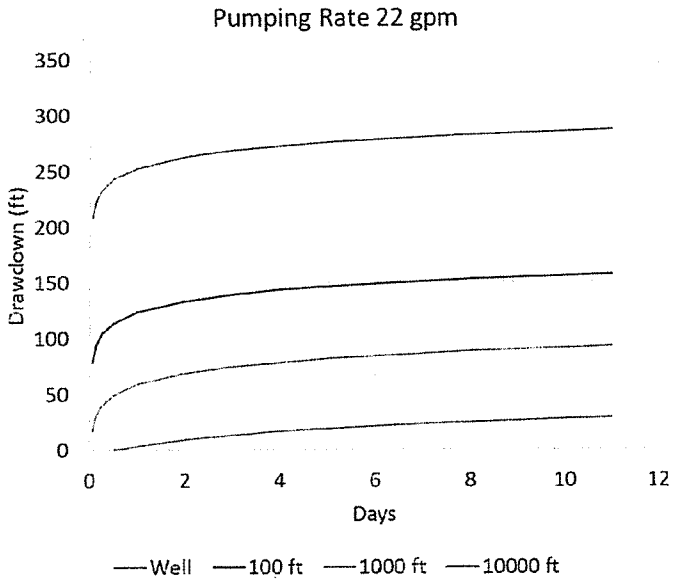

Figure 4: Drawdown for a well pumping 22 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

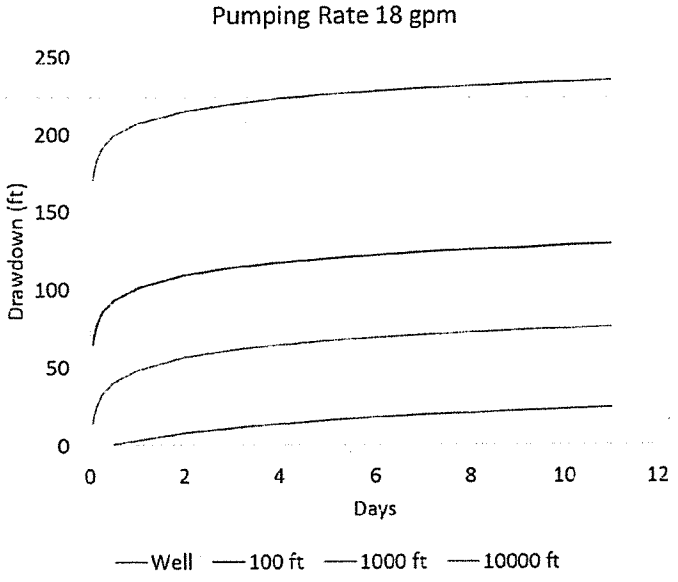

Figure 5: Drawdown for a well pumping 18 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

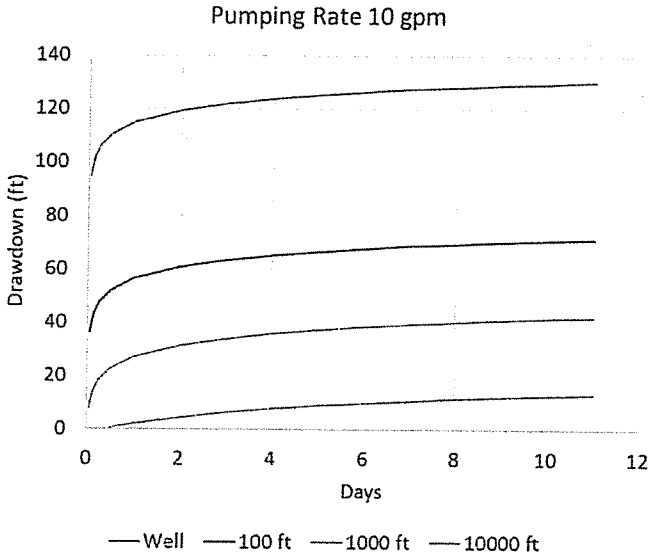

Figure 6: Drawdown for a well pumping 10 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

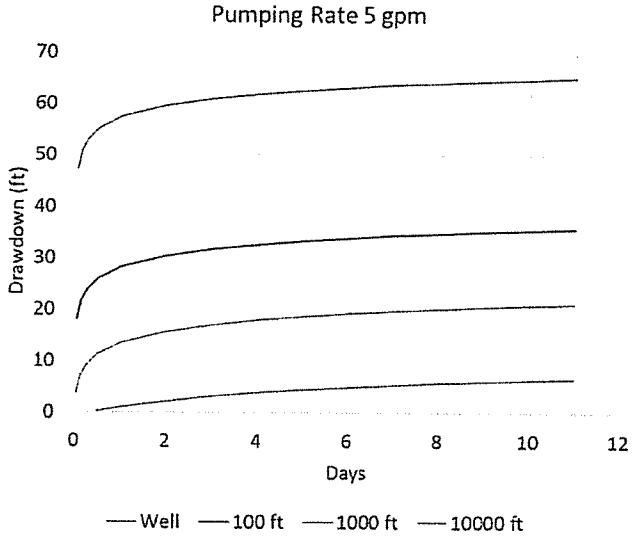

Figure 7: Drawdown for a well pumping 5 gpm in a confined aquifer for S=0.0001 and T=3000 ft2/d at specified radii.

It is doubtful that this well could actually pump at 18 gpm and yield 29 af/y without going dry. The drawdown shown on the well log, if maintained for a significant period, would likely cause substantial drawdown at the neighbors' wells. The results of this simplified analytical modeling are similar to those observed in the pump test; after three hours pumping at 22 gpm the simulated drawdown at the well was over 200 feet. This justifies the confined aquifer assumption.

Figures 4 and 5 indicate that drawdown at the well will exceed the distance from the water table to the bottom of the screen for pumping at 22 or 18 gpm. At 10 and 5 gpm, the drawdown at the well remains within the screen for the simulation period. Based on these simple hydraulic calculations, it does not appear that the well can pump at 22 or 18 gpm continuously without going dry. Also, at 22 gpm and 1000 and 10,000 feet, the drawdown would approach 100 feet and 25 feet (Figure 4) which would certainly affect nearby neighbors more than should be considered reasonable. Drawdown is progressively decreased as pumping rate decreases and the radius to the point of interest increases. However, even pumping at 10 and 5 gpm will impact neighboring wells; at 1000 and 10,000 feet from the well, the calculations suggest that pumping 10 gpm will cause drawdown to exceed 40 and 15 feet at 1000 and 10,000 feet, respectively, and for pumping 5 gpm, drawdown could exceed 20 and 8 feet at 1000 and 10,000 feet, respectively. Pumping from the proposed well for long-term periods at rates projected for the combined projects will cause significant drawdown at neighboring wells up to at least 10,000 feet away. The County should require a much more extensive pump test with monitoring of neighboring wells prior to granting this permit.

In summary, the NegDec's conclusion that the project will have "less than significant impact" is wrong because the pumping may exceed the rate that groundwater is replenished, based on the potential that recharge is less than the allotment. This would cause the groundwater table to be depleted and water to be drawn from the river. These impacts would be "potentially significant". The well proposed to be used may also cause sufficient drawdown to affect the neighbors' wells more than would be considered reasonable, which could also be a "potentially significant impact".

Question f

The NegDec declares the project will have a "less than significant" impact on water quality, but this is incorrect. The primary reason for this is that the project pumping will draw contaminated water from the northwest in the Calistoga area. The primary contamination is very high boron and arsenic concentrations, as seen on Figures 4 and 5, reproduced from L&S (2011). Most boron is due to relatively shallow geothermal water being drawn into the alluvial aquifers (L&S 2011, Faye 1973). The project site is at about the number 120 just southeast of Calistoga on Figure 4. The number 120 is a concentration in ug/l, which is much less than critical values for boron[5]. However, just northwest of the project site the boron concentrations are much higher, as much as 14,000 ug/l, or almost five times the health advisory level of 3 mg/l. Arsenic concentrations range from 40 to 85 ug/l in the same area which are four to eight

[5] Boron has no MCL, but there is a health advisory for 3 mg/l (http://water.epa.gov/action/advisories/drinking/upload/dwstandards2012.pdf) and California sets a "notification level" at 1000 ug/l (U&S 2011).

and a half times the MCL[6]. One arsenic observation just south of the project site is 75 ug/l. L&S (2011, Table 4-2) summarizes groundwater water quality showing that chloride, specific conductance, nitrate and total dissolved solids (TDS) also occasionally exceed standards in the Calistoga area.

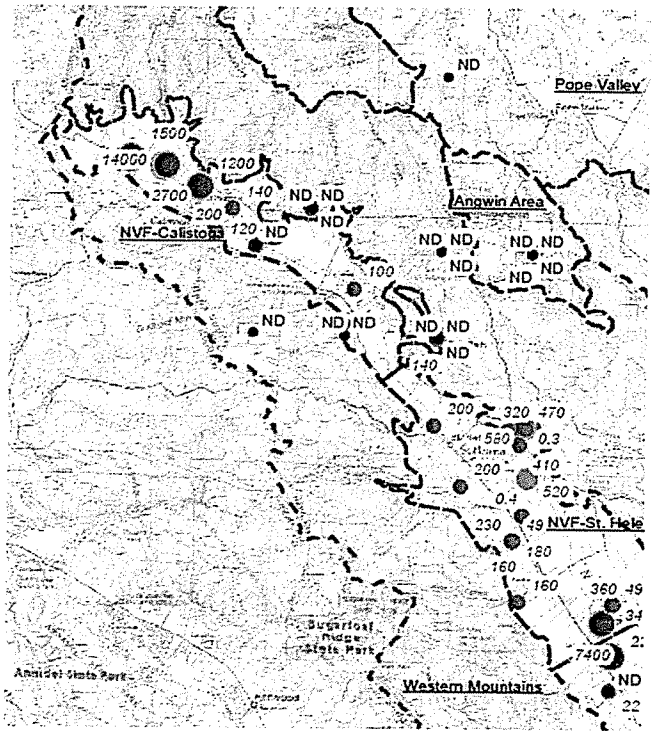

Figure 8: Snapshot of L&S (2011) Figure 4.19 showing groundwater boron concentrations in ug/l. The figure shows the northwest end of Napa Valley.

[6] The MCL for arsenic is 10 ug/l.

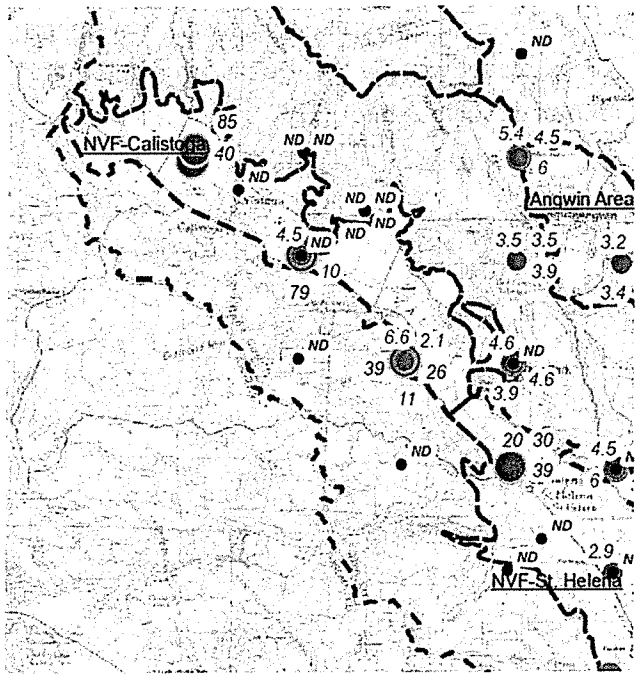

Figure 9: Snapshot of L&S (2011) Figure 4.18 showing groundwater arsenic concentrations in ug/l. The figure shows the northwest end of Napa Valley.

The higher concentrations all occur in or northwest of Calistoga or along the base of the mountains (L&S 2011). The reports do not discuss the cause of the higher values. Those of arsenic and boron are of the most significant concern.

Cumulative pumping in the Calistoga area controls the flow directions in the area. Additional pumping downgradient of the high concentrations, in what appears to be both an arsenic and boron plume, will draw the contaminants further into Calistoga and beyond to the southeast. Additionally, pumping in surface aquifers which increases the gradient from depth to more shallow aquifers may draw boron or metals from geothermal water into shallow waters, thereby increasing the boron concentration. Because of these potentials, the proposed pumping could increase the potential for water pollution to spread and cause a "potentially significant impact", contrary to the conclusion in the NegDec.

Conclusion and Recommendations

The proposed expansion of pumping for the Girard Winery could have two potentially significant impacts. First, the pumping could unacceptably lower the groundwater levels because there is not as much recharge in the area as the County assumes. This could also draw water from the river. Second, the pumping could affect groundwater flow directions and cause boron and arsenic plumes to expand through a larger portion of the Calistoga area.

Because of these potentially significant impacts, the project should not be permitted until a much more detailed hydrogeologic study is completed. This would include the completion of a flow and transport model to assess the change in groundwater levels, flow paths, and the extent of the boron and arsenic plumes. If the project goes forward after such a study, the flow and transport model should be used to determine where monitoring is necessary to detect the movement of the plumes.

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Curriculum Vitae

Objective: To provide diverse research and consulting services to nonprofit, government, legal and industry clients focusing on hydrogeology specializing in mine dewatering, contaminant transport, natural gas development, groundwater modeling, NEPA analysis, federal and state regulatory review, and fluvial morphology.

Education

Years	Degree	University
1992-96	Ph.D. Hydrology/Hydrogeology	University of Nevada, Reno Dissertation: Stochastic Structure of Rangeland Streams
1990-92		University of Arizona, Tucson AZ Classes in pursuit of Ph.D. in Hydrology.
1988-90	M.S. Hydrology/Hydrogeology	University of Nevada, Reno Thesis: Stream Morphology, Stability and Habitat in Northern Nevada
1981-83		University of Colorado, Denver, CO Graduate level water resources engineering classes.
1977-81	B.S., Civil Engineering	University of Colorado, Boulder, CO

Professional Experience

Years	Position	Duties
1993-Pr.	Hydrologic Consultant	Completion of hydrogeology studies and testimony focusing on mine dewatering, groundwater modeling, natural gas development, contaminant transport, NEPA review, and water rights for nonprofit groups and government agencies.
1999-2004	Great Basin Mine Watch, Exec Director	Responsible for reviewing and commenting on mining projects with a focus on groundwater and surface water resources, preparing appeals and litigation, organizational development and personnel management.
1992-1997	Univ of NV, Reno, Res. Assoc.	Research on riparian area and watershed management including stream morphology, aquatic habitat, cattle grazing and low-flow and flood hydrology.
1990-1992	U of AZ, Res. and Teach. Assistant	Research on rainfall/runoff processes and climate models. Taught lab sections for sophomore level "Principles of Hydrology". Received 1992 Outstanding Graduate Teaching Assistant Award in the College of Engineering
1988-1990	U of NV, Reno Res. Asst	Research on aquatic habitat, stream morphology and livestock management.
1983-1988	US Bureau of Reclamation Hydraulic Eng.	Performed hydrology planning studies on topics including floodplains, water supply, flood control, salt balance, irrigation efficiencies, sediment transport, rainfall-runoff modeling and groundwater balances.

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Special Coursework

Years	Course	Sponsor
2011	Hydraulic Fracturing of the Marcellus Shale	National Groundwater Association
2008	Fractured Rock Analysis	MidWest Geoscience
2005	Groundwater Sampling Field Course	Nielson Environmental Field School
2004	Environmental Forensics	National Groundwater Association
2004 and -5	Groundwater and Environmental Law	National Groundwater Association

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Exhibit 2

Exhibit 2

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ENGINEERS · PLANNERS

September 19, 2013

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

Subject: ***Focused Traffic Analysis for the Proposed Yountville Hill Winery - Located at 7400 St. Helena Highway (SR-29) in Napa County***

Dear Mr. Sklar:

This report provides a focused traffic analysis for the proposed Yountville Hill Winery project located at 7400 St. Helena Highway in Napa County (see Figure 1 for Project Vicinity Map). This study reflects our discussions with County Planning staff regarding the project analysis approach and other adjacent approved/pending projects in the study area. In addition, the analysis will build on previous work conducted by George W. Nickelson, P.E. with regard to winery access to/from State Route 29 and driveway access. Some of the key issues evaluated in this study include the following:

- Existing and future weekday PM and weekend mid-day peak hour operations at the Yountville Hill Winery Project Driveway intersection with State Route 29;
- Near-term (Year 2015) traffic conditions reflecting other approved/pending projects in the study area;
- Project trip generation from proposed winery production, employment, and/or visitors;
- Project site circulation and vehicle access at State Route 29 project driveways and truck circulation;
- Cumulative year 2030 (no project) conditions along State Route 29 based on the Napa County General Plan Update EIR.

The following sections outline existing and future traffic conditions with and without the proposed Yountville Hill Winery project. Where necessary, measures have been recommended to ensure acceptable traffic flow, circulation, and/or fair share contribution to regional cumulative traffic improvements along State Route 29. I trust that this report responds to your needs. Please review this information and call me with any questions or comments.

Sincerely,

Peter J. Galloway

Peter J. Galloway, Transportation Planner
OMNI-MEANS, Ltd. Engineers & Planners

Cc: Mr. Lester Hardy, Attorney
Mr. George W. Nickelson, P.E.

Attachments: Appendices

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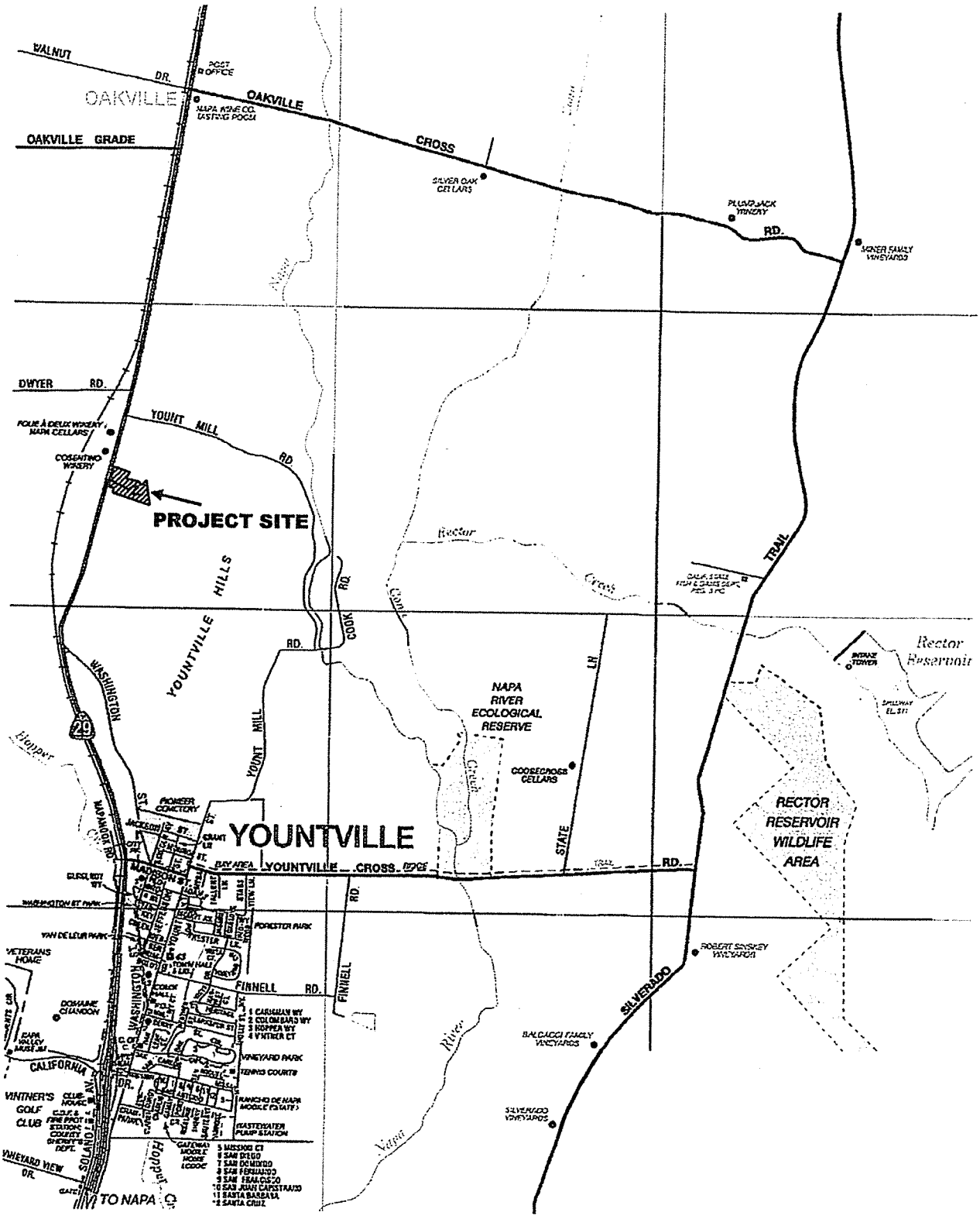

Project Vicinity Map

North

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figure 1

1. EXISTING TRAFFIC CONDITIONS

Roadways

The proposed Yountville Hill Winery project is located at 7400 State Route 29 (SR-29 or St. Helena Highway) on the northeast side of the highway. It is noted that SR-29 is primarily a north-south facility through the Napa Valley. However, SR-29 extends in a northwest-southeast direction immediately adjacent to the project site. A brief description of each roadway follows:

State Route 29 extends in a northwest-southeast direction between Yountville and Oakville in the project study area. Classified as a two-lane rural arterial roadway, SR-29 provides access northwest to Oakville, Rutherford, St. Helena, and Calistoga as well as southeast to Napa and American Canyon. In the immediate project site area SR-29 functions as a two-lane rural arterial road with two 12-foot travel lanes, a 12-foot two-way-left-turn-lane (TWLTL), and wide 8-10 foot shoulders (striped each side) at the project driveway intersection. The speed limit on SR-29 is 55 mph.

Yountville Hill Winery Driveway (existing configuration) extends east from SR-29 to provide access to the winery grounds and other parcels located in the project vicinity. The current driveway is paved with an 11-12 foot width and extends to an electronic access gate situated approximately 105 feet east of highway. Past the gate, the driveway continues east extending up a hill to an existing (former) Bed and Breakfast building. The driveway circles the building to create a one-way loop road that allows visitors to return via the same route. Prior to extending up the hill to the B&B building, a second driveway extends north approximately 360 feet to provide access to an existing residence.

Existing Roadway/Intersection Volumes

SR-29 acts as the primary north-south regional route through the Napa Valley and provides direct access to the project site. Based on the most recent Caltrans daily traffic counts conducted along SR-29 (south of Oakville Grade Road), SR-29 has a current annual average daily traffic volume of 22,800 vehicles.[1] During the peak month, the roadway carries 24,800 ADT. Based on Napa County roadway segment level-of-service (LOS) thresholds, these volumes are approaching the roadway capacity and represent LOS F conditions for a two-lane rural arterial roadway.[2] This would certainly be true of the peak month season (which typically occurs during the summer-fall season), and can result in southbound congestion approaching Yountville. As this heavy southbound flow approaches the traffic signal at Madison Avenue, vehicle queues can extend back towards the project area. Field observations made during peak weekday/weekend data collection at the SR-29/Project Driveway indicate relatively stable-flow conditions in both directions with occasional platoons/congestion in the southbound direction approaching Yountville.

As a part of this study, intersection turning movement counts were conducted on SR-29 at the proposed winery's access driveway during a weekday PM peak commute period (4-6 PM) and the Saturday afternoon peak period (1-3 PM).[3] (Winery visitor activity is expected to be highest during a Saturday afternoon). From these peak period counts, the "peak hour" of traffic flow was derived to calculate existing vehicle delay. These counts indicate a weekday PM peak hour flow of 1,755 vehicles and a Saturday afternoon peak hour

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[1] *Caltrans, 2012 Traffic Volumes Book, State Route 29 average annual daily traffic (AADT) and peak month average daily traffic (ADT).*
[2] *Napa County Baseline Data Report, Table 11-1; Napa County Roadway Segment Daily LOS Volume Thresholds, Transportation and Circulation, November 2005.*
[3] *Omni-Means Engineers & Planners, Weekday PM peak period (4:00-6:00 p.m.) and weekend mid-day peak period (1:00-3:00 p.m.) intersection turning movement counts, SR-29/Project Driveway, July 13 & 17, 2013.*

flow of 1,675 vehicles. The counted peak hour volumes are somewhat lower than the expected typical day peak hour flow based on Caltrans data. To simulate "typical" peak conditions as indicated by Caltrans data, the volumes counted as a part of this analysis were increased by 16.5% These volumes reflect a two-way SR 29 operation that would be categorized as in the Level of Service (LOS) "E" range. Based on Caltrans count data, the peak hour volumes would be about 9% of the daily total or about 2,050 peak hour vehicles on a typical day.

It is noted that construction for the undergrounding of utilities is occurring along segments of SR-29 northwest of the project site. Based on the Caltrans website, this construction work is currently taking place between Mee Lane and Sulphur Springs Road on SR-29 and can require lane closures, flagmen, and cause moderate to severe traffic delays. With the project site being located south of the construction area, overall vehicle flow on SR-29 was not significantly affected.

Existing weekday PM peak hour and weekend mid-day peak hour intersection volumes have been shown in Figure 2.

Project Driveway/Access Operations

At the Yountville Hill Winery site access intersection, SR-29 has two travel lanes, paved shoulders and a standard two-way-left-turn-lane (TWLTL). Just to the north of the project driveway, the TWLTL provides access to the Mustard's Grill restaurant driveway on the west side of SR-29. The distance between the north side of the project site driveway and the south side of the Mustard's Grill driveway is about 40-45 feet. Both driveways share the existing TWLTL on SR-29 that allows motorists to make left-turn movements into the driveways without interrupting through-traffic flow on the highway. This same TWLTL allows outbound motorists from the same driveways refuge on SR-29 when making a left-turn movement and merging into through-traffic. This is noted because all outbound traffic from both the proposed project driveway and Mustards Restaurant driveway must yield the right-of-way to any vehicle in the TWLTL.

The Yountville Hill Winery project site currently has a 4-room inn (not in operation) and an off-site residence that gains access via the site driveway. The existing residence traffic activity is very low. During this study's peak period counts, only two vehicle trips in/out of the driveway occurred during the weekday PM and weekend mid-day peak hour (representing the single family dwelling). However, to provide an existing baseline for analysis, trips that would be generated by a 4-room inn were calculated and added to the driveway.[4]

Existing Intersection Operation

Intersection operation is one of the primary factors in evaluating the carrying capacity of a roadway network. Traffic conditions are measured by Level of Service (LOS), which applies a letter ranking to successive levels of intersection performance. LOS 'A' represents optimum conditions with free-flow travel and no congestion. LOS 'F' represents severe congestion with long delays at the approaches. For intersections with minor street stop control, the LOS reflects the delays experienced by the minor street approach. (LOS definitions and calculation worksheets are provided in the Appendix).

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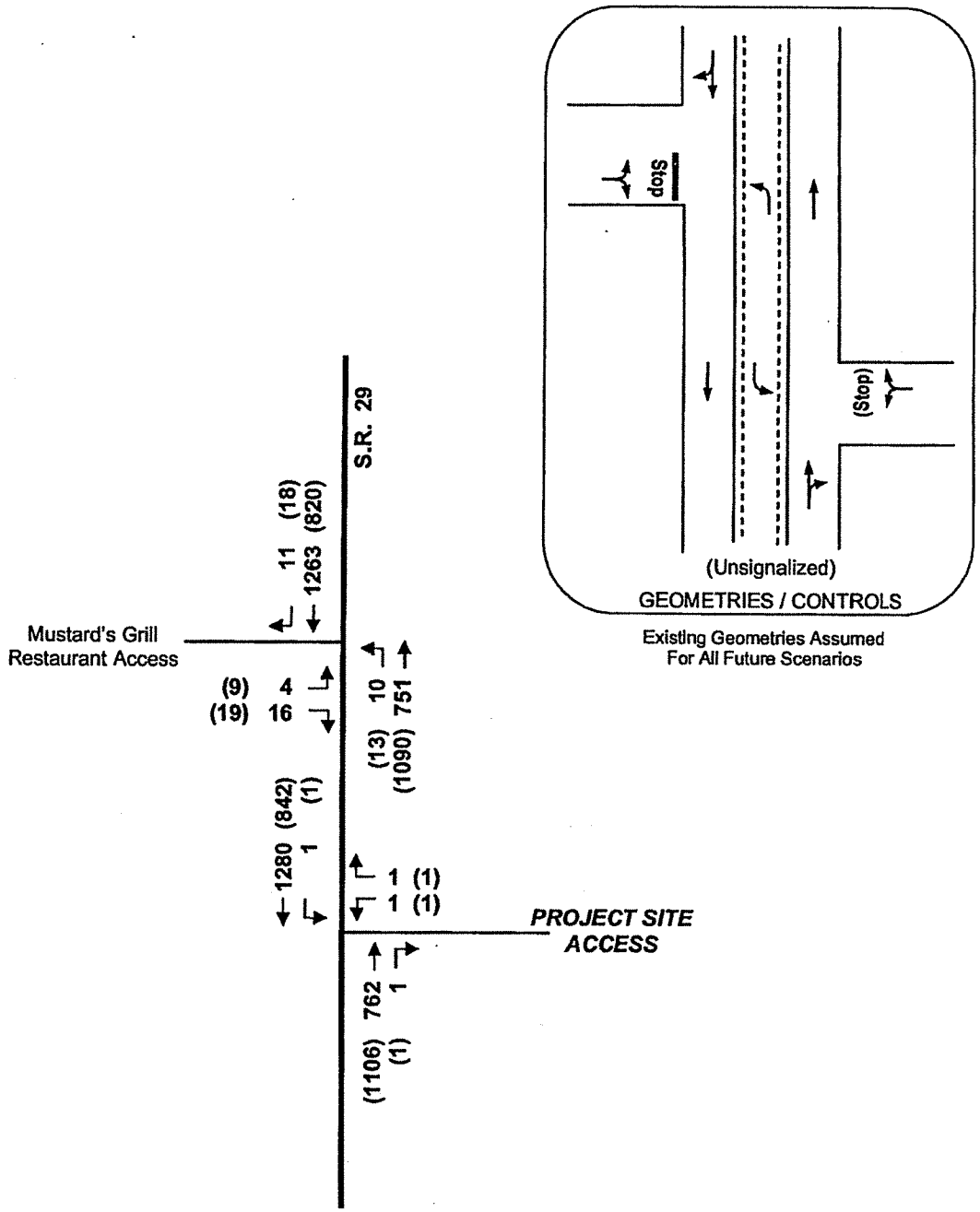
[4] *Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, Resort Hotel (#330), Based on 0.37 trips/room (= 2 peak hour trips) during both weekday PM and weekend mid-day peak hour, 2012.*



Existing Weekday P.M. and (Weekend Mid-day)
Peak Hour Volumes

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figure 2

The project study intersection at SR-29 is an unsignalized, minor-street stop-sign controlled intersection. Based on the Highway Capacity Manual (*HCM 2010*) operations methodology for unsignalized intersections, existing weekday PM peak and weekend mid-day peak hour existing (no project) level-of-service has been shown in Table 1. As calculated, during the weekday PM peak hour the Yountville Hill Project Driveway/SR-29 intersection is operating at LOS C (17.9 seconds delay) for the stop-sign controlled outbound turning movements onto SR-29. During the weekend (Saturday) mid-day peak hour, the same outbound turning movements are operating at LOS C (19.8 seconds of delay).

TABLE 1
EXISTING AND NEAR-TERM (NO PROJECT) CONDITIONS: INTERSECTION LEVELS-OF-SERVICE WEEKDAY PM PEAK AND WEEKEND MID-DAY PEAK HOUR

			Wkdy. PM LOS/Delay		Wknd. Mid-Day LOS/Delay	
#	Intersection	Control Type	Existing (No Project)	Near-Term (No Project)	Existing (No Project)	Near-Term (No Project)
1	Yountville Hill Driveway/SR-29	Stop	C 17.9 secs.	C 19.7 secs.	C 19.8 secs.	C 22.0 secs.

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (unsignalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

Based on the California Manual on Uniform Traffic Control Devices (CAMUTCD) peak hour signal warrant criteria, the Yountville Hill Project Driveway/SR-29 intersection was evaluated for signalization.[5] The peak hour warrants are one of several standards to help determine if installation of a traffic signal is appropriate. Qualifying for signalization using the peak hour warrants does not necessarily mean a signal should be installed. The Yountville Hill Project Driveway/SR-29 intersection does not qualify for signalization under the peak hour warrants using existing volumes (the warrant graphs are provided in the Appendix).

Vehicle Speeds/Sight Distance

The primary issues for access design are the vehicle visibility and operation relative to vehicles traveling on SR 29 and vehicles turning in/out of the winery access. The required vehicle visibility or "corner sight distance" is a function of the travel speeds on SR-29. Caltrans design standards indicate that for appropriate corner sight distance, "a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the cross road and the driver of an approaching vehicle in the right lane of the main highway."[6] Based on radar surveys conducted as a part of this study, the "critical" vehicle speeds (85% of all surveyed vehicles travel at or below the critical speed) along SR-29 at the proposed project driveway were observed to be approximately 49-54 miles per hour (mph) during the weekday PM peak period and the Saturday afternoon peak period. Based on Caltrans design standards, these vehicle speeds require a sight distance of about 450-500 feet, measured along the travel lanes on SR-29.[7]

The proposed Yountville Hill winery project driveway intersection is located on a straight section of SR-29. Field observations indicate sight distances to the north and south are well in excess of the 500 feet needed for the measured vehicle speeds. However, there is an existing shrub/low tree situated on the north side of project driveway that blocks sight distance to the north. This shrub would have to be removed if/when project approval is granted.

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[5] *California Manual on Uniform Traffic Control Devices (CAMUTCD), Chapter 4C, Peak hour signal warrant (#3), 2012.*
[6] *Caltrans, Highway Design Manual, Sixth Edition, July 1, 20009.*
[7] *George W. Nickelson, P.E., Radar speed surveys on State Route 29 at Yountville Hill Winery driveway(s), October 30 and November 5, 2009.*

2. NEAR-TERM (NO PROJECT) CONDITIONS

Near-Term (Approved/Pending Projects)

Near-term (no project) conditions represent a reasonable period of time in which the proposed project could be approved and/or constructed. Based on discussions with County staff, a two-year period to the year 2015 has been established for near-term (no project) conditions representing all approved/pending projects within the study area. In addition, recent approved/pending projects within the Town of Yountville are included in the overall project list. To generate near-term (no project) conditions, approved and pending projects provided by both Napa County and Town of Yountville Planning staff for other recent traffic analyses in the area have been used.[8] [9] To the best of our knowledge, these approved/pending projects are either new wineries or existing wineries applying for use permit modifications to increase production, employees, visitors, and/or marketing events. These projects are located both north and south of the project site off of State Route 29, in the City of St. Helena, or east of the project site off northern crossroad(s) that connect SR-29 with Silverado Trail and are described as follows:

Town of Yountville

Stewart Mixed-Use 6572 Washington St. Yountville, CA 94599	Wine Tasting Rm.: 2,350 square feet Bookstore: 1,420 square feet Café: 690 square feet Apartment: One Bedroom

City of St. Helena:

Crocker & Starr Winery 700 Dowdell Lane St. Helena, CA 94574	Production: 25,000 gallons per year Visitors: 16 visitors/day Employees: 7 full-time, 3 part-time

Napa County:

Raymond Winery 849 Zinfandel Lane St. Helena, CA 94575	Production: 1,500,000 gallons per year Visitors: 500 visitors/day Employees: 90 full-time
Kelham Winery 360 Zinfandel Lane St. Helena, CA 94575	Production: 75,000 gallons per year Visitors: 140 visitors/week Employees: 6 full-time
The Ranch Winery 105 Zinfandel Lane St. Helena, CA 94575	Production: 12,500,000 gallons per year Visitors: 15 visitors/week Employees: 85 full-time
Del Dotto Family Winery 1455 St. Helena Hwy. St. Helena, CA 94575	Production: 48,000 gallons per year Visitors: 15 visitors/week Employees: 5 full-time

8 Mr. Greg Desmond, Interim Planning Director, City of St. Helena, Personal communication; Crocker & Starr Winery project, April 12, 2013.
9 Ms. Linda St. Clair, Planner III, Planning, Building, and Environmental Services Department, Personal communication, Yountville Hill Winery Use Permit Modification (dated 6-6-12), April 15, 2013.

Whitehall Lane Winery 1563 St. Helena Hwy. St. Helena, CA 94575	Production: 50,000 gallons Visitors: 500 visitors/week Employees: 5 full-time
The Sullivan Family Estate 1090 Galleron Road St. Helena, CA 94575	Production: 22,500 gallons per year Visitors: 7 visitors/week Employees: 4 full-time
Franciscan Winery 1178 Galleron Road St. Helena, CA 94575	Production: 1,200,000 gallons per year Visitors: 3,500 visitors/week Employees: 65 full-time
Flynnville Winery 1184 Maple Lane Calistoga, CA 94515	Production: 300,000 gallons per year Visitors: 500 visitors/day Employees: 30 full-time
Martini Winery 254 St. Helena Hwy. St. Helena, CA 94575	Production: 2,000,000 gallons per year Visitors: 1,400 visitors (+296 trade visitors)/week Employees: 54 full-time
Sinegal Estate Winery 2125 Inglewood Ave. St. Helena, CA 94575	Production: 60,000 gallons per year Visitors: 21 visitors/week Employees: 3 full-time

Near-Term (No Project) Trip Generation

Near-term (approved/pending) projects' weekday PM hour, weekend mid-day peak hour, and daily traffic volumes have been taken directly from previous transportation analyses performed for those projects and these include the following:

- *Omni-Means Engineers & Planners, Updated Traffic Study for the Proposed Raymond Winery Use Permit Application (#P11-00156), Napa County, Draft Report, April 5, 2013;*
- *Omni-Means Engineers & Planners, Focused Trip Generation Analysis for the Proposed Crocker & Starr Winery Project at 700 Dowdell Lane (APN 009-120-059), City of St. Helena, Draft Report, April 12, 2013;*
- *Omni-Means Engineers & Planners, Focused Traffic Analysis for the Proposed Flynnville Winery Project, Located at State Route 29/Maple Lane in Napa County, January 15, 2013:*
- *Omni-Means Engineers & Planners, Updated Focused Traffic Analysis for the Proposed Louis M. Martini Winery Master Plan—Located at 254 St. Helena Highway (SR-29) in St. Helena (Napa County), May 16, 2013.*

For all approved/pending winery projects, daily and peak hour trip generation was calculated using employee peaking factors, auto occupancy rates for visitors, and production ratios based on recent winery research conducted by the Napa County Conservation, Development, and Planning Department. For approved development in the Town of Yountville, peak hour trip generation was based on the Institute of Transportation Engineers (ITE) trip research for specialty retail and residential uses.[10] Near-term projects would generate 202 weekday PM peak hour trips and 206 mid-day weekend peak hour trips on

[10] Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition, Specialty Retail (#826) and Apartment (#210) uses, 2012.

SR-29 adjacent to the Yountville Hill Winery. On a daily basis, near-term projects would generate 845 ADT and 828 ADT on a weekday and weekend, respectively.

Near-term (no project) daily and peak hour volumes for the weekday and weekend have been added to existing intersection volumes on State Route 29 based on previous transportation analyses conducted in the area. Near-term (no project) volumes for weekday PM peak hour and weekend mid-day peak hour have been shown in Figure 3.

Near-Term (No Project) Intersection/Roadway Operation

With near-term (no project) volumes, study intersection LOS has been calculated and is shown in Table 1. During the weekday PM peak hour, the Yountville Hill Winery Driveway/SR-29 intersection would be operating at LOS C (19.7 seconds). LOS operation during the mid-day weekend peak would be similar at LOS C (22.0 seconds). Near-term (no project) intersection LOS would represent minor increases in vehicle delay for outbound traffic from the Yountville Hill winery driveway of 2-3 seconds (all referenced intersection LOS refers to the stop-sign controlled outbound turning movements from the project driveway).

Based on CAMUTCD peak hour signal warrant criteria (Warrant #3), the Yountville Hill Winery Driveway/SR-29 intersection would not qualify for signalization with near-term (no project) volumes.

AADT volumes on SR-29 would increase from 22,800 to 23,645 vehicle under near-term (no project) conditions. Based on Napa County roadway thresholds, this would continue to represent LOS F conditions as under existing conditions.

3. NAPA COUNTY SIGNIFICANCE CRITERIA

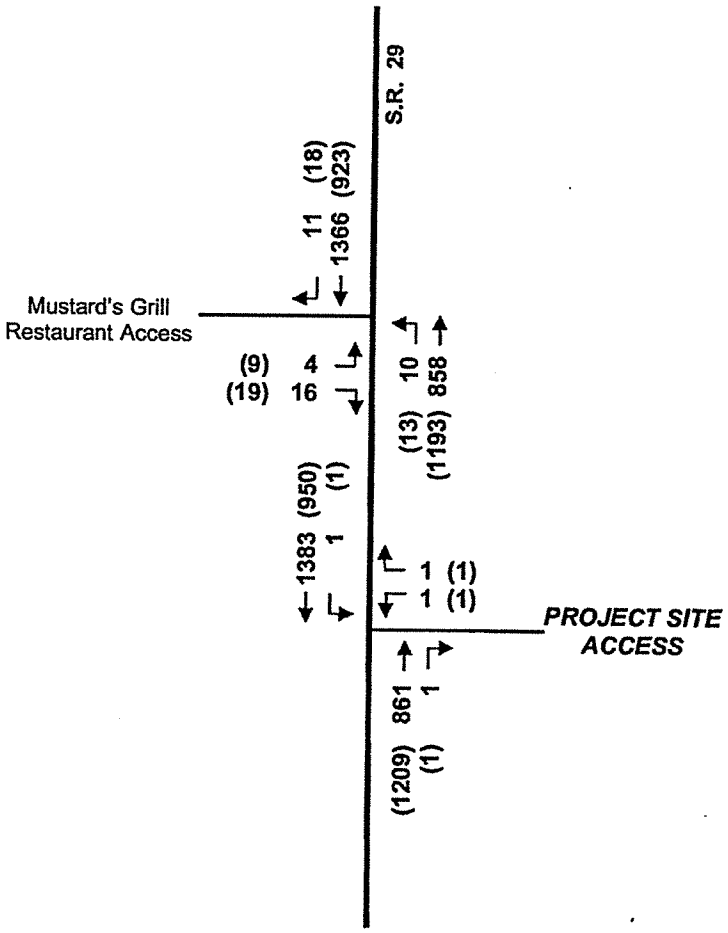
The County of Napa's significance criteria has been based on a review of the Napa County Transportation and Planning Agency and Napa County General Plan documentation on roadway and intersection operations. Specifically, the Circulation Element of the County's General Plan outlines the following significance criteria specific to intersection operation:

Intersections

- The County shall seek to maintain a Level of Service D or better at all intersections, except where the level of service already exceeds this standard (i.e. Level of Service E or F) and where increased intersection capacity is not feasible without substantial additional right-of-way.
- No single level of service standard is appropriate for un-signalized intersections, which shall be evaluated on a case-by-case basis to determine if signal warrants are met.

Further significance criteria are based on County and CEQA guidelines and apply mainly to intersection operation and access. A significant impact occurs if project traffic would result in the following:

- Cause an increase in traffic which is substantial in relation to existing traffic load and capacity of the street system (i.e. result in a substantial increase in either the number of vehicle trips, the volume capacity ratio on roads, or congestion at intersections);
- Exceed either individually or cumulatively, an LOS standard established by the county congestion management agency for designated roads or highways;
- Result in a change of traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;



NOT TO SCALE

Near Term Approved/Pending Development
Weekday P.M. and (Weekend Mid-day) Peak Hour Volumes

North

omni-means

figure 3

- Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);
- Result in inadequate emergency vehicle access;
- Project site or internal circulation on the site is not adequate to accommodate pedestrians and bicycles;

4. PROPOSED PROJECT IMPACTS

Project Components

The proposed Yountville Hill winery project would consist of wine production, full-time employees, visitation tours/tasting, and marketing events throughout the year. The project applicant's use permit application indicates there would be no part-time employees (except during Crush). Full-time employees would either work a weekday shift and/or combination of weekday/weekend shift. Proposed project components can be described as follows: [11]

• Production	Annual:	100,000 gallons
• Employees:	Weekday:	19 full-time
	Weekend:	8 full-time
• Visitors:	Weekday:	110 visitors
	Weekend:	285 visitors
• Trucks:	Weekday:	2 truck per day
	Weekend:	2 trucks per day

Daily operations for the proposed Yountville Hill Winery project would involve an all on-site winery operation with a maximum annual production of 100,000 gallons (40,500 cases). All fruit (100,000 gallons of production) would be processed on-site during the year with the majority occurring during the harvest/crush season. Visitors (by appointment only) are expected; an average of 110 daily visitors on a typical weekday and 285 daily visitors on a Saturday. Visitor hours would be limited between 10:00 a.m. – 6:00 p.m. Employment is expected to be a maximum of 19 full-time employees during weekday and/or weekend periods. Winery operations for staff would occur between 6:00 a.m. – 6:30 p.m. The employment shift hours would vary dependent on specific work applications; five production staff (6:00 a.m. – 3:00 p.m.), six administrative staff (8:00 a.m. – 5:00 p.m.), and eight hospitality staff (9:30 a.m. – 6:30 p.m.). The largest marketing event would involve 200 guests occurring on an annual basis. All new marketing events would only be held during off-peak hours.

Annual winery production would be estimated at 100,000 gallons. With regard to truck activity, the winery would generate approximately 4-5 deliveries on its busiest day (crush season).

Project Trip Generation/Distribution

The proposed project's weekday and weekend peak hour and daily traffic volumes have been calculated and are shown in Table 3. Overall trip generation calculations have been based on employee peaking factors and auto occupancy rates for event visitors based on recent winery research conducted by the

[11] *Yountville Hill Winery, Winery Traffic Information/Trip Generation Sheet, Preliminary project data for production, employment, visitors, and marketing, Mr. Lester Hardy, Attorney, Personal communication, August, 2013.*

Napa County Conservation, Development, and Planning Department and existing driveway volumes.[12] It is noted that for peak hour traffic generation, only full time employees traveling to/from the site were included in project trip generation calculations. For the weekday PM peak hour, this included six administrative staff (production staff would be gone, hospitality staff still on-site). For the weekend mid-day peak hour, this included the eight hospitality staff (production and administrative staff would be gone). Based on production, employment, and visitor activity, the project would be expected to generate 145 daily weekday trips with 39 PM peak hour trips (16 in, 23 out). During a typical weekend, the project would be expected to generate 228 daily trips with 59 mid-day peak hour trips (30 in, 29 out).

During the six-week harvest crush season, the proposed project is expected to generate an average of 250 daily trips. This daily trip total would represent 285 visitors, 9 full-time and 4 part-time employees on-site during weekend periods, 100,000 gallons of wine production, and approximately 35 daily tons (on-haul) of grapes.

Based on the largest marketing event attendance of 200 persons (twice per year), there would total generation of 191event trips.

To determine traffic conditions with the proposed project, the calculated project trips were added to existing volumes. Based on observed turning percentages, the project trips were distributed 25% to/from the north and 75% to/from the south on State Route 29.

Existing plus project and near-term plus project volumes have been shown in Figure 4 and 5.

Project Effects on Roadway/Intersection Operation

A. Existing Plus Project Conditions

The project would be expected to add approximately 109 daily trips south of the site and 36 daily trips north of the site on State Route 29. This would represent an addition of less than 1 percent (0.006) to the daily volumes on the highway. The combined existing plus project volume of 22,945 daily trips would remain at LOS F operating conditions for a two-lane rural arterial roadway based on established County thresholds.

During the peak winery activity periods, the project would generate 39 weekday PM peak hour and 59 Saturday mid-day peak hour trips. Weekday PM peak hour and weekend mid-day peak hour intersection levels of service were evaluated with proposed project traffic and are shown in Table 4.

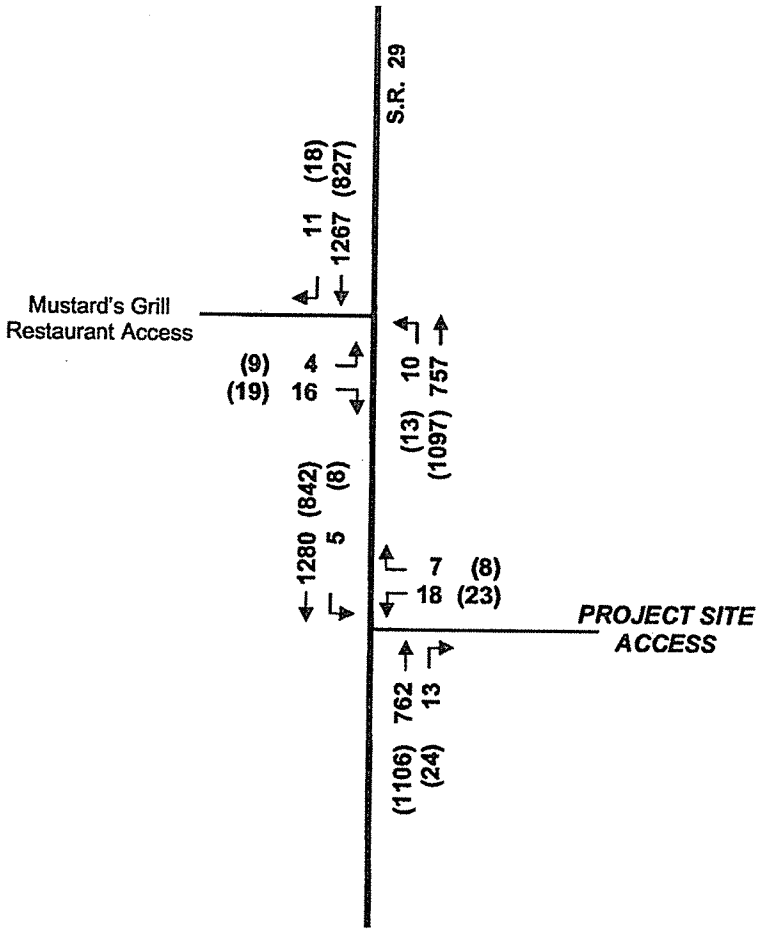
With existing plus project traffic volumes, the two project study intersections would continue to operate at acceptable levels (LOS C or better) during both the weekday PM peak hour and weekend mid-day peak hour periods. At shown in Table 4, intersection LOS would remain unchanged from existing conditions with proportional increases in overall vehicle delay.

[12] *County of Napa, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2012.*

TABLE 3
PEAK HOUR AND DAILY TRIP GENERATION:
PROPOSED YOUNTVILLE HILL WINERY PROJECT

Weekday Daily Traffic:		
110 visitors/2.6 persons per vehicle x 2 one-way trips	=	85 daily trips
19 full time employees x 3.05 one-way trips	=	58 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
100,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	2 daily trips
Total Weekday Daily Trips	=	**145 daily trips**
Weekday PM Peak Hour Traffic:		
(85 daily visitor trips + 2 daily truck trips) x 0.38 peak	=	33 peak hour trips
6 full time employees x 1 trip/employee	=	6 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekday PM Peak Hour Trips	=	**39 trips (16 in, 23 out)**
Weekend (Saturday) Daily Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
8 full time employees x 3.05 one-way trips	=	24 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
Total Weekend (Saturday) Daily Trips	=	**224 daily trips**
Weekend (Saturday) Peak Hour Traffic:		
204 daily visitor trips x 0.25 peak	=	51 peak hour trips
8 full time employees x 1 trip/employee	=	8 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekend (Saturday) Peak Hour Trips	=	**59 trips (30 in, 29 out)**
Weekend (Saturday) Daily Harvest/Crush Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
9 full time employees x 3.05 one-way trips	=	27 daily trips
4 part-time employees x 1.90 one-way trips	=	4 daily trips
20,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	1 daily trips
0 annual ton grapes (on-haul)/144 daily trucks x 2 o-w trips	=	0 daily trips
Total Weekend (Saturday) Daily Harvest/Crush Trips	=	**55 daily trips**
Largest Marketing Event – Additional Traffic		
6 event staff x 2 one-way trips per person	=	12 event trips
125 visitors / 2.8 visitors per vehicle x 2 o-w trips	=	89 event trips
4 trucks x 2 one-way trips	=	8 event trips
Total Largest Event Marketing Trips:	=	**109 event trips**

Source: Production, employee, and visitor data provided by Mr. Eric Sklar (project applicant) and Mr. Lester Hardy (Attorney).



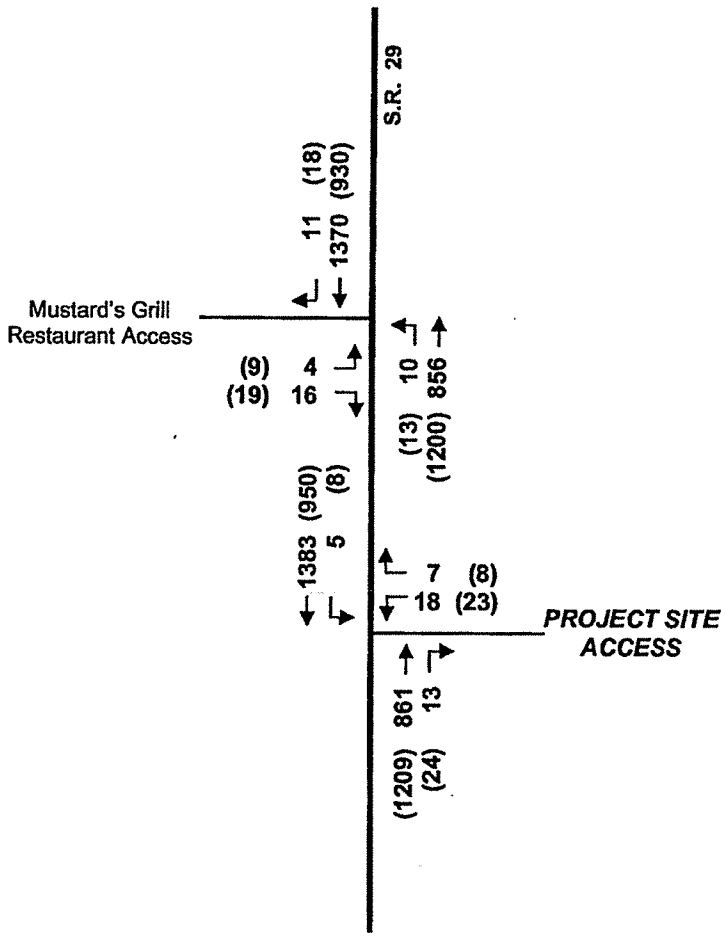
NOT TO SCALE

Existing + Project Weekday P.M. and (Weekend Mid-day) Peak Hour Volumes

North

omni-means

figure 4



NOT TO SCALE

Near Term + Project Weekday P.M. and (Weekend Mid-day) Peak Hour Volumes

North

omni-means

figure 5

B. Near-Term Plus Project Conditions

With near-term plus project conditions, daily traffic volumes on State Route 29 would increase to 23,873 ADT. Again, this would represent LOS F conditions for a two-lane, rural arterial roadway based on County thresholds. However, the existing continuous two-way-left-turn-lane on SR-29 improves overall vehicle delay and adds some additional capacity to the roadway.

Both driveway study intersections would operate at acceptable levels (LOS C or better) during both the weekday PM peak hour and weekend mid-day peak hour under near-term with project conditions.

TABLE 4
EXISTING PLUS PROJECT AND NEAR-TERM PLUS PROJECT CONDITIONS:
INTERSECTION LEVELS-OF-SERVICE
WEEKDAY PM PEAK AND WEEKEND MID-DAY PEAK HOUR

			Wkdy. PM LOS/Delay		Wknd. Mid-Day LOS/Delay	
#	Intersection	Control Type	Existing + Project	Near-Term + Project	Existing + Project	Near-Term + Project
1	Yountville Hill Driveway/SR-29	Stop	C 21.1 secs.	C 23.6 secs.	C 21.4 secs.	C 24.2 secs.

Based on Highway Capacity Manual (HCM) 2000, Operations methodology for stop-sign controlled (unsignalized) intersections using Synchro-Simtraffic software. Intersection calculation yields an LOS and vehicle delay in seconds. Stated LOS refers to the minor street (stop-sign) controlled movement.

5. SITE ACCESS/DESIGN PARAMETERS

Sight Distance

As noted in the discussion of existing conditions, sight distances to the north and the south are well in excess of the minimum sight distances needed for the measured vehicle speeds. Based on radar surveys conducted in the vicinity of the proposed Yountville Hill Winery project, the "critical" vehicle speed (85% of all surveyed vehicles travel at or below the critical speed) along SR-29 at the winery were observed to be 49-54 miles per hour (mph).[13] Based on Caltrans design standards, these vehicle speeds require a stopping sight distance of 400-450 feet, measured along the travel lanes on SR-29.[14]

The Yountville Hill winery access intersection is located on a straight section of SR-29. Field observations indicate sight distances to the north and south are well in excess of the 450 feet needed for the measured vehicle speeds with the existing southerly and new northern driveway locations. However, a large shrub/tree (volunteer) would need to be removed on the north side of the driveway entrance to ensure unobstructed views to the north up SR-29.

Two-Way-Left-Turn-Lane-Operation

The proposed project's driveway intersects SR-29 at a point where a TWLTL exists. As shown on Figures 4 and 5, the driveway would have 5 inbound left-turns during a weekday PM peak hour and 8 inbound left turns during a Saturday afternoon peak hour. During these same periods, the inbound left turns counted at the Mustard's Grill driveway were 10 vehicles and 13 vehicles, respectively. Based on Caltrans guidelines for left turn queuing, the Mustard's Grill volumes would require a maximum of one vehicle storage during the

[13] *George W. Nickelson, P.E., Radar speed surveys on State Route 29 at Yountville Hill Winery driveway(s) October 30 and November 5, 2009*
[14] *Caltrans, Ibid....*

peak hours.[15] During the peak period counts, the actual observed left turn queues never exceeded one vehicle. The very low inbound left turn volumes at the project driveway would not be expected to significantly conflict with the left turns into Mustard's Grill.

Project Access and Circulation

Based on the Yountville Hill Winery site plan, a new driveway (improved) would extend to parking and winery facilities located on the hillside east of SR-29 (see Figure 6–Project Site Plan). The project driveway would have a minimum width of 20-feet to provide for two-way travel and comply with County standards. Approximately mid-way up the hillside, the driveway would provide access to a parking area and visitor entrance to the winery. The parking area would have a 25-foot drive aisle and multiple access points (three) from the driveway to allow for vehicle entry/exit and return to SR-29. Continuing up the hill, the driveway would terminate in a large cul-de-sac at the winery's visitor tasting room/office. There would be limited parking spaces at this building (two). This area would primarily be for project staff and/or ADA visitors not parking in the lower parking areas. The large cul-de-sac would allow vehicles to turn around and/or back out of parking spaces to exit the site.

The proposed project driveway has been evaluated for right-turn lane warrants. Caltrans guidelines suggest that the combination of northbound through volumes on SR-29 and the expected inbound right turn volumes would not warrant a separate right turn lane at the site driveway. However, the driveway would have inbound right turn volumes that would warrant a right turn taper (not a separate right turn lane). The right turn volume would just meet the minimum volume threshold during only the Saturday afternoon peak hour (with visitor activity at the maximum permitted levels).

The Napa County Transportation & Planning Agency (NCTPA) in cooperation with Napa County and local City agencies is developing bicycle routes as outlined in the Napa Countywide Bicycle Plan.[16] The plan encourages new developments to incorporate bicycle friendly design. State Route 29 has wide striped shoulder areas (unofficial Class II bike lanes) in both directions. Some visitors may utilize bicycles to access the proposed project. The project would provide bicycle racks for visitors to the proposed winery.

Marketing Events

With regard to special event traffic, the largest (200 visitors) event would be an all day event on a weekend. This event would involve visitors arriving and departing throughout the entire day. The event would be scheduled to ensure that the majority of visitor arrivals and/or departures would not coincide with the Saturday afternoon peak hour background traffic flows on SR-29.

Based on standard auto occupancy rates, the largest special event (200 people) would generate up to 191 trips (96 in, 95 out). As noted, these events are typically of sufficient duration in length that the inbound and outbound trips occur in separate hours, thus the number of trips on the street network at one time are half of the total volume. These events are usually held outside of typical peak traffic periods (throughout the entire day or later than 6:00 p.m.) and therefore generally do not impact peak hour operations during the weekday/weekend peak periods.

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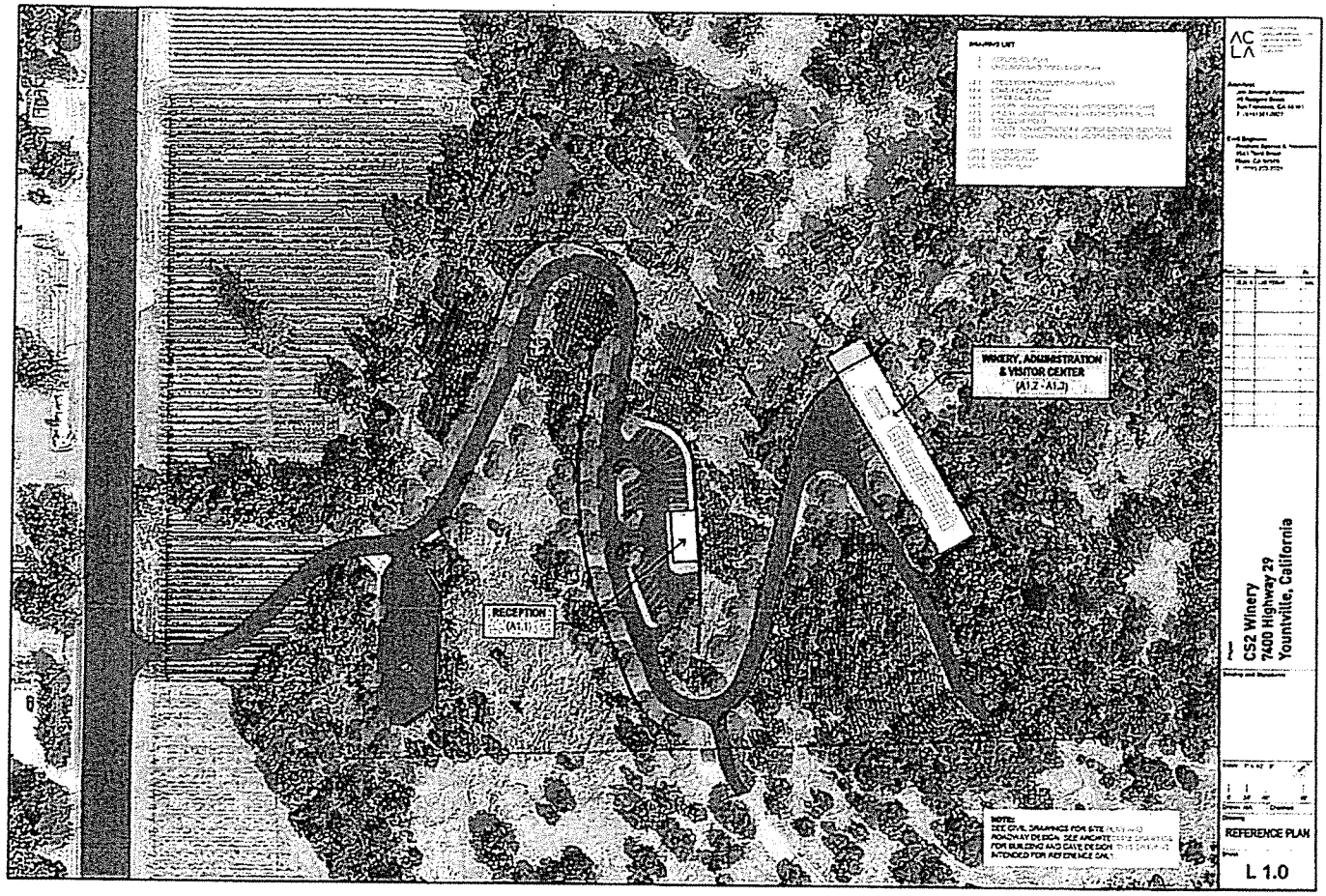
[15] *Caltrans, Guidelines for Reconstruction of Intersections, August 1985. The maximum peak hour northbound left-turn volume is 13 vehicles, requiring 1 vehicle storage calculated as follows: 13 hourly vehicles/60 x 2 minutes of storage = 0.43 or 1 vehicle.*

[16] *Napa County, Countywide Bicycle Plan (2012), Planning Area-North Valley, May 2012.*



Project Site Plan

North

omni-means

figure 6

Construction Impacts

With regard to construction impacts, the contractor responsible for cave construction has estimated an 18-month schedule during which time approximately 28,400 cubic yards of cave spoils would be hauled off-site. Based on an 18-month schedule, the spoils quantity would equate to approximately 75 cubic yards daily or 7-8 trucks each day. Truck volumes of this magnitude would not be measurably affect traffic flows on SR-29 during the weekday PM peak period.

6. CUMULATIVE CONDITIONS

Cumulative Year 2030 Projections

Model Forecast

Cumulative (Year 2030) volume projections on State Route 29 (SR-29) were derived from the Napa County Transportation & Planning Agency's traffic volume forecasts in the Napa County General Plan Update EIR. The forecast increase in volume-to-capacity (v/c) ratio from Year 2003 to Year 2030 on SR-29 in the project vicinity between Madison Street and Oakville Grade Road was applied to the provided Year 2003 peak hour two-way volume (2,017 trips) on SR-29, yielding a volume of 4,098 weekday PM peak hour trips on SR-29 in Year 2030.

The projected PM peak hour cumulative volume on SR-29 represents a large (200%) increase compared to the existing (Year 2013) peak hour counted volume of 2,042 trips on SR-29 at the project driveway. With projected cumulative forecasts, the existing daily volume on SR-29 would increase from 22,800 trips to 45,600 daily trips.

Historical Data

For comparison, average annual daily traffic volumes on SR-29 between Madison Street and Oakville Grade Road over the previous twenty years were reviewed. The average annual daily traffic (AADT) on SR-29 in 1992 was 15,500 trips. By comparison, the AADT on SR-29 2012 was 22,800 trips. Daily volumes were highest in the year 2007, reaching 26,500 AADT. Daily volumes on SR-29 have since declined and are lower today than they were in 2002. Increases in daily volumes between year 1992 and the highest year of 2007 equates to an annual increase of 4.5% per year on SR-29. Applying the same annual increase to the current ADT on SR-29 of 22,800 results in about 38,760 ADT in year 2030 (4.1% per year added for 17 years).

Cumulative volumes based on historical data are approximately 85% of the model forecast volumes on SR-29. The difference between the model numbers and historical growth trends indicates volumes are not increasing to the model's forecasted levels. However, in order to proactively address potential traffic volumes under cumulative conditions, the County has adopted several measures identified in the General Plan to improve the street network and also reduce vehicle trips.

In order to identify weekend cumulative conditions, the General Plan Update provides a ratio of weekday to weekend peak hour volumes on key streets within the valley. Several segments on SR-29 in the vicinity of the project were shown to have an average ratio of 0.76-0.80, indicating weekend peak hour volumes are expected to be about 80% of weekday volumes. Therefore the future weekend peak hour volumes would be expected to remain roughly in the same ratio as the existing volumes and lower than the weekday volume projections.

Cumulative Operating Conditions

The County's forecasted transportation model volumes on SR-29 under Year 2030 conditions are very tenuous given that the highway is essentially at or near capacity today. A more reasonable projection based on historical growth suggests that SR-29 would continue to operate near capacity levels with increased congestion during peak times of the day with longer peak periods during the day typically at unacceptable conditions (LOS E-F) for all minor street approaches and/or driveways at SR-29. Again, the presence of the existing two-way-left-turn-lane improves overall vehicle delays from minor street/driveways and as some additional capacity to the roadway.

Additional improvements to the street network are anticipated and have been included in the General Plan's Improved 2030 Network model. As noted, the County has also adopted several measures identified in the General Plan to reduce vehicle trips through public transit and Transportation Demand Management (TDM) strategies: "The project should support programs to reduce single occupant vehicle use and encourage alternative travel modes."

- In keeping with the policy, the winery project will provide bicycle racks for visitors who may arrive by bike. The project should also promote the use of public transportation and carpooling of employees (by adjusting work schedules, etc.) to facilitate the use of other transportation modes.

The County has identified other mitigation policies, including development of a traffic impact fee (TIF) to be developed in cooperation with the NCTPA (Mitigation Measure 4.4.1C). This would require new projects to pay their "fair share" of countywide traffic improvements they contribute the need for. Examples of such improvements could include transit/bicycle enhancements or possibly signalizing major cross street intersections along the SR-29 corridor. The concept is under development but presumably the fee would be applied on a "per trip" basis if/when implemented.

7. SUMMARY AND CONCLUSIONS

Daily and Peak Hour Operations

The proposed Yountville Hill Winery project would generate 145-224 net new daily trips during the weekday and weekend periods (respectively). The project traffic would represent an increase of less than 1% (0.006) over the existing SR-29 volume of 22,800 daily trips. All project study intersections would continue to operate at LOS C under existing plus project and near-term plus project conditions during both weekday and weekend peak hour conditions.

Daily volumes on SR-29 would continue to operate at or near capacity with 23,645 ADT (near-term no project) and 23,873 ADT with near-term plus project volumes but are aided with the presence of the continuous two-way-left-turn-lane.

Based on standard auto occupancy rates, the largest special event (200 people) would generate up to 191 trips (96 in, 95 out). As noted, these events are typically of sufficient duration in length that the inbound and outbound trips occur in separate hours, thus the number of trips on the street network at one time are half of the total volume. These events are usually held outside of typical peak traffic periods (throughout the entire day or later than 6:00 p.m.) and therefore generally do not impact peak hour operations during the weekday/weekend peak periods.

Vehicle Sight Distance

Vehicle sight distances to the north and the south on SR-29 are well in excess of the minimum sight distances needed for the measured vehicle speeds. Based on radar surveys conducted in the vicinity of the Yountville Hill Winery, the "critical" vehicle speed (85% of all surveyed vehicles travel at or below the critical speed) along SR-29 at the winery were observed to be 49-54 miles per hour (mph).[17] Based on Caltrans design standards, these vehicle speeds require a stopping sight distance of 400-450 feet, measured along the travel lanes on SR-29.[18]

The Yountville Hill winery access intersection is located on a straight section of SR-29. Field observations indicate sight distances to the north and south are well in excess of the 400-450 feet needed for the measured vehicle speeds at this driveway location. However, an existing shrub/tree just to the north side of the site's driveway should be removed to provide unobstructed views of vehicle traffic coming from the north on SR-29.

Vehicle Circulation/Site Access

Based on the Yountville Hill Winery site plan, a new driveway (improved) would extend in a winding fashion to parking and winery facilities located on the hillside east of SR-29 (see Figure 6--Project Site Plan). The project driveway would have a minimum width of 20-feet to provide for two-way travel and comply with County standards. Approximately mid-way up the hillside, the driveway would provide access to a large parking area and visitor entrance to the winery. The parking area would have a 25-foot drive aisle and multiple access points from the driveway (3) to allow for vehicle entry/exit and return to SR-29. Continuing up the hill, the driveway would terminate in a large cul-de-sac at the winery's visitor tasting room/office. Limited parking spaces would be provided in front of this building (two). This area would primarily be for project staff and/or visitors with ADA parking requirements. The large cul-de-sac would allow vehicles to turn around and/or back out of parking spaces to exit the site.

Based on design guidelines, the site's driveway would have inbound right turn volumes that would warrant a right turn taper (not a separate right turn lane), The right turn volume would just meet the minimum volume threshold for a taper during only the Saturday afternoon peak hour (with visitor activity at the maximum permitted levels).

The proposed project's driveway intersects SR-29 at a point where a TWLTL exists. As shown on Figures 4 and 5, the driveway would have 5 inbound left-turns during a weekday PM peak hour and 8 inbound left turns during a Saturday afternoon peak hour. During these same periods, the inbound left turns counted at the Mustard's Grill driveway were 10 vehicles and 13 vehicles, respectively. Based on Caltrans guidelines for left turn queuing, the Mustard's Grill volumes would require a maximum of one vehicle storage during the peak hours.[19] During the peak period counts, the actual observed left turn queues never exceeded one vehicle. The very low inbound left turn volumes at the project driveway would not be expected to significantly conflict with the left turns into Mustard's Grill.

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[17] *George W. Nickelson, P.E., Radar speed surveys on State Route 29 at Yountville Hill Winery driveway(s), October 30 and November 5, 2009*

[18] *Caltrans, Ibid....*

[19] *Caltrans, Guidelines for Reconstruction of Intersections, August 1985. The maximum peak hour northbound left-turn volume is 13 vehicles, requiring 1 vehicle storage calculated as follows: 13 hourly vehicles/60 x 2 minutes of storage = 0.43 or 1 vehicle.*

Construction Impacts

With regard to construction impacts, the contractor responsible for cave construction has estimated an 18-month schedule during which time approximately 28,400 cubic yards of cave spoils would be hauled off-site. Based on an 18-month schedule, the spoils quantity would equate to approximately 75 cubic yards daily or 7-8 trucks each day. Truck volumes of this magnitude would not be measurably affect traffic flows on SR-29 during the weekday PM peak period.

Cumulative Year 2030 Conditions

As noted under cumulative model forecasts, the County's forecasted transportation model volumes on SR-29 under Year 2030 conditions are very tenuous given that the highway is essentially at or near capacity today. A more reasonable projection based on historical growth suggests that SR-29 would continue to operate near capacity levels with increased congestion during peak times of the day with longer peak periods during the day typically at unacceptable conditions (LOS E-F) for all minor street approaches and/or driveways at SR-29.

The County has identified other mitigation policies, including development of a traffic impact fee (TIF) to be developed in cooperation with the NCTPA (Mitigation Measure 4.4.1C). This would require new projects to pay their "fair share" of countywide traffic improvements they contribute the need for. Examples of such improvements could include transit/bicycle enhancements or signalizing major cross street intersections along the SR-29 corridor. The concept is under development but presumably the fee would be applied on a "per trip" basis if/when implemented.

APPENDIX

- Level of Service Definitions
- Level of Service Calculations
- Turn Lane Warrant Graphs
- Signal Warrant Sheets

LEVEL-OF-SERVICE CRITERIA FOR INTERSECTIONS

Level of Service	Type of Flow	Delay	Maneuverability	Control Delay (seconds/vehicle)		
				Signalized	Unsignalized	All-Way Stop
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10.0 secs.	≤ 10.0	≤ 10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10 and ≤ 20.0 secs.	>10 and ≤ 15.0	>10 and ≤ 15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20 and ≤ 35.0 secs.	>15 and ≤ 25.0	>15 and ≤ 25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles of stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35 and ≤ 55.0 secs.	>25 and ≤ 35.0	>25 and ≤ 35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55 and ≤ 80.0 secs.	>35 and ≤ 50.0	>35 and ≤ 50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80.0 secs.	> 50.0	> 50.0

References: 1. Highway Capacity Manual, Fourth Edition, Transportation Research Board, 2000,

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	762	1	1	1280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	828	1	1	1391
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2222	829			829	
vC1, stage 1 conf vol	829					
vC2, stage 2 conf vol	1393					
vCu, unblocked vol	2222	829			829	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	227	371			802	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	829	1	1391
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	282	1700	802	1700
Volume to Capacity	0.01	0.49	0.00	0.82
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	17.9	0.0	9.5	0.0
Lane LOS	C		A	
Approach Delay (s)	17.9	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	1106	1	1	842
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	1202	1	1	915
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2120	1203			1203	
vC1, stage 1 conf vol	1203					
vC2, stage 2 conf vol	917					
vCu, unblocked vol	2120	1203			1203	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	272	225			580	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	1203	1	915
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	246	1700	580	1700
Volume to Capacity	0.01	0.71	0.00	0.54
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	19.8	0.0	11.2	0.0
Lane LOS	C		B	
Approach Delay (s)	19.8	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	861	1	1	1383
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	936	1	1	1503
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2442	936			937	
vC1, stage 1 conf vol	936					
vC2, stage 2 conf vol	1505					
vCu, unblocked vol	2442	936			937	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			100	
cM capacity (veh/h)	200	321			73	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	937	1	1503
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	246	1700	731	1700
Volume to Capacity	0.01	0.55	0.00	0.88
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	19.7	0.0	9.9	0.0
Lane LOS	C		A	
Approach Delay (s)	19.7	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	1	1209	1	1	950
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1	1314	1	1	1033
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLT					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2349	1315			1315	
vC1, stage 1 conf vol	1315					
vC2, stage 2 conf vol	1035					
vCu, unblocked vol	2349	1315			1315	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	239	193			526	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	2	1315	1	1033
Volume Left	1	0	1	0
Volume Right	1	1	0	0
cSH	214	1700	526	1700
Volume to Capacity	0.01	0.77	0.00	0.61
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	22.0	0.0	11.9	0.0
Lane LOS	C		B	
Approach Delay (s)	22.0	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	18	7	762	13	5	1280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	8	828	14	5	1391
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2238	835			842	
vC1, stage 1 conf vol	835					
vC2, stage 2 conf vol	1402					
vCu, unblocked vol	2238	835			842	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	98			99	
cM capacity (veh/h)	224	367			793	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	27	842	5	1391
Volume Left	20	0	5	0
Volume Right	8	14	0	0
cSH	251	1700	793	1700
Volume to Capacity	0.11	0.50	0.01	0.82
Queue Length 95th (ft)	9	0	1	0
Control Delay (s)	21.1	0.0	9.6	0.0
Lane LOS	C		A	
Approach Delay (s)	21.1	0.0	0.0	
Approach LOS	C			

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	23	8	1106	24	8	842
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	9	1202	26	9	915
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2148	1215			1228	
vC1, stage 1 conf vol	1215					
vC2, stage 2 conf vol	933					
vCu, unblocked vol	2148	1215			1228	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	96			98	
cM capacity (veh/h)	287	221			567	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	34	1228	9	915
Volume Left	25	0	9	0
Volume Right	9	26	0	0
cSH	254	1700	567	1700
Volume to Capacity	0.13	0.72	0.02	0.54
Queue Length 95th (ft)	11	0	1	0
Control Delay (s)	21.4	0.0	11.4	0.0
Lane LOS	C		B	
Approach Delay (s)	21.4	0.0	0.1	
Approach LOS	C			

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	18	7	861	13	5	1383
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	8	936	14	5	1503
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2457	943			950	
vC1, stage 1 conf vol	943					
vC2, stage 2 conf vol	1514					
vCu, unblocked vol	2457	943			950	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	98			99	
cM capacity (veh/h)	197	318			723	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	27	950	5	1503
Volume Left	20	0	5	0
Volume Right	8	14	0	0
cSH	220	1700	723	1700
Volume to Capacity	0.12	0.56	0.01	0.88
Queue Length 95th (ft)	10	0	1	0
Control Delay (s)	23.6	0.0	10.0	0.0
Lane LOS	C		B	
Approach Delay (s)	23.6	0.0	0.0	
Approach LOS	C			

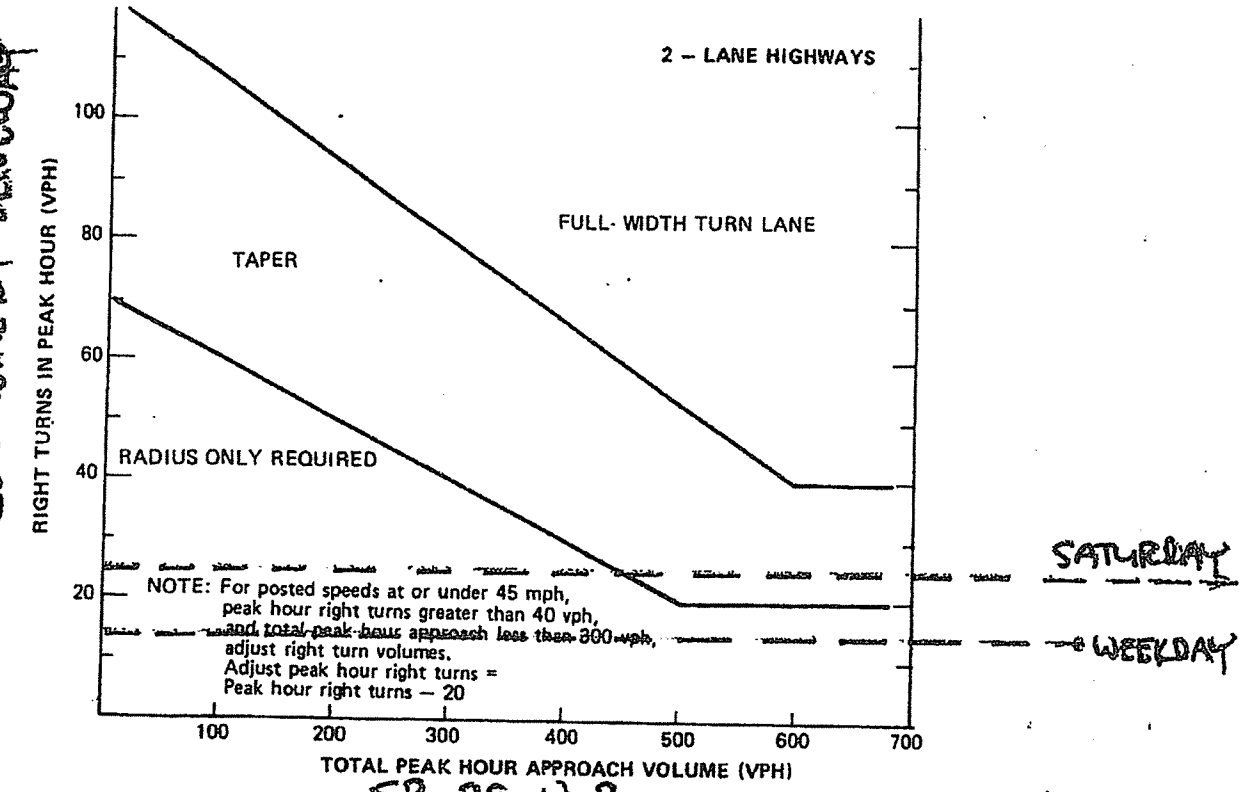
Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	23	8	1209	24	8	950
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	9	1314	26	9	1033
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL					
Median storage veh)	5					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2377	1327			1340	
vC1, stage 1 conf vol	1327					
vC2, stage 2 conf vol	1050					
vCu, unblocked vol	2377	1327			1340	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	95			98	
cM capacity (veh/h)	235	190			514	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	34	1340	9	1033
Volume Left	25	0	9	0
Volume Right	9	26	0	0
cSH	221	1700	514	1700
Volume to Capacity	0.15	0.79	0.02	0.61
Queue Length 95th (ft)	13	0	1	0
Control Delay (s)	24.2	0.0	12.1	0.0
Lane LOS	C		B	
Approach Delay (s)	24.2	0.0	0.1	
Approach LOS	C			

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

CS2 WINERY DRIVEWAY



SR-29 N.B.

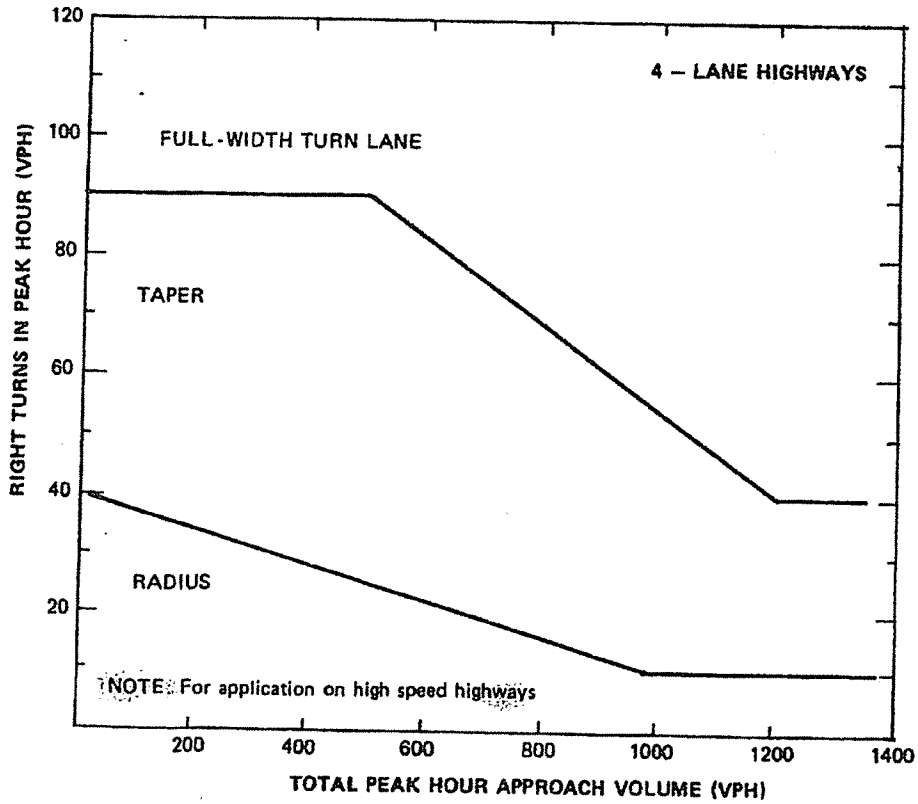
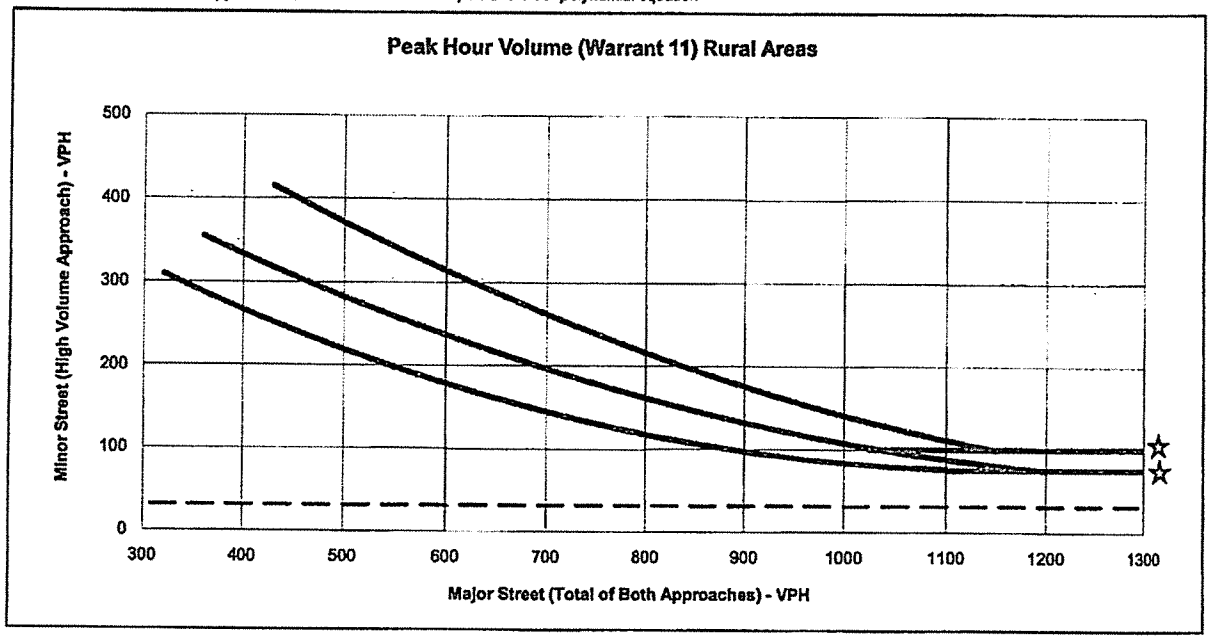


Figure 4-23. Traffic volume guidelines for design of right-turn lanes. (Source: Ref. *4-11*)

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
370	280				
400	270	460	297	430	410
500	215	500	290	500	380
600	185	600	230	600	310
700	140	700	198	700	265
800	115	800	170	800	210
900	99	900	125	900	180
1000	85	1000	105	1000	140
1100	75	1100	90	1100	110
1200	75	1200	75	1150	100
1300	75	1300	75	1300	100

** Note: Values in Table are approximate, actual curves based upon 2nd order polynomial equation*

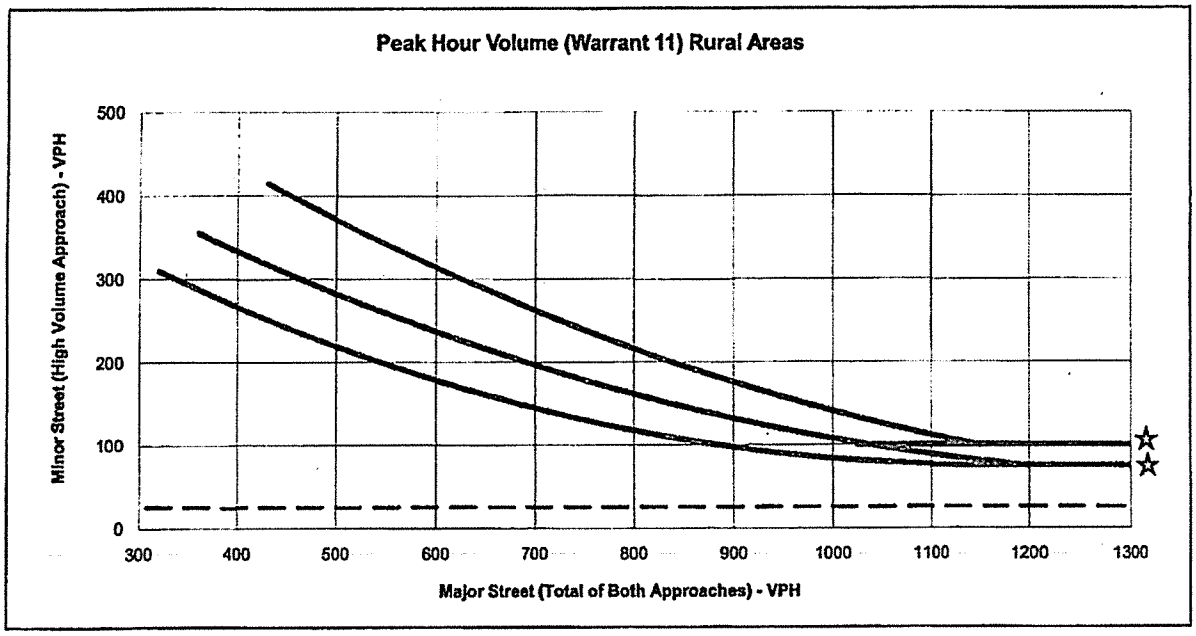


☆ NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Intersection:	Yountville Hill Winery / State Route 29
Scenario:	MD Weekend Near-Term plus Project
Minor St. Volume:	31
Major St. Volume:	2191
Warrant Met?:	NO

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
370	280				
400	270	460	297	430	410
500	215	500	290	500	380
600	185	600	230	600	310
700	140	700	198	700	265
800	115	800	170	800	210
900	99	900	125	900	180
1000	85	1000	105	1000	140
1100	75	1100	90	1100	110
1200	75	1200	75	1150	100
1300	75	1300	75	1300	100

** Note: Values in Table are approximate, actual curves based upon 2nd order polynomial equation*



☆ NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Intersection:	Yountville Hill Winery / State Route 29
Scenario:	PM Weekday Near-Term plus Project
Minor St. Volume:	25
Major St. Volume:	2262
Warrant Met?:	NO

omni·means
ENGINEERS PLANNERS

February 13, 2014

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

RE: Addendum Response Letter To Napa County Comments; 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 Napa County staff comments on the focused traffic analysis performed for the proposed Yountville Hill Winery in Napa County. Specifically, Mr. Sean Trippi (Senior Planner with Napa County) has commented on our discussions relating to proposed project trip generation and actual project trip generation calculations found in Table 3 of the draft report.[i] Specifically, Mr. Trippi has noted our discussion of proposed project trip generation (page 12 of report) is not consistent with the actual trip generation shown in Table 3 (page 13 of the report). In response, we have the following clarifications/corrections for pages 12 and 13 of the draft report (attached):

- Page 12: 1st Paragraph—last sentence: "During a typical weekend, the project would be expected to generate 228 daily trips with 59 mid-day peak hour trips (30 in, 29 out)." This sentence is correct. However, Table 3 indicated a daily trip generation for a typical weekend Saturday of *224* trips. This has been corrected in Table 3 (attached);

- Page 12: 2nd Paragraph—first sentence: "During the six week harvest crush season, the proposed project is expected to generate and average of *250* daily trips. This sentence is incorrect. In addition, the weekend (Saturday) daily harvest/crush traffic calculation shown in Table 3 indicated *55* daily trips. This amount is also incorrect. The daily trip calculation for proposed project harvest/crush has been re-calculated and the text corrected. The proposed project would generate 241 daily trips during a Saturday harvest/crush season. Both text and Table 3 have been corrected (attached). As part of this new calculation, the correct amount of annual on-haul grapes (35 tons) has been included to correspond with text discussion.

We appreciate Mr. Trippi's review of our focused traffic analysis for the proposed Yountville Hill Winery project. We hope these corrections relating to overall trip generation will allow the environmental review to continue. It is noted that these corrections to daily project trip generation would not change our conclusions related to overall project impacts. Please call if you have any questions.

Sincerely,

OMNI-MEANS, Ltd.
Engineers & Planners

Peter J. Galloway
Project Manager/Transportation Planner

Cc: Mr. Sean Trippi, Senior Planner, Napa County
Mr. Lester Hardy, Attorney at Law, St. Helena
Mr. George Nickelson, P.E., Omni-Means

Enc. Page 12 & 13 (Corrected); Focused Traffic Analysis for the Proposed Yountville Hill Winery—Located at 7400 St. Helena Highway (SR-29) in Napa County (September 19, 2013).

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[1] *Mr. Sean Trippi, Senior Planner, Napa County, Planning, Building, and Environmental Services, Correspondence (email) to Mr. Lester Hardy, Attorney at Law, St. Helena, February 13, 2014.*

Napa County Conservation, Development, and Planning Department and existing driveway volumes.[12] It is noted that for peak hour traffic generation, only full time employees traveling to/from the site were included in project trip generation calculations. For the weekday PM peak hour, this included six administrative staff (production staff would be gone, hospitality staff still on-site). For the weekend mid-day peak hour, this included the eight hospitality staff (production and administrative staff would be gone). Based on production, employment, and visitor activity, the project would be expected to generate 145 daily weekday trips with 39 PM peak hour trips (16 in, 23 out). During a typical weekend, the project would be expected to generate 228 daily trips with 59 mid-day peak hour trips (30 in, 29 out).

During the six-week harvest crush season, the proposed project is expected to generate an average of 241 daily trips. This daily trip total would represent 285 visitors, 9 full-time and 4 part-time employees on-site during weekend periods, 100,000 gallons of wine production, and approximately 35 annual tons (on-haul) of grapes.

Based on the largest marketing event attendance of 200 persons (twice per year), there would total generation of 191event trips.

To determine traffic conditions with the proposed project, the calculated project trips were added to existing volumes. Based on observed turning percentages, the project trips were distributed 25% to/from the north and 75% to/from the south on State Route 29.

Existing plus project and near-term plus project volumes have been shown in Figure 4 and 5.

Project Effects on Roadway/Intersection Operation

A. Existing Plus Project Conditions

The project would be expected to add approximately 109 daily trips south of the site and 36 daily trips north of the site on State Route 29. This would represent an addition of less than 1 percent (0.006) to the daily volumes on the highway. The combined existing plus project volume of 22,945 daily trips would remain at LOS F operating conditions for a two-lane rural arterial roadway based on established County thresholds.

During the peak winery activity periods, the project would generate 39 weekday PM peak hour and 59 Saturday mid-day peak hour trips. Weekday PM peak hour and weekend mid-day peak hour intersection levels of service were evaluated with proposed project traffic and are shown in Table 4.

With existing plus project traffic volumes, the two project study intersections would continue to operate at acceptable levels (LOS C or better) during both the weekday PM peak hour and weekend mid-day peak hour periods. At shown in Table 4, intersection LOS would remain unchanged from existing conditions with proportional increases in overall vehicle delay.

[12] *County of Napa, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2012.*

TABLE 3
PEAK HOUR AND DAILY TRIP GENERATION:
PROPOSED YOUNTVILLE HILL WINERY PROJECT

Weekday Daily Traffic:		
110 visitors/2.6 persons per vehicle x 2 one-way trips	=	85 daily trips
19 full time employees x 3.05 one-way trips	=	58 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
100,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	2 daily trips
Total Weekday Daily Trips	=	**145 daily trips**
Weekday PM Peak Hour Traffic:		
(85 daily visitor trips + 2 daily truck trips) x 0.38 peak	=	33 peak hour trips
6 full time employees x 1 trip/employee	=	6 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekday PM Peak Hour Trips	=	**39 trips (16 in, 23 out)**
Weekend (Saturday) Daily Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
8 full time employees x 3.05 one-way trips	=	24 daily trips
0 part-time employees x 1.90 one-way trips	=	0 daily trips
Total Weekend (Saturday) Daily Trips	=	**228 daily trips**
Weekend (Saturday) Peak Hour Traffic:		
204 daily visitor trips x 0.25 peak	=	51 peak hour trips
8 full time employees x 1 trip/employee	=	8 peak hour trips
0 part-time employees/2	=	0 peak hour trips
Total Weekend (Saturday) Peak Hour Trips	=	**59 trips (30 in, 29 out)**
Weekend (Saturday) Daily Harvest/Crush Traffic:		
285 visitors/2.8 persons per vehicle x 2 one-way trips	=	204 daily trips
9 full time employees x 3.05 one-way trips	=	27 daily trips
4 part-time employees x 1.90 one-way trips	=	8 daily trips
20,000 gallons/1,000 x .009 daily trucks x 2 o-w trips	=	1 daily trips
35 annual ton grapes (on-haul)/144 daily trucks x 2 o-w trips	=	1 daily trips
Total Weekend (Saturday) Daily Harvest/Crush Trips	=	**241 daily trips**
Largest Marketing Event – Additional Traffic		
6 event staff x 2 one-way trips per person	=	12 event trips
125 visitors / 2.8 visitors per vehicle x 2 o-w trips	=	89 event trips
4 trucks x 2 one-way trips	=	8 event trips
Total Largest Event Marketing Trips:	=	**109 event trips**

Source: Production, employee, and visitor data provided by Mr. Eric Sklar (project applicant) and Mr. Lester Hardy (Attorney), project representative, August, 2013. Daily and peak hour calculations based on County of Napa, Conservation, Development, and Planning Department, "Use Permit Application Package," Napa County Winery Traffic Generation Characteristics, 2012.

Exhibit 3

Exhibit 3

Napa Valley Winery Project Approvals

Name	(Orig) PC Meeting date	date approved	New/Mod	gallons	Added Production	acreage	(additional) visitation requested	(additional) vistation approved	Notes	variances regested
Kelly Fleming Winery	7/16/2014	NA	mod	12,000 to 20,000	8,000	83.14	8,940		continued date uncertain	
LMR Rutherford Estate Winery	6/18/2014	07/16/14	new	100,000	100,000	30	19,600	19,600		
Raymond Vineyards & Cellar	7/16/2014	NA	mod	750,000	0	60.72	42,400	-	continued date uncertain	
Castellucci Family Winery	5/21/2014	05/21/14	new	30,000	30,000	19.3	16,430	11,750		
Titus Vineyards Winery	5/7/2014	05/07/14	new	24,000	24,000	31.77	23,290	12,620		
Goosecross Cellars	5/7/2014	05/07/14	mod	?		11.31	50	50		
Sinegal Estate	3/19/2014	03/19/14	mod	13,200 to 60,000	46,800	30	7,020	7,020		
Diogenes Ridge Winery	2/19/2014	02/19/14	new	30,000	30,000	12.94	6,080	5,680		
Silverado Trail Winery	12/18/2013	02/05/14	new	60,000	60,000	17.7	11,940	11,940		
Martini Winery / G3	1/15/2014	01/15/14	mod	NA			11,099	11,088		
Domaine Carneros	1/15/2014	01/15/14	mod	NA	0	139	94,400	94,400		
Brand Napa Valley	1/15/2014	01/15/14	mod	NA		42.26	4,662	4,054		
Paradigm	1/15/2014	01/15/14	mod	NA		26.25	5,460	5,460		
J3 Wine Partners/ Farm Collective	12/18/2013	12/18/13	new	80,000	80,000	NA	12,220	12,220		
Theorem Winery	12/4/2013	12/04/13	mod	20,000	0	41.45	5,680	5,680		
L'Attitude Vineyards / Idealogy Cellears Winery	11/6/2013	11/06/13	new	30,000	30,000	10.09	5,700	5,700		
Napa Valley Holdings / Corona	11/6/2013	11/06/13	new	100,000	100,000	49.05	19,000	19,000		
Woolls Ranch Winery	11/6/2013	11/06/13	new	50,000	50,000	236.66	25,640	22,840		
Black Cat Winery (Industrial Park)	10/16/2013	10/16/13	mod	12,500	12,500	NA	7,400	7,400		
Peter Kitchak Winery	10/2/2013	10/02/13	mod	5,000 to 15,000	10,000	20.01	3,142	3,142		
Flynnville Wine Co	10/02/13		new	300,000	300,000	11.44	185,000	0	continued date uncertain	
Fantesca Winery / Suan and Duane Hoff	10/2/2013	10/02/13	mod	0	0	52.56	6,245	6,245		
Outpost Winery	10/2/2013	10/02/13	mod	30,000 to 50,000	20,000	42.3	5,092	5,092		
Robert Keenen Winery								-	acknowledgement	
Cliff Lede Vineyards	8/21/2013	08/21/13	mod	80,000 to 120,000	40,000	25.3	-	-		
Dunn Vineyards - Manzanita & Dogwood/Dunn	7/17/2013	07/17/13	mod	5,000 to 20,000	15,000	39	1,040	1,040		
Araujo Estate Winery	7/17/2013	07/17/13	mod	NA		162	5,825	5,825		
Davis Estates / Frostfire vineyards	7/3/2013	07/03/14	mod	20,000 to 30,000	10,000	114.32	10,184	10,184		
Hartwell Vineyards	6/5/2013	06/05/13	mod	12,000 to 36,000	24,000	29.81	18,964	18,964		
Honig Vineyard & Winery	6/5/2013	06/05/13	mod	150 - 300,000	150,000	67	22,200	22,200		
Coquerel Family Winery	6/5/2013	06/05/13	mod	75,000	0	19.73	4,900	4,900		
White Cottage Ranch Winery	5/1/2013	05/01/13	mod	20,000	0	62.35 & 4.65	10,625	9,377		
Stags Leap Winery	3/6/2013	04/03/13	mod	NA		118.2	10,920	10,920		
Tamber Bey Vineyards Winery	3/20/2013	03/20/13	new	60,000	60,000	22.41	8,740	8,640		
B Cellars	3/6/2013	03/06/13	mod	10,000 to 45,000	35,000	11.53	19,060	13,860		

Napa Valley Winery Project Approvals

Arkenstone Vineyards winery	1/16/2013	01/16/13	mod	48,000 to 60,000	12,000	42.53	7,688	7,688		
Trefethen family Vineyards	12/5/2012	12/05/12	new	30,000	30,000	41.15	7,680	7,680		
Odette Winery	10/17/2012	10/17/12	mod	NA		49.26	55,484	55,484		
15 Chateau Lane Winery	9/5/2012	09/05/12	new	20,000	20,000	12.33	2,332	2,332		
Cairdean Winery	6/6/2012	06/06/12	new	50,000	50,000	50.31	11,125	11,125		
Krupp, Jan Krupp / Bart & Patricia Krupp	6/6/2012	06/06/12	new	50,000	50,000	13	48,506	48,506		
Swanson Winery	5/16/2012	05/16/12	new	100,000	100,000	74	76,178	76,178		
Rombauer Vineyards	5/2/2012	05/02/12	mod	450,000	0	NA	-	-		
Reata Winery	3/21/2012	03/21/12	mod	200,000 to 800,000	600,000	78.33	-	-		
Envy Wines / Mark Carter	3/21/2012	03/21/12	mod	20,000 to 50,000	30,000	18.4	900	900		
Cliff Lede Vineyards	3/21/2012	03/21/12	mod	60,000 to 80,000	20,000	25.3	7,280	7,280		
Paraduxx Winery	3/7/2012	03/07/12	mod	156,000 to 200,000	40,000		14,177	14,177		
Lodestone Vineyards Winery	11/16/2011	11/16/11	new	20,000	20,000	42.1	13,130	13,130		
Silver Oak	10/19/2011	10/19/11	mod	132,500 to 210,000	75,000	22.5	-	-		
Faust House Winery	9/21/2011	09/21/11	ghost winery	10,000	10,000	6.35	5,900	5,950		Conservation Setback Exception Use Permit would allow limited earth disturbing activities necessary to convert the existing historic structures located within the required creek setback to winery-related purposes. The Exception to Established Napa County Road Standards would reduce the minimum 30 ft. turning radius onto the site from eastbound Coombsville Road to 13 ft. to preserve two historical entrance pylons located at the main driveway entrance.
Eagle Eye Winery	9/21/2011	09/21/11	new	30,000	30,000	13	7,376	7,276		NA
Chappellet	8/17/2011	08/17/11	mod	150,000	0		2,345	2,345		
					2,322,300		890,109	636,942		

Exhibit 4

Exhibit 4

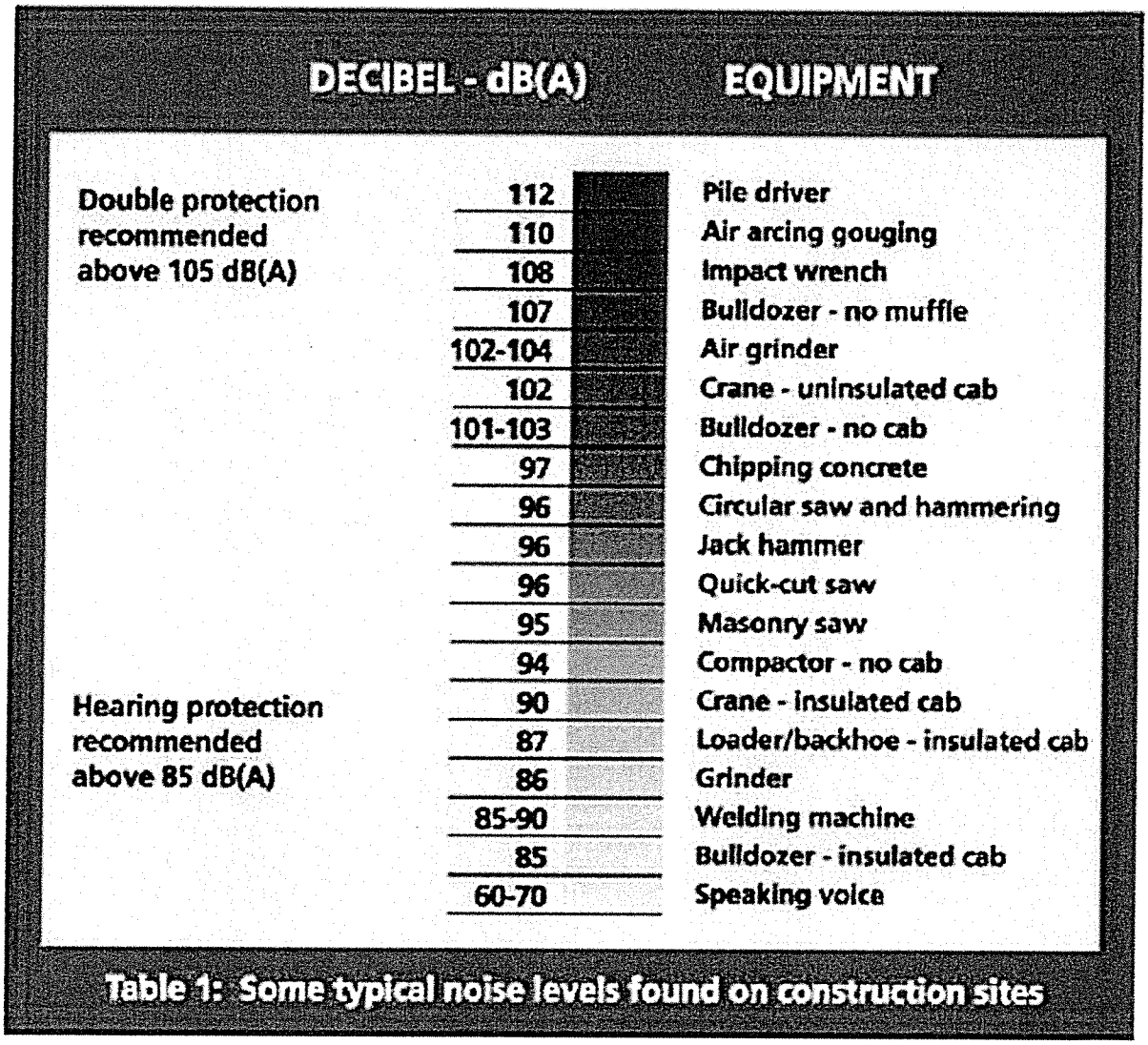

Table 1: Some typical noise levels found on construction sites

Frost, Melissa

Subject: FW: Girard Letter from Shute/Mihaly
Attachments: Letter to D Morrison (Part 1 of 4).pdf; Letter to D Morrison (Part 2 of 4).pdf; Letter to D Morrison (Part 3 of 4).pdf; Letter to D Morrison (Part 4 of 4).pdf

From: Juanito H. Maravilla [mailto:maravilla@smwlaw.com]
Sent: Tuesday, January 20, 2015 3:40 PM
To: Morrison, David
Cc: keepnvap@sonic.net; Ellison Folk; Laurel L. Impett
Subject: Proposed Girard Winery Project (Part 1 of 4)

Mr. Morrison:

On behalf of the Tofanelli family we submit this letter with four exhibits on the proposed Girard Winery Project. We would appreciate your distributing this letter to each member of the Planning Commission on or before the January 21, 2015 hearing on the Project.

Due to file size of the Letter, we are sending the Letter in 4 parts in separate emails. This email is **Part 1 of 4**.

When you have received all 4 emails, we would also appreciate confirmation of receipt of this letter and each of the four exhibits.

Thank you,

Juanito Maravilla
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