Coblentz
Patch Duffy
& Bass LLP

One Montgomery Street, Suite 3000
San Francisco, CA 94104-5500
T 415 391 4800
coblentzlaw.com

Scott Greenwood-Meinert
D (415) 772-5741
sgreenwood-meinert@coblentzlaw.com

September 15, 2020

DAyers@trccompanies.com;
charlene.gallina@countyofnapa.org

Dana Ayers, Consulting Planner
Charlene Gallina, Supervising Planner
County of Napa Planning Division
1195 Third Street, 2nd Floor
Napa, CA 94559

Re: Frank Family Benjamin Ranch Winery Use Permit Application P13-00371-UP

Ladies:

As you know, our law firm represents Frank Family Benjamin Ranch, which is going to the Planning Commission tomorrow morning for a Use Permit Application Hearing. This letter responds to letters you received yesterday from Chatten-Brown, Carstens & Minteer, LLP, Latham & Watkins, Caltrans and the Department of Toxic Substances.

1. Chatten-Brown Letter

Foremost, attached to the Chatten-Brown letter is a peer review by Crane Transportation Group ("Crane") of the W-Trans traffic impact study prepared in support of this application. A traffic impact study that was the third such study submitted to the County and the only one to be blessed by the Public Works Department and PBES. The first two such studies were prepared by Crane, who worked on this project for 3 years. That Crane would choose to critique the W-Trans traffic impact study concerns Frank Family Vineyards.

Attached to this letter is W-Trans detailed response to Crane's peer review. W-Trans analysis establishes unequivocally that Crane's peer review is insubstantial, not credible, not reasonable in nature, and fails to state a fair argument that substantial evidence exists that would warrant an EIR.

The rest of Chatten-Brown's arguments are speculation, argument or unsubstantiated opinion or narrative…not substantial evidence. Substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact. Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative." (Pub. Resources Code, §§ 21080(e)(1)-(2) [emphasis added].) And accordingly, Chatten-Brown's CEQA related arguments fail to state a fair argument that substantial evidence exists that would warrant an

EIR or even a mitigated negative declaration. Substantial evidence supporting a fair argument must be of ponderable legal significance, reasonable in nature, credible, and of solid value.

The mere existence of some controversy, which Chatten-Brown creates with its letter and the Crane peer review do not satisfy the fair argument standard under Public Resources Code § 21151, and as such the County is warranted in concluding no significant impacts exist and a negative declaration is appropriate for adoption.(Public Resources Code § 21080(c)(1). (See Jensen v. Santa Rosa, 2018 Cal.App.Lexis 480.)

In most instances in the Chatten-Brown letter, the issues raised can be summarized as a request for more information to evaluate or more time to evaluate the existing more than sufficient data, not an analysis sufficient to credibly state a fair argument.

For instance, with regard to greenhouse gas impacts, the Chatten-Brown letter fails to acknowledge that the Initial Study/Mitigated Negative Declaration does calculate emissions, reasonably determines that they do not meet the 1,100 metric ton threshold and that under CEQA Guidelines when the threshold is not met, no further need to quantify is required. Chatten-Brown's comments regarding the MND's various greenhouse gas reduction measures lacking specificity and enforceability are simply wrong. The Project's water recycling is required through its water and wastewater conditions of approval. Those are obviously measurable, reportable, and a failure to meet with the water related conditions of approval can result in a permit being revoked. The County certainly enforces, through the building and development process and Code Enforcement, such things as a Project's green roof, landscape requirements and lighting. When the Planning Commission approves a Project, such commitments are "baked in" to the Project at that point

The Project's water analysis provided to the County that underpins the MND's water analysis was prepared by Bartelt Engineering, a veteran presence in the wine and vineyard industry to say the least. The water analysis meets all County criteria and was based on the best available information. Further the draft conditions of approval require consistent monitoring of water usage, with enforcement provisions. Merely stating that a well test should be done is not a fair argument. A fair argument would provide actual evidence that the current well water usage is arguably harming a neighbor's well—no such evidence is provided.

The Chatten-Brown letter raises thin arguments regarding noise and night time lighting. The IS/MND more than adequately addresses these issues, as do the draft conditions of approval that include standard precautions such as downward directed lighting and no amplified sound. It should go without saying that in this rural quiet area there are two significant wineries 3 to 4 hundred yards away and vast vineyards with frost fans and tractors running all through the night at times. The nearest residence is 300 or more yards away from the winery. Chatten-Brown fails to provide any actual facts, such as a noise study, to support its arguments.

As to the Aesthetic Impact argument raised by Chatten-Brown about Highway 128 being a scenic highway. Admittedly they are at a disadvantage being in Hermosa Beach. No redwood trees are being removed and the landscape plan calls for the planting of more trees. Highway 128 has not been designated a scenic highway. This is a two-step process, in which CalTrans places highways on a list and then the local agency, in this instance Napa County, must then undergo its own analysis and decision whether to undertake a beautification process. The second phase has not begun yet and accordingly there is no need to have analyzed this in the MND. Nor are their statements about floodplain grading requirements accurate. So again they fail to state any substantive evidence.

In conclusion the CEQA documents the County has prepared are thorough. As are the findings and the conditions of approval. And Chatten-Brown's arguments fail to rise to the level of even a fair argument under CEQA law.

2. Latham & Watkins Letter.

This letter misses the mark on bringing into play the Keep Our Mountains Quiet case. In that case a fair argument was successfully made based on actual non-expert facts indicating impacts to the environment from noise and traffic, not speculation as is presented by Latham & Watkins and Chatten-Brown. They present no facts regarding noise. And the Crane peer review fails to remotely approximate the standards established in Keep Our Mountains Quiet. Furthermore, this letter appears to take far too lightly the significant mitigating effects of a CalTrans' standard left turn lane.

With regard to fire evacuation concerns. The Napa County Fire Marshall has reviewed the project and did not raise this type of concern. It should be noted that the property is not in a high fire danger area, especially with significant vineyard planted on all four sides. The site has three potential exit routes: SR 128 north to Silverado Trail, SR 128 South to Skellenger Lane then to Silverado Trail, and SR128 south and west to SR 29.

As to Lathan & Watkins stating the MND is inadequate for failing to consider construction water usage, that usage is rather obviously subsumed within the Project's water use limitations as established within the Project's water analysis and MND analysis thereof.

3. The Department of Toxic Substance Control.

This department has raised concerns, as did Chatten-Brown, about the historic agricultural uses of substances on the property. Given the late nature of these comments, we are doing our best to address them. We have ordered the acquisition files from 2012 from storage and the undersigned spoke with both the applicant and the applicant's attorney at that time. Significant due diligence was done when the property was purchased in 2012, and it is believed a Phase 1 Environment Study was completed prior to purchase and did not show any significant issues.

But we do not have that study from storage yet. Frank Family Vineyards is a careful steward of the environment, as this project's documentation clearly shows as well as its Certified Napa Green status for its vineyards. Frank Family Vineyards commits to working with County staff to review the 2012 Phase 1 Environmental Study and if warranted, commits to doing additional soils testing prior to construction and going further if the evidence warrants.

4. CalTrans Letter.

The applicant will, of course, comply with all CalTrans requirements as set forth in its letter yesterday. The applicant has committed to the County regarding monitoring and responsibility for the TDM measures provided for through this process. Indeed, to complete this project, when the time comes, will take a great deal of working with CalTrans.

Conclusion.

The application should be approved as it now is, with the adjustments made to visitation and marketing. The arguments by the law firms for Mr. Honig fail to raise a fair argument regarding CEQA requiring an EIR. The Crane peer review similarly fails as the W-Trans response abundantly articulates.

Thank you very much for your time and consideration.

Cordially,

Scott Greenwood-Meinert

Attachments

cc: Leslie Frank
Rich Frank
Dalene Whitlock
Paul Bartelt

September 15, 2020

Mr. Scott Greenwood-Meinert, Esq.
Coblentz Patch Duffy & Bass LLP
700 Main Street, Suite 210
Napa, CA 94558

Response to Comments on the *Traffic Impact Study for the Frank Family Benjamin Ranch Winery Project*

Dear Mr. Greenwood-Meinert;

We are in receipt of comments on the *Traffic Impact Study for the Frank Family Benjamin Ranch Winery Project* (TIS) dated February 4, 2020 and prepared by W-Trans. These comments are contained in a peer review memorandum prepared by Mr. Mark Crane of Crane Transportation Group dated September 11, 2020 as well as a letter from Mr. Mark Leong of Caltrans dated September 14, 2020. Copies of the memorandum and letter are enclosed for reference.

Memorandum from CTG (the headings for the fifteen comments are shown followed by our responses)

1. Evaluation of Appropriate Roadways and Intersections, as Determined by the County of Napa

The study area was established by Mr. Crane prior to preparing the original traffic study prepared for this project. The draft *Frank Family Vineyards Traffic Impact Study*, August 22, 2018, was prepared by Crane Transportation Group (CTG) and submitted to County staff for review. Their comments on this initial study are contained in a memorandum from Mr. Ahsan Kazmi, the County's Traffic Engineer, dated April 11, 2019. Copies of both documents are attached for reference. While there are extensive comments regarding the adequacy and accuracy of the CTG study, no comments were made regarding the need to expand the study area or include further intersections, and during their review of the draft version of the W-Trans report there were similarly no comments made indicating that the study area was inadequate. It therefore appears reasonable to assume that the County concurred with the study area chosen by Mr. Crane and therefore used for this analysis.

2. Project Trip Generation Rates

The comment is correct in that there is a disparity between the written text and the trip generation table. However, if the text is correct, the resulting analysis is conservative as it overstates the trip generation by 46 daily trips, 7 weekday p.m. peak hour trips and 37 weekend peak hour trips. It is noted that had the Friday p.m. peak hour trip generation been applied to the 2,124 square feet that comprise the tasting room, the resulting trip generation of 23 trips is equal to that used in the analysis, indicating that the rates applied were adequately conservative to encompass conditions under the rates suggested by Mr. Crane. We concur that the rate for Saturdays appears to be excessively high; however, as discussed with County, until such time as there is more local trip generation data, the standard rates are acceptable for use in this analysis under the County's policies as well as standard practice on numerous other studies for projects in Napa County.

3. Trip Distribution Patterns and Percentages

Project traffic exiting the site will be directed to use SR 29 to travel north and Silverado Trail to travel south, thereby eliminating the need for project patrons to turn left onto either heavily-traveled roadway and reducing the project's potential impacts. As indicated in the trip distribution table, the split between northbound and southbound was 55/45 and not 100 percent to the north as asserted. Per Figure 5 the

outbound trips for the weekday p.m. peak hour were assigned such that 7 vehicles went north on SR 29 and 5 went south on Silverado Trail.

It is noted that the truck trips during harvest were not separately addressed in the traffic analysis; however, such truck trips are an inherent part of the travel patterns in an agricultural valley and are not typically evaluated separately in a traffic study. If the trip generation for the Saturday peak hour is considerably higher than would reasonably be expected for this winery, as asserted by the commenter in Comment 2, it is also reasonable to anticipate that the 33 daily truck trips are already accounted for in the analysis as performed, and therefore no further analysis is needed.

4. Signal Warrant Analysis is Missing

The assertion that signals would result in acceptable operation at both SR 29/Rutherford Road and Silverado Trail/Conn Creek Road is related to the analysis of their service levels. For reference purposes only, an analysis was performed to determine if signalization would result in acceptable operation at the two intersections, and it was determined that it would. However, this analysis was not presented in the traffic study as it is the County's policy not to install signals, and as such this potential mitigation measure was deemed infeasible. Because traffic signals cannot be recommended there would be no benefit to providing a signal warrant study showing whether they are warranted or not.

5. Parking Demand

As parking is not an issue related to environmental impacts, the parking analysis included in the traffic study provides information that staff and the policymakers can use in their deliberations. Because it was determined that the on-site parking supply would be inadequate for even the smallest event, it was recommended that guests be shuttled to the site from off-site parking. The parking supply that would be needed off-site should be determined based on the appropriate attendance and occupancy rate.

6. VMT (Vehicle Miles Traveled)

Since February, when the TIS was published, much progress has been made in the area of estimating and evaluating VMT, and many jurisdictions have now established metrics and standards related to VMT. As indicated in the Initial Study (IS) prepared for this project, Napa County has established a standard of reducing VMT by 15 percent, consistent with the recommendations made by the Office of Planning and Research, the State agency tasked with establishing metrics for VMT. The finding in the Initial Study is that the impact related to VMT can be reduced to a less-than-significant level through implementation of a Transportation Demand Management (TDM) Plan, as recommended in the TIS.

7. Need for Transportation Demand Management (TDM) Plan

The IS includes a mitigation measure indicating that a TDM Plan shall be prepared for the project; it does not indicate that a TDM coordinator is needed, though this measure could reasonably be included in the TDM Plan.

8. Accidents

The incidence of an above-average crash rate does not, in and of itself, indicate that there is a safety problem; this information is generally used to determine if a more detailed evaluation of the crash pattern is warranted. While there is not a published policy signifying that the lack of injuries indicates a lack of a safety concern, common sense dictates that such crashes should be of less concern relative to safety than crashes resulting in injuries or fatalities, and equations used to evaluate the benefit of making safety improvements bears this out as property-damage only crashes are often excluded from such calculations or, if included, given a much lower weight than injury crashes.

The driveway does not currently exist, so it would be atypical to perform an analysis of crashes at a location where there is currently no potential for conflicting turning movements. Such analyses are more typically prepared for projects with existing driveways when an expansion of the use is being proposed. The proposed new driveway location was evaluated for adequacy of sight distance and the need for a left-turn lane to support safe operation.

9. Bike Routes

The traffic study includes a table that details the extents of various bike facilities in the vicinity of the project site, including the plan to install bike lanes on Conn Creek Road in front of the project site. It is recommended in the TIS that the project dedicate property along its frontage as necessary to accommodate any widening necessary for the bike lane, and this recommendation is included as a Mitigation Measure in the Initial Study. It is unclear from the comment what additional information is needed as the information provided results in a finding of less-than-significant impacts with mitigation.

10. Road Surface

Conn Creek Road (SR 128) is a state highway, intended to carry regional traffic and therefore presumably designed for truck traffic. The project can reasonably be expected to have a less-than-significant impact on the surface of a road designated for carrying such traffic.

11. Intersection Geometrics

A review of the width of Rutherford Road on the approach to SR 29 indicates that it is approximately 19 feet wide, which is adequate to accommodate two queues of vehicles side-by-side. The potential for a left-turn queue to block a driver wishing to turn right is therefore limited. The Conn Creek Road approach to Silverado Trail is approximately 17 feet wide at a point 70 feet from the intersection, which is approximately the queue length for three vehicles. If the queue of drivers waiting to turn left reaches three vehicles, drivers wishing to turn right would be delayed. While the text does not provide these details, it is noted that this constraint is programmed into and accounted for in the calculations.

12. Unsignalized Level of Service Criteria

While the overall average intersection delay is presented in the tables for reference purposes, it is not used for the analysis; that is based solely on the side-street delay in keeping with the County's policy. As County staff accepts the presentation of service levels as shown in the report, and this reporting is typical of the many reports W-Trans has prepared for projects in the County of Napa, it would appear that this approach is considered acceptable.

13. Roadway Directions

While Silverado Trail runs generally north-south, at the intersection with Conn Creek Road it has an east-west orientation. The predominant assumption of orientation should have been used, and Table 10 should indicate northbound and southbound directions and not westbound and eastbound. The information is, however, accurate as presented given its consistency with the roadway's orientation in the study area.

14. Access Intersection Level of Service – Data Missing

The concept of Level of Service is inappropriate for application to driveways. The County's policies regarding Level of Service apply to roadways and intersections, and the *California Vehicle Code* defines an intersection as being where two public roads intersect. Since driveways are not public roads, where they connect to the road system is not an intersection and should therefore not be evaluated as such. The operational analysis performed was for the purpose of establishing potential safety concerns associated

with excessive delays to exiting traffic. Inclusion of these calculations was therefore deemed unnecessary and, as staff did not request the information, it was not added after their review of the draft report.

15. Significant Unmitigable Project Impacts

While the project would have an *adverse effect* on operation at the intersection of SR 29/Rutherford Road, this is not a CEQA issue so it cannot translate to the need for an EIR. The project's effect on operation is an issue of consistency with the County's policies, not CEQA. Since February, when the TIS was finalized, the project has undergone some changes, including a recent reduction in the proposed visitation from 400 persons per day to 300 persons daily on Thursday through Sunday and 150 persons per day on Monday through Wednesday, and these changes would be expected to reduce this adverse effect.

Comment Letter from Caltrans

Travel Demand Analysis

The TDM measures identified in the TIS are supported. Caltrans additionally suggests monitoring of the TDM program, which could be added to the Mitigation Measure in the Initial Study if the County wishes to require annual monitoring and review of the monitoring reports

Proposed Left-turn Lane

The left-turn lane on SR 128 (Conn Creek Road) was proposed as part of the project, so analysis was not prepared to determine if such an installation is warranted or not. Upon evaluating the warrants used by Caltrans it was determined that a left-turn lane is not warranted, under current or event future traffic volumes. It is therefore recommended that a left-turn lane not be required as Caltrans. Copies of the turn lane warrant results, including volumes for all scenarios, are enclosed for reference.

We hope the above information adequately addresses the comments received on our traffic study. Thank you for allowing us to provide these services.

Sincerely,

Dalene J. Whitlock, PE, PTOE
Senior Principal

DJW/djw/NAX154.R2C

Enclosures: Peer Review Memorandum (CTG)
Draft *Frank Family Vineyards Traffic Impact Study* (CTG)
Notice of Incomplete Documentation Memorandum (Napa County Public Works)
Comment Letter (Caltrans)
Left-turn Lane Warrant Analysis

CRANE TRANSPORTATION GROUP

PEER REVIEW OF THE FRANK FAMILY BENJAMIN RANCH WINERY PROJECT TRAFFIC IMPACT STUDY – NAPA COUNTY BY W-TRANS, FEBRUARY 4, 2020

A. INTRODUCTION

The following is a peer review conducted by Crane Transportation Group (CTG) of the Frank Family Benjamin Ranch Winery Project Traffic Impact Study prepared by W-Trans, February 4, 2020. This peer review has been prepared at the request of Michael Honig, of Honig Winery.

B. OVERALL ISSUES

1. The County of Napa should have approved the scope of work for this study, however, there is no clear indication that the County was directly consulted for this purpose.

2. The Use Permit Application for the Frank Family Benjamin Ranch Winery Project contains data that are inconsistent with the traffic study prepared for the project. Specifically, the Winery Traffic Information/Trip Generation Sheet included in the Use Permit file cites 46 fulltime and 5 part time employees during a typical weekday, while page 1 of the traffic study cites a proposed "46 fulltime and 15 part time employees on a typical daily basis." Either the Use Permit Application or the input to the Traffic Impact Study requires update to be made consistent with the current definition of the project.

C. SPECIFIC ISSUES BY TOPIC

1. Evaluation of Appropriate Roadways and Intersections, as Determined by the County of Napa

Page 5 of the traffic study lists three study intersections, but does not say if these specific intersections were required by the County of Napa for analysis, or if the County was consulted on the scope of the analysis. The study does not include analysis of arterial Level of Service as is frequently required by the County.

2. Project Trip Generation Rates

Page 14 of the traffic study states that the ITE "Winery" LU # 970 trip rate was used for

the 2,124 square foot portion of the winery building that would house the tasting room, and references Table 6. However, Table 6 uses 3,140 square feet (3.14 ksf). These statements are conflicting, and require correction.

According to ITE, for the purposes of this land use, the independent variable "1,000 sq. foot gross floor area" refers to the square footage of the building that houses the tasting room. It may be most appropriate to use the 2,124 square foot portion of the winery building, referenced in the traffic study, that is specific to tasting room use. It would also be helpful for the traffic study to include an explanation of the square footage components of the total visitor's center building (7,669 square feet as shown on the site plan cover sheet Code Synopsis) in order to understand the use of the 3,140 square feet referenced in Table 6.

The ITE 10th Edition Trip Generation "Winery" LU # 970 trip rates applied in the traffic study are subject to question. For example, the County of Napa generally directs use of Friday and Saturday data, rather than "weekday" and "weekend." The traffic study uses the weekday PM peak hour rate of 7.31 per thousand square feet rather than a Friday PM peak hour rate of 10.93 per thousand square feet. The traffic study applies a Saturday PM peak hour average rate of 36.5, when application of the available fitted curve equation might result in a trip generation rate more specific to the project.

The resulting analysis states that there would be 23 weekday PM peak hour trips and 115 Saturday PM peak hour trips. Why so many Saturday PM peak hour trips? Recent traffic counts (September 13 and 14, 2019) conducted at the public access to the Mondavi Winery resulted in a Friday PM peak hour total of 59 trips and a Saturday PM peak hour total of 96 trips. Why would the Frank Family Benjamin Ranch Winery, located on Conn Creek Road, have more traffic on a Saturday PM peak hour than one of the most famous wineries in the Napa Valley located on State Route 29? This should be explained in the context of proposed visitor trips, preferably by use of a table showing hourly anticipated inbound and outbound visitors throughout the business day for typical Friday and Saturday conditions.

3. Trip Distribution Patterns and Percentages

   a. Trip distribution requires explanation. Why is it that the majority of inbound project traffic from Silverado Trail is from the north while 100% of outbound traffic is to the south? Why is it that at SR29 the inbound traffic is split 50%/50% northbound and southbound, while outbound traffic is 100% to the north?

   b. There is no mention of truck traffic volumes in the traffic study. However, the winery will have trips related to haul of grapes during harvest. The project Use Permit application "Winery Traffic Information/Trip Generation Sheet" shows crush Saturday conditions with 33 daily truck trips. The traffic study should address these trips.

4. Signal Warrant Analysis is Missing

Signal warrant analysis should be shown to support the statement, used several times in the traffic study, that signalization of the SR 29/Rutherford Road and Silverado Trail/Conn Creek Road intersections would mitigate conditions at both intersections. The study contains no signal warrant analysis.

5. Parking Demand

Page 28 of the traffic study cites the Napa County standard per car occupancy rate at 2.8 persons, and this is correct for Saturdays, but not for weekdays. The Napa County weekday standard is 2.6 persons per car. Use of this slightly more conservative factor, applied to a weekday with a maximum of 400 visitors over the course of the day would result in a parking space demand of 61 for employees (assuming 1 parking space per employee), and 38 for guests (conservatively assuming one-quarter of the guests – 100 - parked during any one hour), for a total 99 parking spaces, or five more than included on the site plan (94 spaces), and two more than the 97 spaces recommended in the traffic study.

Use of the 2.6 persons per car rate would also change the parking calculation for the 150-attendee events and the 24-attendee events. Event parking should also take into account any needed additional parking spaces for additional staffing, caterers, musicians and entertainers.

It is recommended that the study provide a parking demand matrix, with a marketing event occurring, by hour for a harvest Friday and Saturday.

6. VMT (Vehicle Miles Traveled)

The traffic study correctly identifies the need for addressing VMT in the context of maintaining air quality by reducing vehicle emissions. However, the analysis provided on page 23 and in Table 11 pertains only to employee trips, with no mention of visitor trips. This issue should be revisited when the County's new VMT methodology is approved.

7. Need for Transportation Demand Management (TDM) Plan

The traffic study contains the beginnings of a Transportation Demand Management (TDM) Plan. Because the project would result in substantial increases in traffic at intersections currently operating unacceptably, a serious effort at peak hour trip reductions should be considered. Such a plan should include a TDM coordinator.

8. Accidents

a. Page 6 of the traffic study states that the Silverado Trail/Conn Creek Rd (SR128) intersection has a higher number of collisions than the state average, but

there is no safety concern because these were non-injury accidents. Is this an opinion, or based on a standard Caltrans has established?

b. The study does not provide accident data in the vicinity of the project driveway.

9. Bike Routes

While future bike lane plans are detailed, existing bike route descriptions are vague (see page 7 of the traffic study).

10. Road Surface

The project will add traffic, including large trucks, to the deteriorating pavement condition of Conn Creek Road. The traffic study should describe the existing roadway condition and include mitigation consisting of a before-and-after pavement inspection that would require the project to make improvements to the roadway as needed.

11. Intersection Geometrics

The description of study intersections should include the observation that although the Conn Creek Road approach to Silverado Trail is flared to allow for right-turning vehicles to separate from through or left-turning vehicles, this is not always possible. A through or left-turning vehicle can obstruct access to the right-turn flare. The same is true for the Rutherford Road approach to State Route 29; the flare provided for right turns is not always accessible if a left-turning vehicle obstructs access to the right-turn flare.

12. Unsignalized Level of Service Criteria

The traffic study shows and discusses both overall intersection LOS and Minor Street approach LOS for unsignalized intersections. If the county only recognizes Minor Street approach LOS and delay for significant impact evaluation, then the inclusion of overall Intersection LOS is unnecessary and confusing (see page 10 of the traffic study). Similarly, does the County permit mitigation based on overall intersection delay as described in traffic study pages 19 and 20?

13. Roadway Directions

Throughout much of the study Silverado Trail is referred to as a north-south roadway, but in Table 10 on page 23 it is assumed to be an east-west roadway. This is confusing.

14. Access Intersection Level of Service - Data Missing

Page 26 – why is there a Level of Service delay given at the project driveway but no LOS worksheets or volumes provided in the study?

15. Significant Unmitigable Project Impacts

The traffic study identifies significant impacts at the Rutherford/ SR 29 and Conn Creek Road/Silverado Trail intersections. It recommends an improvement measure for the Silverado location, but it is unclear whether this mitigation has been discussed with the County. There is no mitigation for the Rutherford Road/SR 29 intersection except to develop measures to reduce trips. It is notable that none of the mitigations include reducing visitation. If investigated, it will probably be found that a significant reduction in visitation throughout the afternoon will required to reduce significant impacts during the three to four peak traffic hours of every Friday and Saturday afternoon.

As analyzed, the traffic study concludes that the project would result in significant, unmitigable impacts. Thus, it is anticipated that an EIR will be required. This would be an opportunity to revise the traffic analysis.

FRANK FAMILY VINEYARDS
TRAFFIC IMPACT STUDY
NAPA COUNTY, CALIFORNIA

August 22, 2018

Prepared for: FRANK FAMILY VINEYARDS
AND COUNTY OF NAPA

Prepared by: CRANE TRANSPORTATION GROUP
2621 E. Windrim Court
Elk Grove, CA 95758
(510) 236-9375
(510) 684-1984
(916) 647-3406

I. INTRODUCTION

This report has been prepared at the request of the Napa County Public Works Department as authorized by the Frank Family Vineyard applicant. It seeks to determine if the proposed Frank Family Winery along Conn Creek Road (SR 128) will result in any significant circulation system impacts at the project entrance or at the nearby Silverado Trail/Conn Creek Road (SR 128), Conn Creek Road (SR 128)/Rutherford Road (SR 128), and Rutherford Road (SR 128)/ SR 29 intersections and roadway segments. The scope of analysis has been discussed with and approved by County staff and includes evaluation of major intersections as well as Silverado Trail, State Route 29, Rutherford Road and Conn Creek Road operation near the project site for existing (Year 2017), Year 2020 and Year 2030 horizons – see **Figure 1.**

II. PROPOSED PROJECT SUMMARY

The proposed project consists of a full-crush Wine Production Center producing 475,000 gallons of wine per year, and a Visitor Center with commercial kitchen on a 54.64± acre parcel. The project includes a Lot Line Adjustment increasing the parcel size to 63.97± acres. A new, two-lane, two-way paved driveway, relocated to optimize sight lines along Conn Creek Road, would provide employee and visitor access to the site. The driveway would be stop sign controlled on its approach to Conn Creek Road. An eastbound Conn Creek Road left turn lane would be provided to accommodate turns into the site. Employee parking and visitor parking would be provided on site.

III. SCOPE OF SERVICES

The scope of service for this traffic study was developed to provide analysis required by the County of Napa. Evaluation was conducted for harvest Friday and Saturday PM peak hour traffic conditions. Existing (2017), year 2020 and year 2030 (Cumulative – General Plan Buildout) horizons were evaluated both with and without project traffic. Operating conditions at the Conn Creek Road intersections with Silverado Trail, the Project Driveway, Rutherford Road, and the Rutherford Road/ SR 29 intersection were evaluated for all analysis scenarios based upon County traffic significance criteria. In addition, roadway segment analysis was performed. Sight line adequacy was evaluated at the proposed driveway intersection with Conn Creek Road, and on-site parking supply and demand was analyzed. Significant impacts, if any, were identified and measures listed, if needed, to mitigate all impacts to a less than significant level.

IV. SUMMARY OF FINDINGS

A. "WITHOUT PROJECT" OPERATING CONDITIONS

1. Existing Volumes - Year 2017 Harvest

The peak traffic hour at the Silverado Trail/Conn Creek Road intersection, the SR 29/Rutherford Road intersection and the Conn Creek Road intersections with the Project Driveway and Rutherford Road were found to occur during one hour from 3:00-5:30 PM on Friday afternoons. The Saturday peak traffic hours at these intersections were found to occur during one hour between 2:00-4:00 PM.

2. Year 2017 Harvest (Without Project) Circulation System Operation

- **Conn Creek Road (SR 128) Rutherford Road (SR 128) intersection and Conn Creek Road/Project Driveway intersection -** acceptable levels of service + volumes do not meet peak hour signal warrant criteria levels during both the Friday and Saturday PM peak traffic hours.
- **Silverado Trail/Conn Creek Road and SR 29/Rutherford Road intersections** - unacceptable levels of service + volumes would meet peak hour signal warrant criteria levels during both the Friday and Saturday PM peak traffic hours.
- **SR 29 roadway segments** –unacceptable Friday and Saturday PM peak hour northbound and southbound operation north and south of Rutherford Road.
- **Silverado Trail roadway segments** –unacceptable Friday PM peak hour southbound operation north and south of Conn Creek Road.
- **Rutherford Road and Conn Creek Road roadway segments** – acceptable operation during all time periods at all locations.

3. Year 2020 Harvest (Without Project) Circulation System Operation

- **Conn Creek Road (SR 128) Rutherford Road (SR 128) intersection and Conn Creek Road/Project Driveway intersection -** acceptable levels of service + volumes do not meet peak hour signal warrant criteria levels during both the Friday and Saturday PM peak traffic hours.
- **Silverado Trail/Conn Creek Road and SR 29/Rutherford Road intersections** - unacceptable levels of service + volumes would continue to meet peak hour signal warrant criteria levels during both the Friday and Saturday PM peak traffic hours.
- **SR 29 roadway segments** –unacceptable Friday and Saturday PM peak hour northbound and southbound operation north and south of Rutherford Road.
- **Silverado Trail roadway segments** –unacceptable Friday PM peak hour southbound operation north and south of Conn Creek Road.
- **Rutherford Road and Conn Creek Road roadway segments** – acceptable operation during all time periods at all locations.

4. Year 2030 Harvest (Without Project) Circulation System Operation

- **Conn Creek Road (SR 128) Rutherford Road (SR 128) intersection and Conn Creek Road/Project Driveway intersection -** acceptable levels of service + volumes do not meet peak hour signal warrant criteria levels during both the Friday and Saturday PM peak traffic hours.
- **Silverado Trail/Conn Creek Road and SR 29/Rutherford Road intersections** - unacceptable levels of service + volumes would continue to meet peak hour signal warrant criteria levels during both the Friday and Saturday PM peak traffic hours.
- **SR 29 roadway segments** –unacceptable Friday and Saturday PM peak hour northbound and southbound operation north and south of Rutherford Road.
- **Silverado Trail roadway segments** –unacceptable Friday PM peak hour southbound operation north and south of Conn Creek Road.
- **Rutherford Road and Conn Creek Road roadway segments** – acceptable operation during all time periods at all locations.

B. PROJECT IMPACTS

1. Existing and Year 2020 Project Trip Generation

The proposed project (up to a maximum of 400 guests per day by appointment between 10:00 AM and 6:00 PM) will result in the following trip generation on the local circulation system during the Friday and Saturday ambient peak traffic hours. Volumes were developed through several conferences with the project applicant, the Frank Family vintners, and hospitality managers.

PROJECT TRIP GENERATION
EXISTING AND YEAR 2020 CONDITIONS

HARVEST

FRIDAY PM PEAK HOUR* (4:30-5:30)		SATURDAY PM PEAK HOUR* (2:00-3:00)	
INBOUND TRIPS	OUTBOUND TRIPS	INBOUND TRIPS	OUTBOUND TRIPS
18	20	18	18

* Peak hours on Conn Creek Road at Rutherford Road, Silverado Trail and Project Driveway.
Source: Frank Family Vineyards in consultation with Crane Transportation Group

2 . Year 2030 Project Trip Generation and Distribution

By Year 2030, the proposed project (up to a maximum of 400 guests per day by appointment between 10:00 AM and 6:00 PM) will be controlled by appointment and at the gate, resulting in the following trip generation on the local circulation system during the Friday and Saturday ambient peak traffic hours. Volumes were developed through several conferences with the project applicant, the Frank Family vintners, and hospitality managers.

PROJECT TRIP GENERATION
YEAR 2030 CONDITIONS

HARVEST

FRIDAY PM PEAK HOUR* (4:30-5:30)		SATURDAY PM PEAK HOUR* (2:00-3:00)	
INBOUND TRIPS	OUTBOUND TRIPS	INBOUND TRIPS	OUTBOUND TRIPS
9	9	10	10

* Peak hours on Conn Creek Road at Rutherford Road, Silverado Trail and Project Driveway.
Source: Frank Family Vineyards in consultation with Crane Transportation Group

EXISTING AND YEAR 2020 CHANGE IN TRAFFIC ON THE CONN CREEK ROAD EASTBOUND APPROACH TO SILVERADO TRAIL AND THE RUTHERFORD ROAD WESTBOUND APPROACH TO STATE ROUTE 29 DUE TO THE PROPOSED PROJECT

TIME	APPROACHING SR 29	APPROACHING SILVERADO TRAIL
Friday PM Peak Hour	+8 vehicles	+10 vehicles
Saturday PM Peak Hour	+7 vehicles	+9 vehicles

YEAR 2030 CHANGE IN TRAFFIC ON THE CONN CREEK ROAD EASTBOUND APPROACH TO SILVERADO TRAIL AND THE RUTHERFORD ROAD WESTBOUND APPROACH TO STATE ROUTE 29 DUE TO THE PROPOSED PROJECT

TIME	APPROACHING SR 29	APPROACHING SILVERADO TRAIL
Friday PM Peak Hour	+2 vehicles	+2 vehicles
Saturday PM Peak Hour	+5 vehicles	+6 vehicles

3. **Wine Production Center and Visitor Center**
The proposed Frank Family Vineyard would have a full-crush Wine Production Center producing 475,000 gallons of wine per year, and a Visitor Center with commercial kitchen on a 54.64± acre parcel. The project includes a Lot Line Adjustment increasing the parcel size to 63.97± acres. A new, two-lane, two-way paved driveway, relocated to optimize sight lines along Conn Creek Road, would provide employee and visitor access to the site. The driveway would be stop sign controlled on its approach to Conn Creek Road. An eastbound Conn Creek Road left turn lane would be provided to accommodate turns into the site. Employee and visitor parking would be accommodated on the site.

4. **Year 2017 Harvest Existing + Project Off-Cite Circulation Impacts**
The proposed project would not result in any significant off-site circulation impacts at any study intersection or roadway segment, including the Conn Creek Road/Silverado Trail intersection and the SR 29/Rutherford Road intersection, both of which would already be operating unacceptably without project traffic. The percent increase in traffic due to the project would not meet the County's impact significance criteria limit.

5. **Year 2020 Harvest + Project Off-Site Circulation Impacts**
The proposed project would not result in any significant off-site circulation impacts at any study intersection or roadway segment, including the Conn Creek Road/Silverado Trail intersection and the SR 29/Rutherford Road intersection, both of which would already be operating unacceptably without project traffic. The percent increase in traffic due to the project would not meet the County's impact significance criteria limit.

6. **Cumulative (Year 2030) Harvest + Project Off-Site Circulation Impacts**
The proposed project would not result in any significant off-site circulation impacts at any study intersection or roadway segment, including the Conn Creek Road/Silverado Trail intersection and the SR 29/Rutherford Road intersection, both of which would already be operating unacceptably without project traffic. The percent increase in traffic due to the project would not meet the County's impact significance criteria limit.

7. **Sight Lines at Project Driveway**
Sight lines at the relocated Project Driveway connection to Conn Creek Road exceed stopping sight distance criteria based upon the Caltrans *Highway Design Manual,* March 2014, with updates to 2018.

8. **Parking Adequacy**
The largest number of employees on-site at any one time would result in 46 employees on-site, and assuming one car per employee, 46 parking spaces would be in use. Added to the maximum visitor parking projection of 22 occupied spaces during any one hour, the total projected parking demand for a maximum visitor Friday or Saturday would be 68 of the total 75 proposed parking spaces. The proposed parking spaces would be more than adequate to accommodate a maximum day. If any event is held which will exceed

the available on-site parking, the applicant proposes to arrange for on-site valet or off-site parking and shuttle service to the winery.

C. MITIGATION MEASURES

No circulation system mitigations are required beyond those incorporated into the project as proposed.

D. CONCLUSIONS

The project would result in no significant off-site circulation system operational impacts to the roadways and study intersections. All project visitor traffic will be strictly managed by appointment, and the "appointment-only" scheduling will limit visitor traffic during known peak hours. Management will encourage multi-modal access to the winery and participate in programs to reduce overall vehicle miles traveled in accessing the facility. A left turn lane will be provided on the eastbound Conn Creek Road approach to a relocated Project Driveway. Sight lines are acceptable at this location. No additional mitigation measures are required.

V. PROJECT LOCATION & DESCRIPTION

The Frank Family Vineyard (formerly Wood Ranch) is located on the west side of Conn Creek Road, and is accessed via an existing driveway. **Figure 1** provides an area map showing the project site location. The project driveway provides access to land developed with a vineyard manager's office and 47.5± acres of vineyards and accessory structures for vineyard operations, as well as one existing single family residence.

The proposed Frank Family Vineyard would have a full-crush Wine Production Center producing 475,000 gallons of wine per year, and a Visitor Center with commercial kitchen on a 54.64± acre parcel. The project includes a Lot Line Adjustment increasing the parcel size to 63.97± acres. A new, two-lane, two-way paved driveway, relocated to optimize sight lines along Conn Creek Road, would provide employee and visitor access to the site. The driveway would be stop sign controlled on its approach to Conn Creek Road. An eastbound Conn Creek Road left turn lane would be provided to accommodate turns into the site. The majority of employee parking would be provided at the Wine Production Center, where there would be 32 regular (10'X18') parking spaces and two accessible spaces. Visitor parking would be provided at the Visitor Center, where there would be a total of 41 parking spaces, consisting of 36 regular spaces plus three accessible spaces and two spaces sized for limousines. A minor amount of employee parking would occur at the Visitor Center.

41 Full Time Employees Working Onsite at Any One Time

The project's staffing and marketing plan is detailed as follows:

- 41 year-round full-time employees at the Wine Production Center and Visitor Center.
- 5 dayshift seasonal (Harvest) employees[1]
- 5 swing shift seasonal (Harvest) employees[2]

The **Winery Production Center** component of the full-time Harvest employees:
19 Full-time employees

The **Visitor Center** component of the 35 full-time Harvest employees:
Up to **22** Full-time employees

5 Part Time Employees

Tables 5 and 7 provide further detail.

MARKETING EVENTS

Marketing events shall be limited as follows:

- **Dinnertime Wine Marketing Events** for a maximum of 24 guests may occur on Friday and Saturday nights, plus up to 4 events monthly occurring on days other than Friday and Saturday – no more than 1 dinnertime wine marketing event may occur on any given day. Food may be prepared on-site;

- **Lunchtime Wine Marketing Events** may occur Monday through Sunday up to a monthly maximum of 15 such events - no more than 1 lunchtime wine marketing event may occur on any given day – no more than 16 people are allowed per event – food may be prepared on-site;

- **Large Events** may occur Monday through Sunday up to an annual maximum of 8 such events – no more than 2 large events may occur in a given month – no more than 1 large event may occur on any given day – no more than 150 people are allowed per event – food to be catered.

- **Maximum Daily Visitors**
  400 maximum per day for tours and tastings by appointment. Inbound and outbound event-related traffic will be minimized during peak traffic periods, such as 3:00 to 6:00 PM on a weekday, and 2:00 to 4:00 PM on a Saturday. This "by appointment" scheduling is intended to minimize the burden of project-generated traffic during the ambient traffic peak hours.

- **Participation in Auction Napa Valley.**

[1] Production day shift hours: 7:00 AM – 3:00 PM.
[2] Production swing shift hours: 3:00 PM – 12:00 Midnight.

In no case shall the daily combined tours and tastings and marketing visitation exceed 400 persons.

Marketing events shall cease no later than 10:00 PM, except to the extent that marketing event cleanup occurs entirely indoors, said cleanup may extend one hour beyond the end of the event.

Food service shall not involve menu options and meal service such that the winery functions as a café or restaurant.

Start and finish time of activities shall be scheduled to minimize vehicles arriving or departing between 3:00 PM and 5:30 PM weekdays and 2:00 PM and 4:00 PM Saturdays.

If any event is held which will exceed the available on-site parking, the applicant shall arrange for on-site valet or off-site parking and shuttle service to the winery.

VI. EXISTING CIRCULATION SYSTEM EVALUATION PROCEDURES

A. ANALYSIS LOCATIONS

The following locations have been evaluated.

1. Silverado Trail/Conn Creek Road (SR 128) intersection (the Conn Creek Road approach is stop sign controlled).

2. Conn Creek Road (SR128)/Project Driveway intersection (the Project Driveway southbound approach will be stop sign controlled).

3. Conn Creek Road (SR 128)/Rutherford Road (SR 128) intersection (the Conn Creek Road approaches are stop sign controlled.)

4. Rutherford Road (SR 128)/SR 29 intersection (the Rutherford Road westbound approach is stop sign controlled.)

5. SR 29 two-lane highway segments just north and south of Rutherford Road.

6. Silverado Trail two-lane highway segments just north and south of Conn Creek Road.

7. Conn Creek Road just west of Silverado trail.

8. Rutherford Road just east of SR 29.

Figure 2 presents a schematic of approach geometrics and control at each analyzed intersection.

B. VOLUMES

1. ANALYSIS SEASONS AND DAYS OF THE WEEK

As required by Napa County, project traffic impacts have been evaluated during harvest conditions. Based upon 2015 and 2016 historical information from Caltrans PeMS (Performance Measurement System) count surveys along SR 29 in the Napa Valley, the harvest season, occurring in September - October has the highest daily volumes of the year. Therefore, conditions during this time period were selected for evaluation.

According to the Napa County Travel Behavioral Study,[3] the highest weekday volumes in Napa Valley occur on a Friday, with the highest weekend volumes occurring on a Saturday. In addition, historical count data from the City of Napa show that Friday has the highest volumes of any weekday, while Caltrans historical counts for SR 29 between St. Helena and Napa also show that weekday PM peak hour volumes are higher on a Friday than on either a Wednesday or Thursday. Therefore, Friday and Saturday PM peak traffic conditions were evaluated in this study.

2. COUNT RESULTS

Counts were conducted at the Conn Creek Road intersections with Rutherford Road, the Project Driveway, and Silverado Trail in early October 2017. Friday 4:00 to 6:00 PM as well as Saturday 12:00 noon to 5:00 PM turn movement counts were conducted by All Traffic Data, as directed by Crane Transportation Group (CTG) on Friday, October 6 and Saturday, October 7, 2017. These count days occurred just before the onset of the destructive Napa County fires, thus, the count period is considered to reflect typical harvest season peak activity in the region.

Harvest season 2017 volumes were available at the Rutherford Road intersection with State Route 29 in the BV Winery Traffic Impact Report prepared by CTG in July 2017.

Peak traffic hours at each analysis location varied by 15 5o 45 minutes. In these cases, the highest volumes in the same general time period were used for analysis purposes. Traffic volumes are presented in **Figure 3.**

C. ROADWAYS

Regional access to the project site is provided by the State Route 29 highway (S.R. 29), Rutherford Road (State Route 128) and Silverado Trail, while direct access to the project site is provided by the portion of Conn Creek Road that is designated S.R. 128. See **Figure 2.**

[3] Fehr & Peers, December 8, 2014.

Roadway descriptions are based upon the designation that SR 29 and Silverado Trail run in a general north-south direction through the project area while Rutherford Road and Conn Creek Road run in a general east-west direction. The project site is located on the north side of Conn Creek Road between the Rutherford Road and Silverado Trail intersections. **Figure 2** presents existing intersection geometrics and control.

State Route 29 (SR 29) provides the only major regional access to the west side of the Napa Valley. In the vicinity of the Rutherford Road intersection it has two well-paved 12-foot travel lanes and eight-foot-wide paved shoulders. A continuous two-way left turn lane is needed in the southbound approach to Rutherford Road. The posted speed limit is 40 miles per hour and the roadway is level with a minor horizontal curve north of Rutherford Road. SR 29 is not controlled on its approach to Rutherford Road. It is also designated SR 128 to the north of Rutherford Road.

Rutherford Road (SR 128) is a two-lane arterial road extending east of SR 29 to Silverado Trail (with a name change to Conn Creek Road near Silverado Trail). It is designated State Route 128. The Rutherford Road single lane westbound approach to SR 29 is stop sign controlled. Just east of SR 29 the posted speed limit is 30 miles per hour and on-street parking is allowed in most locations. However, left turn lanes are not provided on the approach to any driveway connections. The Rutherford Road intersection with Conn Creek Road is stop-controlled on the northbound Conn Creek Road approach.

Conn Creek Road (SR 128) extends from Silverado Trail west-southwest through an intersection with Skellenger Lane. It provides the only access to the project site. Adjacent to the project site it has two well-paved 12-foot wide travel lanes and 1- to 2-foot wide paved shoulders, with a very wide paved shoulder on the west (project) side of the road where it traverses a broad horizontal curve and has an intersection with the Project Driveway. The Conn Creek Road posted speed limit northbound along Conn Creek Road (S.R. 128), just south of the Project Driveway intersection is 35 miles per hour through a curve. Based upon field measurements conducted by CTG at the proposed driveway location, a 40 to 45 mph speed limit would be considered the "design speed". Conn Creek Road is stop sign controlled on its single lane northbound approach to Silverado Trail. A driveway serving the Rutherford Estates Winery is the fourth (northerly) leg of the Silverado Trail/Conn Creek Road intersection. A left turn lane is not provided on the approach to the Project Driveway intersection; field observations reveal that there are no left turn lanes provided to commercial properties along the SR 128 sections of Conn Creek Road and Rutherford Road.

The ***Project Driveway*** is a paved, two-way, unstriped, approximately 16-foot wide roadway that widens at its intersection with Conn Creek Road. It is stop sign-controlled at Conn Creek Road. The road slopes slightly downhill west of Conn Creek Road. It serves an existing single family residence and vineyards.

Silverado Trail in the project vicinity has two well-paved 12-foot travel lanes and wide paved shoulders that are utilized as Class II bicycle lanes. A left turn lane is provided on the northbound Silverado Trail approach to Conn Creek Road. The posted speed limit is 55 miles per hour, but lowers to 45 miles per hour northbound and 40 miles per hour southbound north of Zinfandel Lane.

D. INTERSECTION LEVEL OF SERVICE

1. ANALYSIS METHODOLOGY

Transportation engineers and planners commonly use a grading system called level of service (LOS) to measure and describe the operational status of the local roadway network. LOS is a description of the quality of a roadway facility's operation, ranging from LOS A (indicating free-flow traffic conditions with little or no delay) to LOS F (representing oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). Intersections, rather than roadway segments between intersections, are almost always the capacity controlling locations for any circulation system.

Signalized Intersections. For signalized intersections, the 2010 *Highway Capacity Manual* (Transportation Research Board, National Research Council) methodology was utilized. With this methodology, operations are defined by the level of service and average control delay per vehicle (measured in seconds) for the entire intersection. For a signalized intersection, control delay is the portion of the total delay attributed to traffic signal operation. This includes delay associated with deceleration, acceleration, stopping, and moving up in the queue. **Table 1** summarizes the relationship between delay and LOS for signalized intersections.

Unsignalized Intersections. For unsignalized (all-way stop-controlled and side-street stop-controlled) intersections, the 2010 *Highway Capacity Manual* (Transportation Research Board, National Research Council) methodology for unsignalized intersections was utilized. For side-street stop-controlled intersections, operations are defined by the level of service and average control delay per vehicle (measured in seconds), with delay reported for the stop sign controlled approaches or turn movements, although overall delay is also typically reported for intersections along state highways. For all-way stop-controlled intersections, operations are defined by the average control delay for the entire intersection (measured in seconds per vehicle). The delay at an unsignalized intersection incorporates delay associated with deceleration, acceleration, stopping, and moving up in the queue. **Table 2** summarizes the relationship between delay and LOS for unsignalized intersections.

2. MINIMUM ACCEPTABLE OPERATION

Napa County uses Level of Service D (LOS D) as the poorest acceptable operation for side street stop sign controlled approaches at two-way stop intersections and for all-way-stop intersections.

E. ROADWAY SEGMENT LEVEL OF SERVICE

1. ANALYSIS METHODOLOGY

Roadway segment operation for SR 29, Silverado Trail and Zinfandel Lane has been evaluated based upon criteria developed for Napa County roadways as part of the County General Plan Update in 2007: Napa County General Plan Update EIR – Technical Memorandum for Traffic and Circulation Supporting the Findings and Recommendations by Dowling Associates, February 2007. Table 5 in this report, "Peak Hour Roadway Capacities," shows the following directional capacity limit-level of service relationships for a two-lane rural highway (such as SR 29 or Silverado Trail) as well as for a two-lane collector roadway (such as Zinfandel Lane).

		LOS A	LOS B	LOS C	LOS D	LOS E
2-Lane Rural Highway	Maximum Peak Direction Volumes	100	330	620	870	1200
(SR 29 & Silverado Trail)	Volume/Capacity Ratio	(.08)	(.28)	(.52)	(.73)	(1.00)
2-Lane Collector (Zinfandel Lane)	Maximum Peak Direction Volumes	73	97	480	760	810
	Volume/Capacity Ratio	(.09)	(.12)	(.59)	(.94)	(1.00)

2. MINIMUM ACCEPTABLE OPERATION

Level of service D (LOS D) is the poorest acceptable roadway segment operation in Napa County.

F. INTERSECTION PEAK HOUR SIGNAL WARRANT EVALUATION

1. ANALYSIS METHODOLOGY

Traffic signals are used to provide an orderly flow of traffic through an intersection. Many times they are needed to offer side street traffic an opportunity to access a major road where high volumes and/or high vehicle speeds block crossing or turn movements. They do not, however, increase the capacity of an intersection (i.e., increase the overall intersection's ability to accommodate additional vehicles) and, in fact, often slightly reduce the number of total vehicles that can pass through an intersection in a given period of time. Signals can also cause an increase in traffic accidents if installed at inappropriate locations.

There are 10 possible tests for determining whether a traffic signal should be considered for installation. These tests, called "warrants", consider criteria such as actual traffic volume, pedestrian volume, presence of school children, and accident history. The intersection volume data together with the available collision histories were compared to warrants contained in the *California Manual on Uniform Traffic Control Devices, 2014, Revision 2 (2014 CMUTCD Rev. 2)*. Section 4C of the 2014 CMUTCD Rev. 2 provides guidelines, or warrants, which may indicate need for a traffic signal at an unsignalized intersection. As indicated in the 2014 CMUTCD Rev. 2, satisfaction of one or more warrants does not necessarily require immediate installation of a traffic signal. It is merely an indication that the local jurisdiction should begin monitoring conditions at that location and that a signal may ultimately be required.

Warrant 3, the peak hour volume warrant, is often used as an initial check of signalization needs since peak hour volume data is typically available and this warrant is usually the first one to be met. Warrant 3 is based on a logarithmic curve and takes only the hour with the highest volume of the day into account. For intersections in rural locations (with local area population less than 10,000 people or where the posted speed limit or 85th percentile speed on the uncontrolled intersection approaches is greater than 40 miles per hour) a 70 percent warrant is applied. The regular and 70 percent warrants are typically referred to as the urban and rural peak hour warrants. Please see the **Appendix** for the warrant charts.

It should be noted that a “rural” warrant chart is utilized when the uncontrolled intersection approaches have vehicle speeds greater than 40 miles per hour or when the intersection is in a community with less than 10,000 population. The rural chart has been utilized for evaluation of the Silverado Trail intersections with Oak Knoll Avenue, Soda Canyon Road and Hardman Avenue since the speeds along Silverado Trail are greater than 40 miles per hour and the intersections are in rural settings.

G. PLANNED IMPROVEMENTS AND PLANNING CONTEXT

There are no planned and funded improvements at any location evaluated in this study.[4]

The project vicinity is subject to a range of vehicle, bicycle and pedestrian–related policy documents for Napa Valley. Policies particularly relevant to the project are found in the County's Transportation Demand Management (TDM) Plan, NVTA Countywide Bicycle Plan and Pedestrian Plan as follows:

Transportation Demand Management (TDM) Policy CIR-8: Developers of new land uses shall provide adequate parking or demonstrate that adequate parking exists to meet their anticipated parking demand and shall not provide excess parking that could stimulate unnecessary vehicle trips or commercial activity exceeding the site's capacity. Consideration of shared parking opportunities is encouraged.

> Action Item CIR-8.1: Update the County's parking requirements for all land uses, including wineries, to support carpool/vanpool options, to avoid over-supply of visitor and employee parking, and to set parking maximums in appropriate areas to support commute trip reduction goals.

TDM Policy CIR-11: Facilities supporting multi-modal access, including but not limited to designated areas for pick-up/drop-off activities, shall be integrated into the site layout of development projects, frontage improvements, and public projects, wherever such facilities are appropriate and can be physically accommodated. The Countywide Bicycle Plan and Countywide Pedestrian Plan shall be referenced in determining appropriate bicycle and/or pedestrian treatments at specific locations. Amenities serving public and private transportation providers and multi-modal connections between private properties are encouraged, particularly in circumstances where such amenities and connections could provide an alternative to vehicular travel on public roadways and where the amenity or connection would reduce VMT.

TDM Policy CIR-19: The County strongly supports Transportation Demand Management (TDM) strategies as a means of accommodating economic growth while moderating the negative effects of personal vehicle travel on the County's transportation infrastructure and on the quality of life of County residents and visitors. Nonresidential development in the County shall include TDM strategies to reduce single-occupant vehicle use, thereby encouraging more energy-efficient forms of transportation and contributing toward the County's greenhouse gas emission reduction goals. The County may require ongoing monitoring of vehicle trips to non-residential developments, in order to evaluate the effectiveness of the TDM strategies employed.

TDM strategies to be considered include but are not limited to:

- Subsidized transit passes or other incentives for transit usage;
- Participation in a neighborhood or employer-sponsored shuttle program;

[4] Ms. Michelle Melonakis, Napa County Public Works Department, July 2017, and Ms. Dana Ayers, Napa County Planning, Building and Environmental Services, October, 2017.

• Provision of multi-modal connections to nearby transit stops, neighboring properties, or other destinations;
• On-site accommodation for bicyclists (such as bicycle parking facilities and showers/lockers for employees who bicycle);
• Incentives for carpool/vanpool participation, and/or priority parking for carpool/vanpool users;
• Alternative work schedules/telecommuting;
• Participation in a subsidized car share or ride share program; and,
• Modifications to parking policies, such as parking pricing, reduced supply, or financial incentives for employees who do not use a parking space.

TDM Policy CIR-20: The County shall update its Transportation System Management Ordinance (Chapter 10.28 of the County Code) to include measures that reduce commute trips March 2018 Draft Page 16 of 23 Napa County General Plan to workplaces within the unincorporated County and a program to oversee implementation.

Action Item CIR-20.1: The County will support implementation of a harvest season ride-matching or ridesharing service pilot program.

Policy CIR-23: The County shall encourage the use of public transportation by tourists and visitors and will work with wineries, the local hospitality industry, and the cities and towns.

The ***Napa Countywide Bicycle Plan***, adopted in January 2012, has as its principal goal *to develop and maintain a safe and comprehensive countywide bicycle transportation and recreation system that provides access, opportunities for healthy physical activity, and reduced traffic congestion and energy use.*

Napa Countywide Bicycle Plan Figures 4, 7 and 9, show SR 29 and Rutherford Road and as Proposed Regional Routes and Proposed Class II Bicycle Facilities. Silverado Trail is shown as an Existing Regional Route, and Conn Creek Road south of Rutherford Road is shown as an Existing Primary Route with Class II Bike Lanes.

A discretionary project such as the proposed winery can participate in achieving the goals and policies of the Countywide Bicycle Plan in the following ways:

Participate in funding route construction, maintenance or enhancement, including support facilities as funding programs are identified (Objective 6, Policy 6.1).

Encourage employees to commute by bicycle; distribute bicycle and pedestrian safety, educational, and promotional materials; provide a public bikeway map and user guide that provides bike route, education, safety, and promotional information (Objective 7, Policy 7.11).

The ***Napa Countywide Pedestrian Plan***, adopted August 2016, is intended to *guide and inform pedestrian infrastructure, policies, programs, and development standards to make walking in Napa County safe, comfortable, convenient and enjoyable for all pedestrians.*

The Pedestrian Plan sets goals and policies to achieve the following:

Goal 1: Provide a connected network of pedestrian sidewalks, trails, and pathways in the County and its jurisdictions that are safe and accessible to a variety of users and that foster community interactions.

Goal 2: Encourage a multimodal transportation system.

Goal 3: Obtain funding for pedestrian projects.

Goal 4: Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists.

Policies are provided to direct the implementation of the goals.

The document provides individual pedestrian plans by jurisdiction, focusing on specific geographic areas in the County. The location-based focus is on Calistoga, St. Helena, Yountville, Napa, American Canyon, and Unincorporated.

The project site is included within the "Unincorporated" geographic area. The plan does not specifically address study area roads, other than to show Rutherford Road and Conn Creek Road as having no sidewalks (see UNC-7, Pedestrian Index for Unincorporated Area). The Countywide sidewalk expansion program is applicable to Conn Creek Road and Rutherford Road, if these roadways become locations of focus for such a program. Wineries along Rutherford Road and Conn Creek Road can effectively participate in countywide Goal 2, encouraging multimodal transportation.

VI. FUTURE HORIZON TRAFFIC VOLUME PROJECTIONS

Traffic analysis has been conducted for existing (2017), year 2020 and year 2030 harvest conditions. The 2030 horizon reflects the cumulative County General Plan Buildout year. At County request traffic projections were initially developed for a list of new or expanding winery projects already approved but not built in the vicinity of Frank Family Vineyard (Project Site). The list projects and the traffic studies used to obtain their projections are as follows:

- Caymus Winery – Amended Caymus Winery Traffic Impact Study by W-Trans, April 2015
- Opus One Winery – Focused Traffic Analysis for the Proposed Opus One Use Modification Project by Omni Means, February 2016
- Frogs Leap Winery – Focused Traffic Analysis for the Proposed Frogs Leap Winery Modifications Project by Omni Means, July 2016
- Scarlett Winery, 1052 Ponti Road – No Traffic Study Available
- Swanson Winery Traffic Impact Study by George Nicholson, May 2008
- LMR Rutherford Estate Winery – LMR Rutherford Estate Traffic Study by Crane Transportation Group, January 2014

- BV Winery Along SR 29 in Rutherford, CA 2017 Use Permit Modification Traffic Study by Crane Transportation Group, July 31, 2017
- Matthew Bruno Wines Tasting Room, 1151 Rutherford Road – No Traffic Study Available

Traffic modeling projections were then compared to projections from the list of nearby projects. While mainline volume increases along Silverado Trail and SR 29 appeared reasonable from the model, traffic increases expected from the County's list of approved nearby projects were greater than increases projected by the model along Rutherford Road and Conn Creek Road for various turn movements at the Conn Creek Road/Silverado Trail, Conn Creek Road/Rutherford Road and SR 29/Rutherford Road intersections. Model results were therefore modified to reflect these increases. After adjustments, cumulative two-way weekday volumes along Silverado Trail would be expected to grow about 30 percent from 2017 to 2030; two-way weekday volumes along SR 29 would be expected to grow about 20 percent from 2017 to 2030. Assuming development of the nearby projects over the next three years as well as regional growth, there would be about a 5 to 7 percent growth in two-way PM peak hour traffic along Silverado Trail and SR 29 from 2017 to the year 2020. Since traffic modeling projections were only available for weekday PM peak hour conditions and not for the Saturday PM peak hour, Saturday two-way PM peak hour volumes on SR 29 were increased by the same percentages found for the weekday PM peak hour.

General Plan weekday PM peak hour traffic modeling projections were also available for Rutherford Road, but did not fully reflect traffic from the nearby projects. After inclusion of traffic from these nearby developments Rutherford Road at Conn Creek Road would be expected to receive about a 33 percent increase between 2017 and 2020 and about a 40 percent increase between 2017 and 2030.

Resultant year 2020 harvest "Without Project" Friday and Saturday PM peak hour volumes are presented in **Figure 4**, while year 2030 (Cumulative) harvest "Without Project" Friday and Saturday PM peak hour volumes are presented in **Figure 5**.

VII. OFF-SITE (WITHOUT PROJECT) CIRCULATION SYSTEM OPERATION

A. YEAR 2017 HARVEST (WITHOUT PROJECT) OPERATING CONDITIONS

1. YEAR 2017 INTERSECTION LEVEL OF SERVICE – see Table 3

Silverado Trail/Conn Creek Road

1) Friday PM Peak Hour

Unacceptable Conn Creek Road stop sign controlled eastbound approach operation: LOS F

2) Saturday PM Peak Hour

Unacceptable Conn Creek Road stop sign controlled eastbound approach operation: LOS F

Project Driveway/Conn Creek Road

1) Friday PM Peak Hour

Acceptable Project Driveway stop sign controlled operation: LOS A

2) Saturday PM Peak Hour

Acceptable Project Driveway stop sign controlled operation: LOS A

Rutherford Road/Conn Creek Road

1) Friday PM Peak Hour

Acceptable Conn Creek Road stop sign controlled operation: LOS B

2) Saturday PM Peak Hour

Acceptable Conn Creek Road stop sign controlled operation: LOS A

SR 29/Rutherford Road

1) Friday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2) Saturday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2. YEAR 2017 ROADWAY SEGMENT LEVEL OF SERVICE – Table 4

a) SILVERADO TRAIL

1) Friday PM Peak Hour

Acceptable operation northbound, both north and south of Conn Creek Road, but unacceptable operation southbound: LOS C northbound and LOS E southbound.

2) Saturday PM Peak Hour

Acceptable operation both north and south of Conn Creek Road: LOS D northbound and southbound.

b) SR 29

1) Friday PM Peak Hour

Uncceptable operation northbound and southbound both north and south of Rutherford Road: LOS E.

2) Saturday PM Peak Hour

Uncceptable operation northbound and southbound both north and south of Rutherford Road: LOS E.

c) CONN CREEK ROAD

1) Friday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and LOS A westbound.

2) Saturday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and LOS B westbound.

d) RUTHERFORD ROAD

1) Friday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound.

2) Saturday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound

3. YEAR 2017 INTERSECTION PEAK HOUR SIGNAL WARRANT EVALUATION – see Table 5

Silverado Trail/Conn Creek Road

1) Friday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

Project Driveway/Conn Creek Road

1) Friday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

Rutherford Road/Conn Creek Road

1) Friday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

SR 29/Rutherford Road

1) Friday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

B. YEAR 2020 HARVEST (WITHOUT PROJECT) OPERATING CONDITIONS

1. INTERSECTION LEVEL OF SERVICE – Table 3

Silverado Trail/Conn Creek Road

1) Friday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2) Saturday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

Project Driveway/Conn Creek Road

1) Friday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS A

2) Saturday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS B

Rutherford Road/Conn Creek Road

1) Friday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS B

2) Saturday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS B

SR 29/Rutherford Road

1) Friday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2) Saturday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2. ROADWAY SEGMENT 2020 LEVEL OF SERVICE – Table 6

a) SILVERADO TRAIL

1) Friday PM Peak Hour

Acceptable operation northbound, both north and south of Conn Creek Road, but unacceptable operation southbound: LOS D northbound and LOS E southbound.

2) Saturday PM Peak Hour

Acceptable operation both north and south of Conn Creek Road: LOS D northbound and southbound.

b) SR 29

1) Friday PM Peak Hour

Unacceptable operation northbound and southbound both north and south of Rutherford Road: LOS E northbound and LOS F southbound

.

2) Saturday PM Peak Hour

Unacceptable operation northbound and southbound both north and south of Rutherford Road: LOS E.

c) CONN CREEK ROAD

1) Friday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and LOS B westbound.

2) Saturday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and westbound.

d) RUTHERFORD ROAD

1) Friday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound.

2) Saturday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound.

3. INTERSECTION PEAK HOUR SIGNAL WARRANT EVALUATION – Table 5

Silverado Trail/Conn Creek Road

1) Friday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

Project Driveway/Conn Creek Road

1) Friday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

Rutherford Road/Conn Creek Road

1) Friday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

SR 29/Rutherford Road

1) Friday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

C. CUMULATIVE (YEAR 2030) HARVEST (WITHOUT PROJECT) OPERATING CONDITIONS

1. INTERSECTION LEVEL OF SERVICE – Table 3

Silverado Trail/Conn Creek Road

1) Friday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2) Saturday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

Project Driveway/Conn Creek Road

1) Friday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS A

2) Saturday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS B

Rutherford Road/Conn Creek Road

1) Friday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS B

2) Saturday PM Peak Hour

Acceptable Rutherford Road stop sign controlled operation: LOS B

SR 29/Rutherford Road

1) Friday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2) Saturday PM Peak Hour

Unacceptable Rutherford Road stop sign controlled operation: LOS F

2. ROADWAY SEGMENT YEAR 2030 LEVEL OF SERVICE – Table 7

a) SILVERADO TRAIL

1) Friday PM Peak Hour

Acceptable operation northbound, both north and south of Conn Creek Road, but unacceptable operation southbound: LOS D northbound and LOS F southbound.

2) Saturday PM Peak Hour

Unacceptable operation both north and south of Conn Creek Road: LOS E northbound and southbound.

b) SR 29

1) Friday PM Peak Hour

Unacceptable operation northbound and southbound both north and south of Rutherford Road: LOS E northbound and LOS F southbound

.

2) Saturday PM Peak Hour

Unacceptable operation northbound and southbound both north and south of Rutherford Road: LOS F.

c) CONN CREEK ROAD

1) Friday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and westbound.

2) Saturday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and westbound.

d) RUTHERFORD ROAD

1) Friday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound.

2) Saturday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound.

3. INTERSECTION PEAK HOUR SIGNAL WARRANT EVALUATION YEAR 2030 – Table 5

Silverado Trail/Conn Creek Road

1) Friday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

Project Driveway/Conn Creek Road

1) Friday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

Rutherford Road/Conn Creek Road

1) Friday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would not meet rural peak hour signal warrant #3 criteria.

SR 29/Rutherford Road

1) Friday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

2) Saturday PM Peak Hour

Volumes would meet rural peak hour signal warrant #3 criteria.

VIII. PROJECT IMPACT EVALUATION SIGNIFICANCE CRITERIA

A. COUNTY OF NAPA SIGNIFICANCE CRITERIA

The following criteria have recently been developed for traffic impact analyses in Napa County.

EXISTING + PROJECT CONDITIONS

A. ARTERIAL SEGMENTS

A project would cause a significant impact requiring mitigation if:

1. An arterial segment operates at LOS A, B, C or D during the selected peak hours without project trips, and deteriorates to LOS E or F with the addition of project trips, or
2. An arterial segment operates at LOS E or F during the selected peak hours without project trips, and the addition of project trips increases the total segment volume by one percent or more.

For the second criteria, the following equation should be used if the arterial operates at LOS E or F without the project:

Project Contribution % = Project Trips ÷ Existing Volumes

B. SIGNALIZED INTERSECTIONS

A project would cause a significant impact requiring mitigation if:

1. A signalized intersection operates at LOS A, B, C or D during the selected peak hours without project trips, and deteriorates to LOS E or F with the addition of project trips, or
2. A signalized intersection operates at LOS E or F during the selected peak hours without project trips, and the addition of project trips increases the total entering volume by one percent or more.

For the second criteria, the following equation should be used if the signalized intersection operates at LOS E or F without the project:

Project Contribution % = Project Trips ÷ Existing Volumes

Maintaining LOS D or better at all signalized intersections would sometimes require expanding the physical footprint of an intersection. In some locations around the County, expanding physical transportation infrastructure could be in direct conflict with the County's goals of preserving the area's rural character, improving safety, and sustaining the agricultural industry, making these potential improvements infeasible. The County's Circulation Element lists intersections that are slated for improvement or expansion in unincorporated Napa County.[5]

Transportation studies should individually consider the feasibility of potential mitigation measures with respect to right-of-way acquisition, regardless of the intersection's place in the Circulation Element's identified improvement lists, and present potential alternative mitigation measures that do not require right-of-way acquisition. County staff would then review that information and make the decision about the feasibility of the identified potential mitigations.

For intersections that cannot be improved without substantial additional right-of-way according to both the Circulation Element and the individual transportation impact study, and where other mitigations such as updating signal timing, signal phasing and operations, and/or signing and striping improvements do not improve the LOS, LOS E or F will be considered acceptable and the one percent threshold would not apply. Analysis of signalized intersection LOS should still be presented for informational purposes, and there should still be an evaluation of effects on safety and local access, per Policy CIR-18.

C. UNSIGNALIZED INTERSECTIONS (ALL WAY STOP AND SIDE STREET STOP SIGN CONTROLLED)

LOS for all way stop controlled intersections is defined as an average of the delay at all approaches. LOS for side street stop controlled intersections is defined by the delay and LOS for

[5] According to the Circulation Element dated June 8, 2008, the following intersections can be altered or expanded as a mitigation measure: SR-12/Airport Boulevard/SR-29, SR-221/SR-12/Highway 29, and several intersections along SR-29 and SR-128 north of Napa. The significance criteria shown above should apply to facilities where appropriate based upon the most recent Circulation Element chapter of the General Plan.

the worst case approach. The recommended interpretation of Policy CIR-16 regarding unsignalized intersection significance criteria is as follows:

1. An unsignalized intersection operates at LOS A, B, C or D during the selected peak hours without project trips, the LOS deteriorates to LOS E or F with the addition of project traffic, and the peak hour traffic signal warrant criteria should also be evaluated and presented for information purposes, or
2. An unsignalized intersection operates at LOS E or F during the selected peak hours without project trips and the project contributes one percent or more of the total entering traffic for all way stop controlled intersections, or 10 percent or more of the traffic on a side street approach for side street stop controlled intersections; the peak hour traffic signal warrant criteria should also be evaluated and presented for informational purposes.

All Way Stop Controlled Intersections
For the second criteria at an all way stop controlled intersection, the following equation should be used if the all way stop controlled intersection operates at LOS E or F without the project.

Project Contribution % = Project Trips ÷ Existing Volumes

Side Street Stop Controlled Intersections
For the second criteria at a side street stop controlled intersection, the following equation should be used if the side street stop controlled intersection operates at LOS E or F without the project.

Project Contribution % = Project Trips ÷ Existing Volumes

Both of those volumes are for the stop controlled approaches only. Each stop controlled approach that operates at LOS E or F should be analyzed individually.

CUMULATIVE+ PROJECT CONDITIONS

A. ARTERIAL SEGMENTS, SIGNALIZED INTERSECTIONS AND UNSIGNALIZED INTERSECTIONS

A project would cause a significant cumulative impact requiring mitigation if:

1. The overall amount of expected traffic growth causes conditions to deteriorate such that any of the significance criteria described above for existing conditions are met, and
2. The project's contribution to a significant cumulative impact would be equal to or greater than five percent of the growth in traffic from existing conditions.

A project's contribution to a cumulative condition would be calculated as the project's percentage contribution to the total growth in traffic from existing conditions.

Project Contribution % = Project Trips ÷ (Cumulative Volumes - Existing Volumes)

- If projected daily volumes on the project driveway in combination with volumes on the roadway providing access to the project driveway meet County warrant criteria for provision of a left turn lane on the approach to the project entrance.

- If sight lines at project access driveways do not meet Caltrans stopping sight distance criteria based upon prevailing vehicle speeds.

B. PROJECT TRIP GENERATION

Friday and Saturday PM peak hour trip generation projections were developed with the assistance of the project applicant. Volumes were developed through numerous conferences with the project applicant, the Frank Family vintners, and hospitality managers. New traffic on the regional roadway network during the Friday and Saturday PM peak hours would be due to the projected maximum of 400 daily guests.

TYPICAL MAXIMUM DAYS

Scenario 1. 400 visitors by appointment; no special events.

Visitor hours 10:00 AM - 6:00 PM.

a. Weekday:

400 / 2.6 = 154 cars inbound, 154 cars outbound.

b. Weekend:

400 / 2.8 = 143 cars inbound, 143 cars outbound.

Scenario 2. 400 visitors by appointment; with evening 150-person special event.

a. Weekday:

400 visitors per day, with 150-person event starting 6:30 PM, and 250 visitors between 10:00 AM and 6:00 PM

250 / 2.6 = 96 cars inbound, 96 cars outbound.

b. Weekend:

400 visitors per day, with 150-person event starting 6:30 PM, and 250 visitors between 10:00 AM and 6:00 PM

250 / 2.8 = 89 cars inbound, 89 cars outbound.

A maximum day with no special events would result in the greatest trip generation volume, thus, **Scenario 1** has been analyzed for weekday (Friday) and weekend (Saturday) conditions.

An important management tool for every winery pertains to whether or not visitors are invited by appointment. The following provides analysis for conditions with guest trips analyzed with control by appointment.

2. EMPLOYEE SCHEDULE AND CONTROL OF VISITORS BY APPOINTMENT

Production and Visitor Center Employee Schedules

Full-time and part-time production employees would arrive by 7:00 AM and depart just after 3:00 PM, and Visitors Center employees would arrive by 9:30 AM and depart after 6:00 PM. These schedules are shown on Tables 8 and 10, along with visitor arrivals and departures.

Control of Visitors by Appointment

The Frank Family proposes to **admit visitors by appointment, only, and will limit visitors during known traffic peak hours**, such as from 3:00 to 5:30 PM on weekdays, and from 2:00 to 4:00 PM on weekends. This would result a controlled volume of inbound vehicle trips during PM peak hour traffic periods, and a reduced volume of outbound trips. Tables 8 through 12 provide details of maximum day inbound and outbound vehicle trips.

Figure 6 shows the project-generated increment of traffic volumes during typical maximum days on a harvest Friday and Saturday.

3. LIMITATIONS ON VISITORS DURING PEAK HOURS WOULD INCREASE BY 2030

In order to avoid creating significant impacts due to traffic by the 2030 Planning Horizon (General Plan Buildout), the Frank Family proposes to reduce visitor appointments during the visitor peak hours, as shown on **Tables 13, 14 and 15.** As shown, visitor appointments during the traffic peak hour would be limited to achieve a peak hour **maximum of 9 inbound and 9 outbound trips on a Friday, and 10 inbound and 10** outbound trips on a Saturday. In addition, departing visitors would be provided direction at the gate to guide their outbound route along Conn Creek Road, with the purpose of strict limits on vehicles added on the approach to Silverado Trail.

The Frank Family currently manages its 350 visitors per day at its Larkmeade facility, also requiring visitation by appointment. This is managed through its website and through its process of setting up each appointment. The process currently followed at the Larkmeade facility would be carefully regulated at its Conn Creek site, with the addition of limits on the number of outbound vehicles during the PM peak hour, and route instructions provided for outbound vehicles at the Conn Creek Road gate.

4. PROGRAMS AND MEASURES UNDER DISCUSSION AT FRANK FAMILY VINEYARDS TO FURTHER LIMIT TRAFFIC IMPACTS

Making it easy for visitors to be delivered to and from wineries is increasingly attractive for winery managers and visitors. Managers benefit from a predictable number of visitors per hour, which allows the winery to insure that staffing is sufficient to provide wine educators and staff support for tasting experiences. From the visitor's perspective, traffic is heavy enough during peak periods along S.R. 29 and Silverado Trail that visitors increasingly seek alternative means of visiting wineries, resulting in less need for designating one of the visitor group as a non-drinking "designated driver." Frank Family Vineyards is well aware of the benefits of providing safe, pleasant transport to and from its wineries, thus, is in discussion with its neighbor wineries to institute rideshare opportunities for visitors to the Rutherford Road – Conn Creek Road facilities. The Frank Family currently works with limo companies to transport visitors, and plans to expand this activity. Additionally, discussion is underway for providing shuttles that would deliver visitors to the group of wineries located along Rutherford Road – Conn Creek Road. These measures carry a high potential for reducing the vehicle miles travelled on the transportation network and supports Countywide planning policy objectives, discussed under section **XI. Project Support Of Countywide Planning Goals And Policies.**

C. PROJECT TRIP DISTRIBUTION

Project traffic was distributed to/from the Project Site Driveway in a pattern similar to that of traffic observed traveling to and from the site today, as well as traffic arriving and departing the nearby Frog's Leap Winery. Existing Friday and Saturday patterns exhibit a roughly 60/40 split of outbound project traffic (i.e., 60% westbound toward SR 29, and 40% eastbound toward Silverado Trail) and a closer to even split (i.e., 55% westbound toward SR 29, and 45% eastbound toward Silverado Trail) of inbound trips on the Conn Creek-Rutherford Road corridor traveling to and from SR 29 and Silverado Trail, on Friday; inbound Saturday maintains the close to 60/40 split. For these reasons, the following distribution patterns were applied to project visitor traffic.

PROJECT VISITOR TRAFFIC – PERCENT DISTRIBUTION
EXISTING (YEAR 2017) AND YEAR 2020
(see Figure 6)

	FRIDAY PM PEAK HOUR		SATURDAY PM PEAK HOUR	
	INBOUND	OUTBOUND	INBOUND	OUTBOUND
Silverado Trail North	28%	25%	22%	22%
Silverado Trail South	17%	15%	17%	17%
SR 29 North	22%	18%	26%	26%
SR 29 South	22%	30%	24%	24%
Conn Creek Road south of Rutherford Road	11%	12%	11%	11%
TOTAL	100%	100%	100%	100%

Source: Crane Transportation Group

The harvest Friday and Saturday PM peak hour project traffic increments expected on Silverado Trail and SR 29 during the times of ambient peak traffic flows are presented in **the 6**. Friday and Saturday Year 2017 "With Project" PM peak hour harvest volumes are presented in **Figure 7**; Year 2020 "With Project" Friday and Saturday PM peak hour harvest volumes are presented in **Figure 8**. The Cumulative (year 2030) "With Project" Friday and Saturday PM peak hour project increment volumes are presented in **Figure 9, and Figure 10 shows** (year 2030) "With Project" Friday and Saturday PM peak hour total volumes.[6]

EXISTING AND YEAR 2020 CHANGE IN TRAFFIC
ON THE CONN CREEK ROAD EASTBOUND APPROACH TO SILVERADO TRAIL
AND THE
RUTHERFORD ROAD WESTBOUND APPROACH TO STATE ROUTE 29
DUE TO THE PROPOSED PROJECT

TIME	EB APPROACH TO SILVERADO TRAIL	WB APPROACH TO STATE ROUTE 29
Friday PM Peak Hour	+8 vehicles	+10 vehicles
Saturday PM Peak Hour	+7 vehicles	+9 vehicles

[6] By year 2030, project traffic distribution is responsive to the "5 percent of growth increment" limits established by County significance threshold limits.

YEAR 2030 CHANGE IN TRAFFIC
ON THE CONN CREEK ROAD EASTBOUND APPROACH TO SILVERADO TRAIL
AND THE
RUTHERFORD ROAD WESTBOUND APPROACH TO STATE ROUTE 29
DUE TO THE PROPOSED PROJECT

TIME	EB APPROACH TO SILVERADO TRAIL	WB APPROACH TO STATE ROUTE 29
Friday PM Peak Hour	+2 vehicles	+5 vehicles
Saturday PM Peak Hour	+2 vehicles	+6 vehicles

D. PLANNED ROADWAY IMPROVEMENTS

There are no capacity increasing roadway improvements planned by Caltrans or the County on the local roadway network serving the project site.[7]

However, the applicant proposes safety improvements along Conn Creek Road, as follows:

- Relocation of the Project Site Driveway to insure optimal, acceptable sight lines to and from the Project Driveway intersection with Conn Creek Road.
- Construction of a Conn Creek Road eastbound left turn lane at the Project Driveway.

VIII. PROJECT OFF-SITE IMPACTS

The following provides results of volumes shown in **the project increment of traffic shown in Figure 6**, added to ambient traffic, with control of visitor traffic by appointment for harvest Friday and Saturday conditions.

A. YEAR 2017 HARVEST (WITH PROJECT) CONDITIONS

Summary

The proposed project would not result in any significant off-site circulation impacts at any study intersection or roadway segment, including the Conn Creek Road/Silverado Trail intersection and the SR 29/Rutherford Road intersection, both of which would already be operating unacceptably without project traffic. The percent increase in traffic due to the project would not

[7] Ms. Michelle Melonakis, Napa County Public Works Department, July 2017, and Ms. Dana Ayers, Napa County Planning, Building and Environmental Services, October 2017.

meet the County's impact significance criteria limit.

1. Intersection Level of Service Year 2017 – Table 3

Project traffic would not produce a significant level of service impact at the study intersections during either the existing Friday or Saturday PM peak traffic hours. Project traffic would not change any acceptable operation to unacceptable conditions, nor would it increase total intersection volumes by 1 percent or more when "Without Project" operation would be unacceptable, or result in a 10 percent or more increase in traffic on the stop sign controlled intersection approach. ***Less than significant.***

2. Roadway Segment Level of Service Year 2017 - Table 4

Project traffic would not produce a significant roadway segment impact during the existing Friday or Saturday PM peak traffic hours. Project traffic would not change any acceptable operation to unacceptable conditions, nor would it increase total volumes by 1 percent or more when "Without Project" operation would be unacceptable. ***Less than significant.***

a) SILVERADO TRAIL

1) Friday PM Peak Hour

Acceptable operation northbound, both north and south of Conn Creek Road, but unacceptable operation southbound: LOS C northbound and LOS E southbound.

2) Saturday PM Peak Hour

Acceptable operation both north and south of Conn Creek Road: LOS D northbound and southbound.

b) SR 29

1) Friday PM Peak Hour

Uncceptable operation northbound and southbound both north and south of Rutherford Road: LOS E.

2) Saturday PM Peak Hour

Uncceptable operation northbound and southbound both north and south of Rutherford Road: LOS E.

c) CONN CREEK ROAD

1) Friday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and LOS B westbound.

2) Saturday PM Peak Hour

Acceptable operation near Silverado Trail: LOS C eastbound and LOS B westbound.

d) RUTHERFORD ROAD

1) Friday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound.

2) Saturday PM Peak Hour

Acceptable operation near SR 29: LOS C eastbound and westbound.

3. Signalization Needs Year 2017 – Table 5

The Rutherford Road and Project Driveway intersections with Conn Creek Road would maintain acceptable operation with the addition of project traffic, and would not result in a need for signalization. The Silverado Trail/Conn Creek Road and SR 29/Rutherford Road intersections would maintain unacceptable Friday and Saturday PM peak hour operation with the addition of project traffic, and would continue to warrant signalization.

Project traffic would not produce a significant signalization need impact at the Silverado Trail/Conn Creek Road or SR 29 Rutherford Road intersection during either the Friday or Saturday existing PM peak traffic hours. Project traffic would not increase volumes to meet signal warrant #3 criteria nor would it increase volumes by 1 percent or more when "Without Project" volumes would already meet peak hour signal warrant criteria levels.
Less than significant.

B. YEAR 2020 HARVEST (WITH PROJECT) CONDITIONS

Summary

The proposed project would not result in any significant off-site circulation impacts at any study intersection or roadway segment, including the Conn Creek Road/Silverado Trail intersection and the SR 29/Rutherford Road intersection, both of which would already be operating unacceptably without project traffic. The percent increase in traffic due to the project would not meet the County's impact significance criteria limit.

1. Intersection Level of Service Year 2020 – Table 3

Project traffic would not produce a significant level of service impact at the study intersections during either the harvest 2020 Friday or Saturday PM peak traffic hours. Project traffic would not change any acceptable operation to unacceptable conditions, nor would it increase total intersection volumes by 1 percent or more when "Without Project" operation would be unacceptable, or result in a 10 percent or more increase in traffic on the stop sign controlled intersection approach. ***Less than significant.***

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Department of Public Works

1195 Third Street, Suite 101
Napa, CA 94559-3092
www.countyofnapa.org/publicworks

Main: (707) 253-4351
Fax: (707) 253-4627

Steven Lederer
Director

M E M O RANDU M

To:	PBES Staff	From:	Ahsan Kazmi, P. E. Senior Traffic Engineer
Date:	April 11, 2019	Re:	Frank Family Vineyards (P13-00371) Notice of Incomplete Documentation

This memorandum is prepared at the request of PBES staff to assess if the proposed Traffic Impact Study (TIS) report prepared by the Crane Transportation Group, dated August 22, 2018, related to the Use Permit Application # P13-00371 for the Frank Family Vineyards–Benjamin Ranch Winery Project, located at 8895 Conn Creek Road, St Helena, California, is adequately addressed per the County of Napa, Public Works Traffic Impact Study report policies.

Public Works staff reviewed the following documents available in support of the Frank Family Vineyards Major Modification Project:

- Proposed Traffic Impact Study (TIS) report, prepared by the Crane Transportation Group, dated: August 22, 2018;
- Project Statement, dated: December 22, 2015;
- Revised Use Permit Modification Application, dated received: October 12, 2018, along with the Winery Traffic Information/Trip Generation Sheet;
- Field evaluation through Google Street View Map.

After careful evaluation and review of all the above mentioned documents, we believe that the proposed TIS report is not adequately representing the facts and trips that will be generated by the proposed modifications, therefore, the TIS report dated: August 22, 2018, is ***incomplete and requires revision accordingly.*** Based on the way the proposed trip generations are presented in the August 22nd TIS report and in the October 2018 Revised Use Permit Application, ***we believe that it is not capturing the actual numbers and will cause increased traffic by the proposed modification. The proposed project in reality will have higher number of trip generation during peak weekday and peak weekend hours and during special events and auctions.*** The report is also confusing, several assumptions were made, there are inconsistencies in traffic and parking data, timing of visitors' appointments are described inconsistently, and tables and text are repetitive. We offer the following comments to be properly addressed for our re-evaluation and approval:

Comments Related to the Use Permit Application, Dated: December 2015/October 2018

1. Only one trip generation sheet is provided without any labeling/without indicating if the trip generation sheet belongs to the existing conditions or proposed modified conditions;
2. There should be a separate trip generation sheet; one for existing conditions for existing trips generated by the vineyard on daily basis and during Friday and Saturday peak PM periods;

3. The other trip generation sheet should be for future/proposed conditions based on the proposed maximum number of visitors per day, gallons of production, numbers of full time/part time employees, number of largest event visitors, etc.;
4. The data provided on Pages 6, 7, 9, and 10 regarding total number of employees and visitors are not consistent with data provided on Page 15.

General Comments Related to the Proposed TIS Report, Dated: August 2018

5. The August 22, 2018, TIS report is not prepared per the guidelines established in the Napa County Department of Public Works "Traffic Impact Study Policies", updated March 25, 2016;
6. The typical weekday daily/typical Saturday daily and Friday PM/Saturday PM peak hour traffic used in the TIS are not from the Napa County Winery Traffic Information/Trip Generation Sheet (Use Permit Application Page 15 of 22), which is required per the established TIS policies;
7. Future/proposed trip generation, i.e., 38 trips on Friday PM peak hour and 36 trips on Saturday PM peak hour are too low compared to peak hours traffic calculation per the trip generation (Use Permit Application Page 15), indicating 177 trips during Friday PM peak hour and 215 trips during Saturday PM peak hour;
8. Distribution of guests are not based on the Napa County Winery Traffic Information/Trip Generation Sheet;
9. Traffic impact analysis regarding arterial segments are discussed and arterial segments related analysis are provided in the report (Table 4, 6, and 7). However, average daily traffic (ADT) data is not provided for Conn Creek Road, Rutherford Road, Silverado Trail and SR 29;
10. Safety analysis/collision analysis for the study area is missing in the TIS report;
11. The need/warrant for a left turn lane at the site driveway is not analyzed;
12. Identify the net change on a yearly basis in number of trips from existing trips to future proposed trips including every trip such as number of employees, daily visitors and visitors during special events;
13. Visitation timing is inconsistent throughout the report;
14. Visitation restrictions are based on several assumptions, and staff questions the reasonableness of mitigation, as described on Page 28, that is based on winery tasting room operators remembering to change their visitor booking program in 10 years;
15. No specific proposal and details about implementation and potential effectiveness of TDM measures and VMT reduction programs;

Specific Comments Related to the Proposed TIS Report, Dated: August 2018

16. Page 3 & 4, section B. Project Impacts, sub-section 1. Existing and Year 2020 Project Trip Generation, and sub-section 2. Year 2030 Project Trip Generation and Distribution: Why project trip generation and distribution spread out in two different project years, i.e., year 2020 and 2030?
17. Page 5, 6, 7, & 38 and Table 9, 13, and 14: Data provided related to the number of parking spaces, the number of employees and the number of visitors are inconsistent with each other;
18. Page 6, section D. Conclusions: Staff does not concur with the statement that *"The project would result in no significant off-site circulation system operational impacts to the roadways and study intersections"*;
19. Page 7, line above Marketing Events, *"Table 5 and 7 provide further detail"* is irrelevant and apparently a typo;
20. Page 7, Marketing Events: Dinnertime Wine Marketing Events and Lunchtime Wine Marketing Events are not listed in the Use Permit Application. Data is not considered in the impact analysis;
21. Page 7, Large Events: Incorrect number of eight (8) events are listed. In Use Permit Application, 12 large events are listed;

22. Page 7, Maximum Daily Visitors: It is stated that *"Inbound and outbound event-related traffic will be minimized during peak traffic periods, such as 3-6 PM on Weekday and 2-4 PM on Saturday".* However, discussion on visitation timing provided on the rest of the report including impact analysis and in Table 5, 8, 9, 10, 11, 13 and 14 conflict with this statement;
23. Page 11 & 12, section E. Roadway Segment Level of Service, sub-section 1. Analysis Methodology: Information provided is not relevant to this project report, apparently a cut and paste from another project report (including text and table);
24. Page 13, section F. Intersection Peak Hour Signal Warrant Evaluation, sub-section 1. Analysis Methodology: fourth paragraph, roadway reference provided in the fourth line is incorrect, apparently a cut and paste from another project report;
25. Page 14 & 15, section G. Planned Improvements and Planning Context: No need to copy the complete paragraphs on TDM/CIR. References to policy numbers should be updated to reflect the Circulation Element as amended by the Board of Supervisors on February 5, 2019, i.e., change CIR-8 to CIR-14, change CIR-11 to CIR-10; change CIR-19 to CIR-23, change CIR-20 to CIR 24, and change CIR 23-CIR-27.

In Conclusion. At this time, the Public Works Department has determined this project to be incomplete and cannot provide a recommendation to the Planning Commission without revisions being completed to the Traffic Impact study report and the Use Permit Application.

Please contact me at Ahsan.Kazmi@countyofnapa.org or call (707) 259-8370 if you have questions or need additional information.

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

September 14, 2020

SCH # 2020080261
GTS # 9739
GTS ID: 04-NAP-2018-00216
Co/Rt/Pm: NAP/128/6.84

Brian Bordona, Deputy Planning Director
Napa County
1195 3rd Street, Suite 210
Napa, CA 94559

Benjamin Ranch Winery – Initial Study/Mitigated Negative Declaration (IS/MND)

Dear Brian Bordona:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Benjamin Ranch Winery project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the August 2020 IS/MND.

Project Understanding

The proposed project is to request a Use Permit to establish a winery that would produce up to 475,000 gallons of wine per year. The project would demolish an existing barn and shed and redevelop a portion of the site with new winery and hospitality buildings. The proposed winery would offer wine tours and tastings for up to 400 people per day, include a wine marketing program consisting of up to 357 events per year for up to 16 to 150 guests per event, employ up to 61 full-time and part-time staff members, and install 75 parking stalls.

This project is developed on 12.8 acres of an approximately 85.1-acre project site at 8895 Conn Creek Road (State Route SR-128) in St. Helena. A new access driveway is planned and a left-turn lane onto SR-128 would be installed at the new access driveway near the southeastern corner of the site.

Travel Demand Analysis
With the enactment of Senate Bill (SB) 743, Caltrans is focusing on transportation infrastructure that supports smart growth and efficient development to ensure alignment with State policies using efficient development patterns, innovative travel demand reduction strategies, multimodal improvements, and VMT as the primary transportation impact metric. Caltrans commends the lead agency in recommending that the winery implement a Transportation Demand Management (TDM) plan, which would help reduce the project's employee and visitor-generated VMT. Caltrans encourages the Lead Agency to provide more clarification on the project's visitor-generated VMT and to link how the TDM measures proposed the Mitigation Measure TRAN-1 or additional TDM measures may reduce the project's VMT impact to be less-than-significant. Additional strategies can be found on page 82 in the following link: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

Lastly, Caltrans recommends the proposed TDM measures identified in the plan should be documented with annual monitoring reports to demonstrate effectiveness.

Proposed Left-Turn Lane
The Traffic Impact Study (TIS) recommends the construction of a left-turn lane at the project driveway from SR-128, but it did not include an intersection/driveway analysis showing the driveway traffic turning movements. The driveway and left turn lane must be designed per the latest Highway Design Manual (HDM) standards, particularly section 405.2, Figure 405.2 and Figure 405.3. Please see https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm for detailed information.

Design exceptions would need be filed and approved in the case of substandard design features. Please coordinate with Caltrans at an early stage as it can potentially impact the traffic operations on SR-128 and may require additional Right-or-Way (ROW).

The striping plans refer to Caltrans 2010 Standard Plans, but it should be changed to the latest 2018 Standard Plans. Also, please identify the posted speed of this highway section.

Hydraulics
Please ensure that any storm runoff to State ROW must be metered to pre-construction levels.

Lead Agency
As the Lead Agency, the County of Napa is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Construction-Related Impacts
Please be advised that any permanent work or temporary traffic control that encroaches onto the ROW requires a Caltrans-issued encroachment permit. Note that potential impacts to the State ROW from project-related temporary access points should be analyzed. Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit issued by Caltrans. Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to STN. For more information, and to apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits.

Encroachment Permit
There appears to be the potential that the property will be conveyed to the State and if that is the case, Caltrans requires the property be transferred on permit projects prior to issuance of the encroachment permit.

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating the State ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

To download the permit application and to obtain more information on all required documentation, visit https://dot.ca.gov/programs/traffic-operations/ep/applications.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Yunsheng Luo at Yunsheng.Luo@dot.ca.gov. Additionally, for future notifications and requests for review of new projects, please contact LDIGR-D4@dot.ca.gov.

Sincerely,

Mark Leong
District Branch Chief
Local Development - Intergovernmental Review

cc: State Clearinghouse

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: SR 128/winery driveway
Study Scenario: Weekday PM Existing Plus Project

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

SR 128 - Conn Creek Rd

Southbound Volumes (veh/hr)
Through Volume = 112
Right Turn Volume = 5

Southbound Speed Limit: 40 mph
Southbound Configuration: 2 Lanes - Undivided

Project Driveway

SR 128 - Conn Creek Rd

Northbound Volumes (veh/hr)
99 = Through Volume
6 = Left Turn Volume

Northbound Speed Limit: 40 mph
Northbound Configuration: 2 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 1012.6
   Advancing Volume Va = 117
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

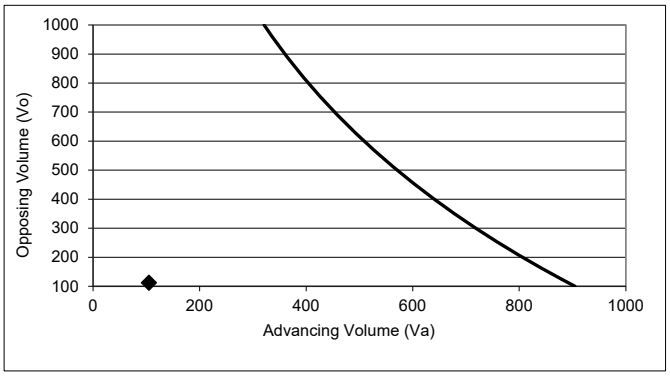
NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 117
   If AV<Va then warrant is met -

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Percentage Left Turns %lt 5.7 %
Advancing Volume Threshold AV 892 veh/hr
If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 40 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: SR 128/winery driveway
Study Scenario: Weekend PM Existing plus Project

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

SR 128 - Conn Creek Rd

Southbound Volumes (veh/hr)
Through Volume = 152
Right Turn Volume = 24

SR 128 - Conn Creek Rd

Northbound Volumes (veh/hr)
90 = Through Volume
30 = Left Turn Volume

Project Driveway

Southbound Speed Limit: 40 mph
Southbound Configuration: 2 Lanes - Undivided

Northbound Speed Limit: 40 mph
Northbound Configuration: 2 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	870.1
Advancing Volume	Va =	176
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper

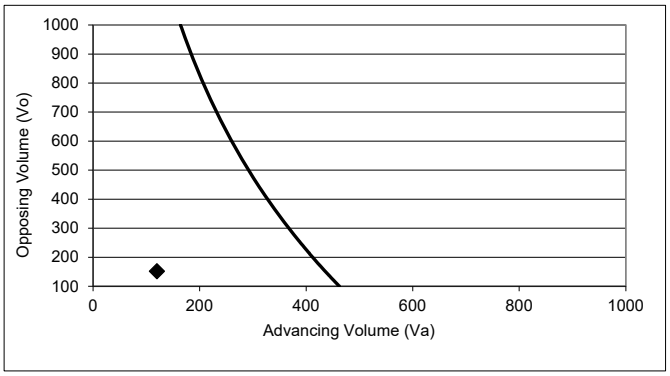
Advancing Volume Threshold	AV =	660
Advancing Volume	Va =	176
If AV<Va then warrant is met		No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Percentage Left Turns	%lt	25.0 %
Advancing Volume Threshold	AV	436 veh/hr

If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 40 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: SR 128/winery driveway
Study Scenario: Weekday PM Future Plus Project

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

SR 128 - Conn Creek Rd

Southbound Volumes (veh/hr)

Through Volume = 154
Right Turn Volume = 5

Southbound Speed Limit: 40 mph
Southbound Configuration: 2 Lanes - Undivided

Project Driveway

SR 128 - Conn Creek Rd

Northbound Volumes (veh/hr)

166 = Through Volume
6 = Left Turn Volume

Northbound Speed Limit: 40 mph
Northbound Configuration: 2 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	1012.6
Advancing Volume	Va =	159
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

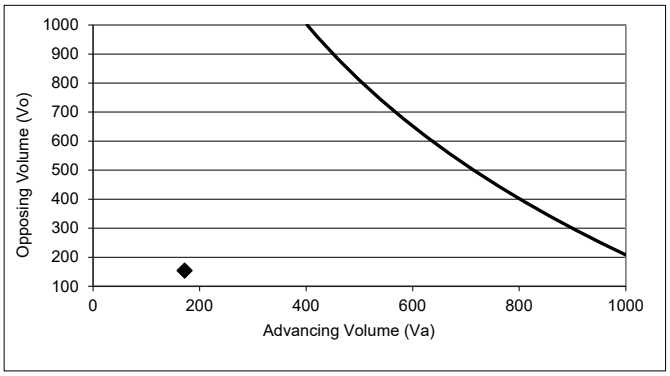
Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	159
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Percentage Left Turns	%lt	3.5 %
Advancing Volume Threshold	AV	1064 veh/hr

If AV<Va then warrant is met



◆ Study Intersection

Two lane roadway warrant threshold for: 40 mph

Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: SR 128/winery driveway
Study Scenario: Weekend PM Future Plus Project

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

SR 128 - Conn Creek Rd

Southbound Volumes (veh/hr)
Through Volume = 207
Right Turn Volume = 24

Southbound Speed Limit: 40 mph
Southbound Configuration: 2 Lanes - Undivided

Project Driveway

SR 128 - Conn Creek Rd

Northbound Volumes (veh/hr)
198 = Through Volume
30 = Left Turn Volume

Northbound Speed Limit: 40 mph
Northbound Configuration: 2 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	870.1
Advancing Volume	Va =	231
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper

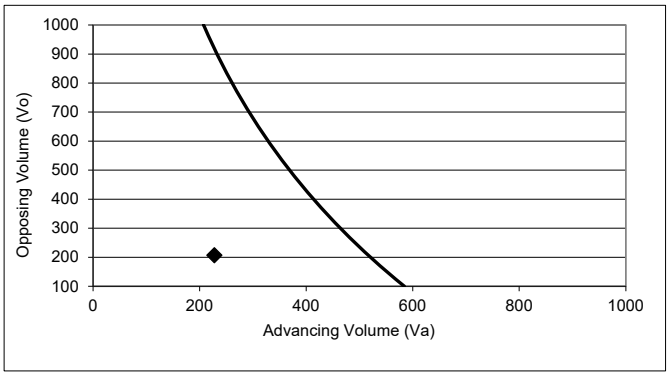
Advancing Volume Threshold	AV =	660
Advancing Volume	Va =	231
If AV<Va then warrant is met		No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Percentage Left Turns	%lt	13.2 %
Advancing Volume Threshold	AV	517 veh/hr

If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 40 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.