



Memorandum

January 25, 2019

To: Mr. Blake Hillegas, Supervising Planner
County of Sonoma
Permit & Resource Management
Department

Project: Peer Review (#2) of Traffic Impact
Study for the VJB Vineyard and
Cellars

From: Peter Galloway, Senior Transportation
Planner

Ref/Job No.: County Project PLP05-009
GHD 11145104

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Subject: Peer Review #2

Introduction

This memorandum has been prepared by GHD to summarize the results of a second peer review of the Traffic Impact Study for the VJB Vineyard and Cellars for the County of Sonoma (County). The following documents were reviewed in order to complete this Secondary Review:

- Initial Study and Peer Review of VJB Marketplace Traffic Study (*Omni-Means, 8/18/2015*)
- Traffic Impact Study for the VJB Vineyard and Cellars (*W-Trans, 8/31/2018*)
- County of Sonoma Guidelines for Traffic Studies (*Revised May 2016*)

The following key issues will be reviewed in this memorandum, following the County's review and Scope of Work, to determine if the revised traffic study for the VJB Vineyard and Cellars contains sufficient information to complete a subsequent peer review:

- Project Description
- Study Area
- Data Collection
- Technical Methodologies & Assumptions
- Study Analysis & Scenarios
- Identification of Future Traffic Impacts
- Identification of Traffic Improvement Projects and
- Consistency with County and Caltrans TIS Guidelines

Project Description

The project site is located between Shaw Avenue and Maple Avenue immediately southwest of SR 12 with primary access off of Shaw Avenue and secondary access off of Maple Avenue in the Kenwood area of Sonoma County. The existing project buildings front Shaw Avenue and SR 12 with vineyards comprising the majority of the site. An internal two-way drive aisle with on-site parking extends east-west between Shaw



Avenue and Maple Avenue on the southwest border of the site. The subject traffic impact study (TIS) for the proposed project describes the current and proposed project uses and changes as follows:

“The project site is developed with uses approved in 2009 and as interpreted by the Permits and Resource Management Department (PRMD) since that date, including an outdoor pizza oven and barbeque, outdoor picnic/dining area, food and wine pairing; and retail shop, gelato shop, and office. Various modifications to the Use Permit as approved are requested as follows:

- Elimination of the requirement for a right-turn lane on the Shaw Avenue approach to SR 12;
- Elimination of the requirement for a left-turn lane on the westbound SR 12 approach to Shaw Avenue;
- The opening of Maple Avenue for egress only, per Sonoma County Fire Marshal;
- The reduction of off-site parking along Shaw Avenue through paving of the east side of Shaw Avenue back 50 feet from the stop sign to the entrance and signage as outlined in the conditions of approval;
- The development of an off-site parking lot, providing 53 spaces, at 75 Shaw Avenue for the exclusive use of VJB Vineyard and Cellars;
- A maximum of 6 employees (full-time equivalent) Monday through Thursday, 9 employees on Friday and 16 employees on Saturday and Sunday;
- Change of hours of operation to 10:00 a.m. to 4 p.m. daily.

Note on Project Description

The various modifications to the Use Permit requested above as part of the proposed project do not match the submitted project statement contained as part of the overall project application (*PLP05-009 – J. Kapolchok Associates; VJB Vineyard and Cellars Proposal Statement Modified Use Permit—August 2018*). Specifically, there are two project component modifications in the project statement that do not coincide with modifications listed in the subject traffic analysis (above) as follows:

Project Statement:

VJB Vineyards and Cellars requests a modification to an existing Use Permit to acknowledge:

1. The installation of a right-hand turn lane through the re-striping of a portion of Shaw Avenue;
2. The widening of the shoulder along the northerly side of Highway 12 across from the property frontage.

The installation of a right-turn lane on Shaw Avenue through re-striping of a portion of the roadway appears to contradict the subject TIS that requests elimination of this requirement for a right-turn lane. In addition, the widening of the shoulder along the northerly side of SR 12 across from the property frontage is not listed in the requested modifications in the subject TIS. Discussion and/or clarification of these discrepancies between the modifications requested in the subject TIS for the proposed project and project statement provided in the County application is needed.



Study Area/Transportation Setting

In its description of project study roadways the subject TIS states “Shaw Avenue and Maple Avenue have posted speed limits of 25 mph and are unimproved residential two-lane roads with limited room for parking on the shoulders.”

Note on Study Area/Transportation Setting

Given the proposed project’s emphasis on parking demand and additional parking supply the TIS should include a more in-depth review of the existing on-street parking activity relative to the use. For example, there appears to be portion of Shaw Avenue where diagonal on-street parking is provided (northeast side of Shaw Avenue, across from project site) but the parking is recessed from the roadway (as opposed to more conventional parallel on-street parking also found on Shaw Avenue). In addition, it also appears that on-street parking on Maple Avenue is available in the shoulders on the west side of the street so as not to block traffic. It is understood that on-street parking cannot be counted towards proposed project parking supply, however, it is currently being utilized by patrons which may be moved to the new lot.

Collision Analysis

The collision analysis conducted for the two project study intersections of SR 12/Shaw Avenue and SR 12/Maple Avenue evaluates a reasonable time period of 5 years and indicates no significant operational safety deficiencies within that time period.

Data Collection

Under the Existing Conditions discussion, the subject TIS states “This (existing) condition does not include project generated traffic volumes, which were subtracted out of the volume data collected on September 16 and 21, 2017 because all activities associated with the proposed conditional use permit modification are already occurring, so their traffic is included in current traffic streams.”

Note on Data Collection

Since project-generated traffic volumes were subtracted out of existing volume counts, a discussion of how these volume reductions were generated and how they were distributed and assigned through existing volumes should be included. If this process mirrors the discussion in the Project Impact section, a reference to this discussion later in the report should be included.

Intersection Level of Service Analysis

All operational analyses were reviewed, including a review of delay and LOS in TIS tables relative to the technical appendix.

Note on Intersection Level of Service Analysis

Although GHD concurs with the reports LOS values, the technical appendices do not match the TIS tables, indicating a potential technical glitch in the PTV Vistro delay reporting. This should be addressed for the record, such that technical appendices match LOS and delay values presented in the TIS.



Future Conditions

The subject TIS indicates that “Because there were no volumes available for Shaw Avenue and Maple Avenue in the County’s model, growth factors per approach were calculated based on 2010 model estimates and 2040 model forecasts on Warm Springs Road and applied to existing volumes on Shaw and Maple Avenue approaches to arrive at future volumes. The growth factor calculation is provide with the counts in Appendix B.”

Note on Future Conditions

Compared to Shaw Avenue and Maple Avenue, Warm Springs Road provides significant east-west access to Bennett Valley Road and further south to Glen Ellen. The application of these growth rates may therefore overestimate future demand on these minor collector streets. Based on listed growth factors in Appendix B, the growth factor for eastbound Shaw and Maple Avenues is 48% over a 23-year period. SR 12, by comparison, is indicated to be 10-20%. Overly conservative background growth forecasts on side streets could diminish project proportional share of impacts in cumulative situations.

Project Description (Project Impact Section)

Related to Project Description, the subject TIS indicates “It is noted that though a separate right-turn lane on Shaw Avenue is not proposed as part of the project, elimination of parking on the east side of Shaw Avenue would create a flared approach of sufficient width to accommodate side-by-side left and right-turn movements.”

Note on Project Description (Project Impact Section)

Please discuss the amount of on-street parking that would be removed on Shaw Avenue to provide for this “flared approach”, including the number of vehicles that would be accommodated and how the geometrics would be striped. If the flared approach can only accommodate one vehicle of storage, the projected vehicle queue length for vehicles making a left-turn from Shaw Avenue onto SR 12 should be reported, to indicate whether this right turn flare would be usable with left turning vehicles queued at the stop sign. On Page 2 of the TIS, under “Project Profile”, it is indicated that 50’ of pavement would be added to Shaw Avenue. Without a geometric schematic, it is unclear whether this 50’ would provide a 50’ turn pocket or simply additional shoulder width.

Trip Generation

The subject TIS states “The trip generation for the project was developed based on counts obtained at the site during each of the peak periods. All persons entering or leaving the site were observed, and inbound and outbound vehicle counts determined, with outbound trips via the driveway to Maple Avenue counted separately.”

Note on Trip Generation

It is acknowledged that actual project driveway counts conducted for the proposed project are superior to ITE research for similar uses (in most cases). However, it is unclear whether the counts included on-street parking activity. Based on streetview imagery, which may have been collected during a high-use time period,



the parking lot at the project site is full and spillover on-street parking is observable. Please ensure the trip generation accounts for on-street parking visitors.

Future plus Project Conditions

“Recommendation – It is recommended that the County rescind the requirement for a right-turn lane on Shaw Avenue approaching SR 12.”

Note on Future plus Project Conditions

The first sentence under the TIS Future plus Project Conditions heading indicates that the Shaw Avenue approach operates at LOS E during the PM peak hour. However, Table 7 does not reflect this. Please reconcile. Based on the technical appendix worksheets, the left-turn movement from Shaw Avenue onto SR 12 is listed at LOS E (43.72 seconds of delay) with the right-turn movement at LOS C (17.63 seconds of delay). If the outbound left-turn movements from Shaw Avenue onto SR 12 experience significant vehicle delay, they would likely block access to the right turn “flared approach” that is being proposed. Removal of 2-3 parking space on the east side of Shaw Avenue would allow for some vehicle storage relief and/or paving and striping for a short right-turn lane (10-11 feet width).

County Intersection/Roadway Operations

The subject TIS provides a technical analysis of intersection LOS for the Shaw Avenue and Maple Avenue intersections at SR 12 under Existing, Existing plus Project, Future, and Future plus Project conditions.

Note on County Intersection/Roadway Operations

Based on Sonoma County Guidelines for Traffic Impact Studies, a roadway operations analysis may be required for SR 12. County guidelines indicate the likelihood of project impacts based on degradation of vehicle speeds based on 2-Lane County Highways and Rural Class 1 Roadway facilities (Table 1—Traffic Impact Thresholds—pages 111 & 12, County of Sonoma, Guidelines for TIS, May 2016).

Pedestrian Facilities

Related to pedestrian findings the subject TIS indicates “The project is expected to generate limited pedestrian traffic except between the project and on-site and off-site parking lots. Given the operational characteristics of Shaw Avenue, it is expected that pedestrians will be able to cross safely between the off-site parking lot and VJB Marketplace. A mid-block crosswalk is therefore not recommended.”

Note on Pedestrian Facilities

Related to County concerns about pedestrian crossings between the proposed project site and adjacent parking lot on Shaw Avenue, the TIS does not offer an acceptable solution to safe pedestrian path of travel. At minimum, a safe path of pedestrian travel between the proposed parking lot and the main project entrance needs to be identified. The current path of travel includes sections lacking shoulders on the northeast side of Shaw Avenue, where parked cars often block pedestrian travel outside of the travel lane. Similarly, while a paved shoulder is present on the southwest side of Shaw Avenue (project frontage), it is currently striped for on-street parallel parking and highly utilized for parking, forcing pedestrians into the travel lane. A clear and safe path of travel should be provided between the parking lot and project site, including a safe crossing of Shaw Avenue, consistent with MUTCD and accessibility requirements appropriate to the context.



Site Access (Left-Turn Lane Warrants)

The subject TIS discusses an alternative approach to installing a recommended left-turn for SR 12 at Shaw Avenue. As indicated “The County has, on numerous occasions, placed a condition that applicants construct a wider shoulder on the opposite side of the street from their driveway, or in this case a side street, so that approaching drivers have adequate space to move around the vehicle stopped before turning left. This alternative improvement has been applied in other places along state highways, including SR 116 and SR 121. Under this alternative the shoulder on the northeast side of the roadway would need to be widened to a minimum of eight feet for a total distance of 200 feet: 100 feet on each side of the centerline of Shaw Avenue.”

The TIS provides, in the appendix, a preliminary layout for SR 12 widening, indicating significant right of way impacts north and south of the site, and along side street approaches.

Note on Site Access (Left-Turn Lane Warrants)

It is unclear how the 8’ shoulder widening that is being proposed would differ from the widening required to provide a left turn pocket without an accompanying visual. It appears that 8’ shoulders are already present along this section of SR 12. Currently, vehicles pre-position for left turns from SR 12 onto Shaw Avenue by crossing double yellow lines and staging in the 6’-wide “transition” striping between Shaw Avenue and the turn pocket on SR 12 at Randolph Avenue.

This prepositioning movement in the 6’-wide double-yellow striping (shown on the cover image of the TIS) is not advisable and promotes vehicle positioning that is illegal according to the California Vehicle Code. An alternative improvement premised on drivers avoiding left turning vehicles by using the shoulders would similarly promote an illegal vehicle movement, leaving the travel way to circumnavigate left turning cars. A left turn pocket remains the recommended improvement for this location, similar to the left turn pocket at Randolph Avenue. If this is not a project-specific impact and mitigation, the County should consider fair-share contribution towards this improvement be provided by the applicant in lieu of construction. Whether or not this is a project specific impact is not immediately clear from the TIS, and should be clarified.

Parking

The parking calculations shown in Table 8 of the subject TIS are consistent with Sonoma County parking code requirements for dining, retail (market), and office uses. The calculated parking demand would be 65 spaces for all project-related uses. Based on a proposed parking supply of 37 on-site spaces and 53 off-site parking spaces (satellite parking lot), there would be a surplus of 25 spaces.

Note on Parking

The proposed project would meet the County parking code requirements of 65 spaces based on a parking supply of 90 spaces. The placement of ADA parking stalls should be considered, since additional ADA stalls will be required. If these are located off site at the proposed new lot, an ADA-compliant path of travel between the proposed lot and project site will be required.



Conclusion/Recommendations

The recommendations for the subject TIS request that the requirement for a left-turn lane on SR 12 and a right-turn lane for the Shaw Avenue approach at SR-12 be eliminated due to subsequent traffic analysis (due to project intersection LOS and physical constraints. Similarly, the TIS recommends that no mid-block crossing be required. The TIS recommends that bicycle parking be provided on site (for 18 bicycles).

Note on Conclusions/Recommendations

The TIS cites the low volume and high sight distance on Shaw Avenue as reason to preclude any pedestrian crossing of Shaw Avenue. However, the TIS also recommends against installing a mid-block crossing due to concerns it would provide a false sense of pedestrian safety. These statements should be reconciled. Furthermore, a safe pedestrian path of travel should be provided, particularly if the proposed lot is to accommodate ADA stalls, between the proposed lot and the project site.

Construction constraints and a lack of collision history are not sufficient to dismiss the left turn lane requirement. Given the speed differential between stopped vehicles and through movement on SR 12, a vehicle stopped in the center of a two-lane road could pose a significant safety hazard, and the proposed improvement to widen the roadway shoulder to allow passing of stopped vehicles at this movement would introduce new roadway departure hazards.