March 12, 2021

Mr. Joe Cassidy
Bally Keal Vineyards
4286 Suisun Valley Road
Fairfield, CA 94534

RE: Focused Vehicle Miles Traveled (VMT) Summary Analysis for the Proposed Bally Keal Winery & Distillery and Special Events Project in Solano County

Dear Mr. Cassidy:

The following letter report provides a focused vehicle miles traveled (VMT) analysis and discussion for the proposed Bally Keal Winery/Distillery and Special Events project at 4286 Suisun Valley Road in Solano County. Based on guidance from Senior Planning staff at Solano County, supplemental VMT analyses for the proposed project is necessary for ongoing environmental review.[i] The VMT analysis builds on previous transportation studies conducted as part of the County's CEQA review and mitigated negative declaration for the proposed project. The following sections include a discussion of background studies completed to-date, VMT guidelines and applications, proposed project trip generation, and likely project impacts and mitigation measures to reduce overall VMT associated with proposed project uses.

1. Background:

The proposed Bally Keal Vineyards and Distillery project would consist of repaving the south driveway, conversion of an existing storage building into a "special event" facility, addition of a new tasting room to an existing building, a new parking area, and landscaping for an outdoor gathering area. Transportation analyses for the proposed project were begun in the year 2019 with an administrative draft report submitted to the County for review and comment in January 2020.[ii] After receiving comments and input from Solano County, a final report was published in May 2020. At that time, the County did not require additional VMT transportation analyses to be conducted since it was prior to the State requirement for inclusion (July 2020).

2. Vehicle Miles Traveled Guidelines and Applications

2.1 VMT Background

SB 743 took effect July 1, 2020 and fundamentally changed the way Transportation Analyses are conducted as part of the California Environmental Quality Act (CEQA). Automobile Level of Service, although permitted as a local policy threshold and included in the Solano County General Plan for conformance, is no longer considered an impact on the environment. Instead, Vehicle Miles Travelled (VMT) is now the primary Transportation Metric for evaluating projects under CEQA.

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Caltrans recently published an update for their Transportation Impact Study Guidelines (*TISG, May 20, 2020*). The Caltrans' TISG is intended for use in preparing a transportation impact analysis of land use projects or plans that may impact the State Highway System and replaces the prior 2002 Guidelines. The TISG heavily references Office of Planning and Research (*OPR*) Technical Advisory as a basis for its guidance. The TISG recommends use of OPR's recommended thresholds for land use projects (15% below existing city or regional VMT per capita or per employee). As each lead agency develops and adopts its own VMT thresholds for land use projects, Caltrans will review them for consistency with OPR's recommendations, and with the state's greenhouse gas emissions reduction targets and California Air Resources Board Scoping Plan. Caltrans identifies possible mitigation framework for projects found to have a potentially significant impact on VMT. These include the following programmatic measures:

- Impact fee programs that contain a demonstrated nexus and proportionality between a fee and capital projects that result in VMT reduction;
- VMT mitigation bank programs; and,
- VMT mitigation exchange programs.

Caltrans also indicates that additional future guidance will include the basis for requesting transportation impact analysis that is not based on VMT, but rather a simplified safety analysis approach that reduces risk to all road users and focuses on multimodal analysis as well as access management issues.

2.2 VMT Screening Thresholds

Understanding CEQA and Caltrans requirements for VMT, very recent discussions were held with Solano County staff (lead agency) to determine the proposed project's status related to VMT analysis. Currently, Solano County has not developed VMT guidelines or minimum VMT thresholds for land use projects defined in the OPR Technical Advisory. Development projects requiring VMT analysis typically fall into the residential, office, and retail-commercial land use categories. Regarding "other projects," OPR indicates "lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types." It is suggested that the proposed Bally Keal Winery/Distillery and Special Events project does not fit neatly into the afore-mentioned land uses. Wineries (and Event Centers) tend to reflect a combination of agriculture, office, and commercial uses and are difficult to categorize for specific VMT thresholds and screening. For this reason, a review of screening requirements for projects considered to have less-than-significant transportation impacts was investigated.

Based on Caltrans TISG and OPR's Technical Advisory (Technical Advisory on Evaluating Transportation Impacts in CEQA, the following projects are considered to have less than significant transportation impacts:[iii]

A. Residential, office, or retail projects within a Transit Priority Area, where a project is within a ½ mile of an existing or planned major transit stop or an existing stop along a high-quality transit corridor.

   - A major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (Pub. Resources Code, § 21064.3).

   - A high-quality transit corridor is defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (Pub. Resources Code, § 21155).

B. An area pre-screened by an agency as having low residential or office VMT:

   - An area where existing residential projects exhibit VMT per capita 15 percent or more below city or regional average.

   - An area where existing office projects exhibit VMT per capita 15 percent or more below regional average.

C. Residential projects composed of 100 percent or near-100 percent affordable housing located in any infill location. Additionally, per OPR's Technical Advisory, "Lead agencies may develop their own presumption of less than significant impact for residential projects (or residential portions of mixed use projects) containing a particular amount of affordable housing, based on local circumstances and evidence. Furthermore, a project which includes any affordable residential units may factor the effect of the affordability on VMT into the assessment of VMT generated by those units."

D. A locally-serving retail project (such a project typically reduces vehicle travel by providing a more proximate shopping destination, i.e., better accessibility).

E. Mixed-use projects composed entirely of the above low-VMT project types.

F. In any area of the state, absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

Based on the Caltrans project screening criteria (above), it is likely that the proposed project could qualify for exemption based on criteria F (project generates or attracts fewer than 110 daily trips per day).

3. Proposed Bally Keal Winery and Distillery Project Daily Trip Generation

3.1 Winery Activities

Based on the most recent transportation analyses conducted for the proposed project, daily trip generation associated with winery activities would generate 65 weekday daily trips and 93 weekend daily trips (see Table 3—attached). Based on screening criteria for VMT impacts, a daily trip generation of less than 110 trips would qualify for exemption under Caltrans criteria. However, daily project trip generation associated with winery activities does not include daily trips associated with special event activities.

3.2 Special Event Activities

Daily trip generation for special event activities was calculated for the two largest events that include 200 guests and 400 guests (see Table 8—attached). As proposed, the facility would host 25 events per year with 200 guests and 10 events per year with 400 guests. However, as described the project would also host 10 events per year with 100 guests (not provided in Table 8). Based on the daily trip calculations provided in Table 8, the three special event sizes would generate the following daily trips:

# of Events	Event Size	Daily Trips/Event	Total Daily Trips/Year
10	100 guest special event	80 trips	800
25	200 guest special event	160 trips	4,000
10	400 guest special event	322 trips	3,220
45			**8,020**

Source: GHD, Focused Traffic Impact Analysis for the Proposed Winery/Distillery Project and Special Events Facility at Bally Keal Vineyards, Solano County, May 29, 2020

As shown above, the total number of daily event trips per year is 8,020 trips. Annualized over the entire year, there would be an average increase of 22 trips per day associated with special event activities (see below). Combined with "normal" winery activities, daily trips associated with special event activities would exceed Caltrans (and OPR's) screening limits of 110 daily trips (92 winery daily trips + 22 special event daily trips). Please refer to Summary/Mitigation for recommended trip reduction measures.

It is noted that OPR's guidance on "special event" activities typically provide for an annual accounting of daily trips (annualized daily trips). The reason for this classification is that event activities are not considered normal weekly activities, events often do not occur every week of the year, and attendance can be highly variable. Previous transportation (VMT) studies conducted for other similar projects with "special event" activities were screened in a similar fashion. In particular, a large school gymnasium/events center project was scheduled to host multiple large events (67 events) throughout the year with some events exceeding 1,000 guests. Since the events were not a considered a "normal" weekly activity, the event daily trips were annualized, and the project was screened out of VMT analysis by the lead agency.[iv]

4. Summary/Mitigation

The proposed Bally Keal Winery/Distillery and Special Event project would exceed the Caltrans/OPR VMT screening thresholds for small projects generating less than 110 daily trips per day. With normal winery and special event activities, the proposed project's overall daily trip generation would total 114 trips (assuming annualization of special event daily trips). In response, the following measure(s) are recommended.

- Winery operations associated with the proposed Bally Keal Winery/Distillery and Special Events project shall be suspended during all special event activities. Specifically, all guest visitation associated with tours and tastings (60 visitors' weekday and 100 visitors' weekends) shall be prohibited on days when special events are being held at the facility. Daily trip generation would be reduced by 46 trips on the weekday and 72 trips on the weekend lowering the overall project daily trips below the screening threshold of 110 daily trips.

- Reduce the number of planned special events on an annual basis. The County may wish to consider reducing the total number of planned events or the number of events per week/month to provide a reduction in project-related daily trip generation.

GHD trusts this letter report provides additional VMT information related to the proposed Bally Keal Winery/Distiller and Special events project. Please contact us if you have any questions.

Sincerely,

GHD

Peter Galloway
Senior Transportation Planner

GHD

Kamesh Vedula, P.E., T.E.
Principal

Cc: Ms. Alice Barkley, Duane Morris
Attachments: Table 3, Table 8
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[i] *Mr. James Leland, Principal Planner, County of Solano, Personal communication related to vehicle miles traveled (VMT) analysis associated with the proposed Bally Keal Winery & Distillery Project, March 9, 2021.*
[ii] *GHD, Focused Traffic Impact Analysis for the Proposed Winery/Distillery Project and Special Events Facility at Bally Keal Vineyards 4286 Suisan Valley Road, Solano County, May 29, 2020.*
[iii] *Caltrans, Vehicle Miles Travel-Focused Transportation Impact Study Guide, May 20, 2020.*
[iv] *GHD, Focused Traffic Impact, Parking Demand, and Vehicle Miles Traveled Analysis for the Proposed Bishop O'Dowd High School, Prepared for the City of Oakland, November 20, 2020.*

6. Project Trip Generation

Winery/Distillery:

The vehicle trips were calculated for "peak" conditions, corresponding with the peak hour of trip generation. To generate vehicle trips, automobile occupancy rates used by Napa County were utilized to calculate the visitor trips.[7]

As shown in Table 3, the winery is calculated to generate up to 65 weekday daily trips and 91 weekend daily trips. For peak hour trips, the Institute of Transportation Engineers (ITE) Trip Generation Manual provides hourly trip data as a percentage of the daily trips for wineries.[8] The data shows weekday PM peak hour trips are 14.8% and weekend peak hour trips are 16.7%. To be conservative, 20% of the daily trips has been used for the peak hour trips. The project is calculated to generate 13 weekday PM peak hour trips (4 in, 9 out) and 18 weekend peak hour trips (9 in, 9 out).

TABLE 3
TRIP GENERATION FOR PROPOSED WINERY

Typical Weekday Daily Trips:	
Visitors: up to 60 visitors / 2.6 visitors per vehicle x 2 o-w trips	= 46 trips
Employees: up to 5 full-time x 3.05 one-way trips	= 15 trips
Trucks: Production- 90,000 gallons / 1,000 x .009 x 2 o-w trips	= 2 trips
Trucks: General deliveries	= 2 trips
Weekday Daily Trips:	**= 65 trips (33 in, 32 out)**
Weekday PM Peak Hour Trips: 20% of daily (30% in, 70% out)	**= 13 trips (4 in, 9 out)**
Typical Weekend Daily Trips:	
Visitors: up to 100 visitors / 2.8 visitors per vehicle x 2 o-w trips	= 72 trips
Employees: up to 5 full-time x 3.05 one-way trips	= 15 trips
Trucks: Production- 90,000 gallons / 1,000 x .009 x 2 o-w trips	= 2 trips
Trucks: General deliveries	= 2 trips
Weekend Daily Trips:	**= 91 trips (46 in, 45 out)**
Weekend Afternoon Pk. Hr. Trips: 20% of daily (47% in, 53% out)	**= 18 trips (9 in, 9 out)**
Harvest Season Weekend Daily Trips:	
Visitors: up to 100 visitors / 2.8 visitors per vehicle x 2 o-w trips	= 72 trips
Employees: up to 5 full-time x 3.05 one-way trips	= 15 trips
Trucks: Production- 90,000 gallons / 1,000 x .009 x 2 o-w trips	= 2 trips
Trucks: General deliveries	= 2 trips
Grape On-haul: 600 tons / 20 tons per truck / 36 days x 2 trips	= 2 trips
Weekend Daily Trips:	**= 93 trips (46 in, 47 out)**
Weekend Afternoon Pk. Hr. Trips: 20% of daily (47% in, 53% out)	**= 19 trips (9 in, 10 out)**

10. Special Events Center

Trip Generation:

As noted, approximately 45 events would be held annually, comprised approximately of 10 events with up to 100 people, 25 events with up to 200 people, and 10 events with up to 400 people.

The vehicle trips were calculated corresponding with the event's peak hour of trip generation before and after an event. It is anticipated most events would occur on weekends, but some may occur on a weekday. Therefore, traffic operations with added event trips have been evaluated for both weekend and weekday conditions.

Vehicle trips generated by temporary staff (catering, entertainment, etc.) were also included using a conservative ratio of one staff person per fifteen guests. (This would reflect an event with full service. Events with buffet service would require fewer staff, and therefore, generate fewer trips than calculated.) The calculated trips are shown in Table 8.

Most events would consist of 200 or fewer attendees. Events with 200 guests are calculated to generate up to 160 trips (80 in prior to the event, and 80 out after the event). The largest events with 400 guests would generate up to 322 total trips (161 in before, 161 out after).

TABLE 8
TRIP GENERATION FOR PROPOSED EVENT FACILITY

Typical Attendance:	
Guests: up to 200 guests / 2.8 guests per vehicle x 2 one-way trips	= 142 trips
Staff: 13 staff / 1.5 staff per vehicle x 2 o-w trips	= 18 trips
Total Trips (200 guests):	**= 160 trips (80 in, 80 out)**
Maximum Attendance:	
Guests: up to 400 guests / 2.8 guests per vehicle x 2 one-way trips	= 286 trips
Staff: 27 staff / 1.5 staff per vehicle x 2 o-w trips	= 36 trips
Total Trips (400 guests):	**= 322 trips (161 in, 161 out)**

These events are of sufficient duration that the inbound and outbound trips occur in separate hours, thus the number of trips on the street network at one time is half of the total volume. Similarly, only half of the trips could be generated during a peak commute period of the day. For example, a wedding starting during the afternoon commute peak time of day would generate inbound trips during the commute peak period, but the outbound trips would occur later at night, when background traffic volumes are lower. However, to remain conservative, both scenarios (before an event and after an event) were evaluated using the peak commute hour volumes. Both driveways would be available for events and vehicle circulation would utilize both driveways for inbound and outbound trips.