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MEMORANDUM

TO: Todd Fujinaga (**todd@tfujinaga.com**)

CC: Carolyn Cole (**carolyncol@aol.com**)

FROM: Mark Crane, P.E. (**cranetransgroup@gmail.com**)

DATE: December 6, 2021

RE: **FOCUSED VMT SUMMARY ANALYSIS FOR THE E&C WINERY IN SOLANO COUNTY**

Hello Todd:

This memo provides a focused vehicle miles traveled (VMT) analysis and discussion for the proposed E&C Winery project 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. The following sections include a discussion of background studies completed to date, VMT guidelines and applications, proposed project trip generation, and likely project impacts. As detailed, no mitigation measures are required to reduce overall VMT associated with proposed project to acceptable levels.

I. BACKGROUND

E&C Winery, LLC proposes to develop a winery and hospitality facility on two parcels totaling approximately 70 acres (APN 027-251-280 (20 acres) and 027-251-290 (49 acres)). These parcels front Rockville Road on the north and Russell Road on the east. The proposed winery will be built in 2 phases over approximately 10 years and have an initial production capacity of 125,000 gallons

with an ultimate production capacity of 500,000 gallons subject to market demand. The facility will process grapes grown both onsite and from offsite sources. Onsite activities include custom crush service for all wineries including grapes grown by E & C. Custom crush will include receiving and crushing grapes, fermentation, processing grape juice into wine, bottling and cooperage, sales, in addition to hospitality and administration for the general public.

II. VEHICLE MILES TRAVELED GUIDELINES AND APPLICATIONS

A. 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.

Caltrans 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;
- 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 of multimodal analysis as well as access management issues.

B. 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 projects 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 E&C Winery project does not fit into the afore-mentioned land uses. Wineries 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 that significant transportation impacts:

1. Residential, office or retail projects within a Transit priority area, where a project is within a 1/2 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 station, a ferry terminal served by either a bus and rail transit service, or the intersection two or more major bas 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).

2. 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 were existing office projects exhibit VMT per capita 15 percent or more below regional average.

3. 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 circumstance and evidence. Furthermore, a project which includes any affordable residential units may factor the effect of the affordability an VMT into the assessment of VMT generated by those units."

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

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

6. 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, it is likely that the proposed project could qualify for exemption based on the above criteria 6 (project generates or attracts fewer than 110 trips per day).

C. PROPOSED E&C WINERY PROJECT DAILY TRIP GENERATION

1. WINERY ACTIVITIES

Based on the most recent transportation analysis conducted for the proposed project, daily trip generation associated with winery activities would generate 97 harvest weekday daily trips and 94 harvest weekend daily trips. Based on screening criteria for VMT impacts, a daily trip generation of less than 110 trips would qualify for exemption under Caltrans criteria. In addition, daily project trip generation associated with inclusion of special event activity traffic would still remain below the 110 trip limit.

2. SPECIAL EVENT ACTIVITIES

Daily trip generation for special event activities is shown as follows:

DAILY TRIP GENERATION PROJECTED FOR E&C WINERY SPECIAL EVENT ACTIVITIES

Number Of Events	Event Size	Daily Trips/Event	Total Daily Trips/Year
15	150 guest special event	122 trips	1,830
12	75 guest special event	60 trips	720
4	300 guest special event	240 trips	960
10	100 guest special event	80 trips	800
41			**4,310**

As shown above, the total number of daily event trips per year is 4,310 trips. Annualized over the entire year, there would be an average increase of 12 trips per day associated with special event activities. Combined with "normal" winery activities, daily trips associated with special event activities would **NOT** exceed Caltrans (and OPR's) screening limits of 110 daily trips (a combined 109 weekday to 106 weekend winery daily trips).

It is noted that OPR's guidance on "special event" activities typically provide for 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 "normal" weekly activity, the event daily trips were annualized, and the project was screened out of VMT analysis by the lead agency.

D. SUMMARY/MITIGATION

The proposed E&C Winery would **NOT** 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 proposal project's overall daily trip generation would total 109 weekday and 106 weekend trips (assuming annualization of special event daily trips). In conclusion, no measure(s) are recommended.

E. PROJECT PEAK HOUR TRIP GENERATION

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.

As shown in the attached Winery Trip Generation Worksheet, the winery is calculated to generate up to 97 harvest weekday daily trips and 94 harvest weekend trips. For peak hour trips, the *Institute of Transportation Engineers (ITE) Trip Generation Manual* provides hourly trip data as a percentage of the daily total trips for wineries. The data shows weekend PM peak hour trips are 14.8% and weekend peak hour trips are 16.7%. To be conservative, 17% of the daily total (Employee/Visitor/Truck) trips has been used for the peak hour trips. The project is calculated to generate 17 harvest weekday PM peak trips and 16 harvest weekend peak hour trips.

F. SPECIAL EVENTS CENTER TRIP GENERATION

As noted, approximately 41 events would be held annually, comprised of 15 events with up to 150 guests, 12 events with up to 75 guests, 4 events with up to 300 guests, and 10 events with up to 100 guests.

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 operation 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 on the next page.

Todd Fujinaga
Focused VMT Summary Analysis for
The E&C Winery in Solano County
December 6, 2021

TRIP GENERATION FOR PROPOSED REPRESENTATIVE SPECIAL EVENTS

TYPICAL ATTENDANCE	
Guests: Up to 150 guests/2.8 guests per vehicle x 2 one-way trips	108 trips
Staff: 10 staff/1.5 staff per vehicle x 2 one-way trips	14 trips
TOTAL TRIPS (200 GUESTS)	**122 TRIPS** (61 in, 61 out)
MAXIMUM ATTENDANCE	
Guests: Up to 300 guests/2.8 guests per vehicle x 2 one-way trips	214 trips
Staff: 20 staff/1.5 staff per vehicle x 2 one-way trips	26 trips
TOTAL TRIPS (200 GUESTS)	**240 TRIPS** (120 in, 120 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 period, but the outbound trips would occur later at night, when background traffic volumes are lower.

We trust this memo provides additional VMT information related to the proposed E&C Winery project. Please contact us if you have questions.

Mark D. Crane, P.E., President
Crane Transportation Group

Attachment: *Winery Trip Generation Worksheet* dated 11.29.2021

WINERY TRIP GENERATION WORKSHEET

Planning, Building & Environmental Services
1195 Third Street, Suite 210
Napa, CA 94559-3082
(707) 253-4417

A Tradition of Stewardship
A Commitment to Service

Clear Form

PROJECT DESCRIPTION

Winery Name: E&C WINERY **Date Prepared:** 11/29/21

Existing Entitled Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	0	0
	Weekend	0	0
Number of Part Time Employees*	Weekday	0	0
	Weekend	0	0
Maximum Daily Visitation	Weekday	0	0
	Weekend	0	0
Annual Gallons of Production		0	0
Annual Tons of Grape Haul		0.0	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday	0	0
	Weekend	0	0

Proposed Winery		Harvest	Non-Harvest
Number of Full Time Employees*	Weekday	11	11
	Weekend	5	5
Number of Part Time Employees*	Weekday	6	3
	Weekend	0	0
Maximum Daily Visitation	Weekday	65	70
	Weekend	110	110
Annual Gallons of Production		500,000	500,000
Annual Tons of Grape Haul		3,125.0	N/A
Number of Visitors at the Largest Event that occurs two or more times per month, on average	Weekday	0	0
	Weekend	0	0

*Number of full time and part time employees should represent the max number of employees that will be working on any given day (including all vendors and contractors employed for the largest event that occurs two or more times per month on average).

E&C WINERY
TRIP GENERATION

Existing Winery					Harvest	Non-Harvest
Maximum Daily Weekday Traffic (Friday)						
	Harvest	*Non-Harvest*				
FT Employees	0	0	3.05 one way trips/employee	FT Employee Daily Trips	0.0	0.0
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0
Max Visitors	0	0	2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	0.0	0.0
Max Event	0	0	2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0
Gallons of Production			0.000018 truck trips	Production Daily Trips	0.0	0.0
Tons of Grape Haul#	0.0		0.013889 truck trips	Grape Haul Daily Trips	0.0	0.0
				Total Weekday Daily Trips	0	0
				Total Weekday Peak Hour Trips*	0	0
Maximum Daily Weekend Traffic (Saturday)						
	Harvest	*Non-Harvest*				
FT Employees	0	0	3.05 one way trips/employee	FT Employee Daily Trips	0.0	0.0
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0
Max Visitors	0	0	2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	0.0	0.0
Max Event	0	0	2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0
Gallons of Production			0.000018 truck trips	Production Daily Trips	0.0	0.0
Tons of Grape Haul#	0.0		0.013889 truck trips	Grape Haul Daily Trips	0.0	0.0
				Total Weekend Daily Trips	0	0
				Total Weekend Peak Hour Trips*	0	0
Maximum Annual Traffic						
				Total Annual Trips**	0	

Proposed Winery					Harvest	Non-Harvest
Maximum Daily Weekday Traffic (Friday)						
	Harvest	*Non-Harvest*				
FT Employees	11	11	3.05 one way trips/employee	FT Employee Daily Trips	33.5	33.5
PT Employees	6	3	1.9 one way trips/employee	PT Employee Daily Trips	11.4	5.7
Max Visitors	65	70	2.6 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	50.0	53.8
Max Event	0	0	2.6 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0
Gallons of Production			0.000018 truck trips	Production Daily Trips	0.0	0.0
Tons of Grape Haul#	0.0		0.013889 truck trips	Grape Haul Daily Trips	0.0	0.0
				Total Weekday Daily Trips	95	94
				Total Weekday Peak Hour Trips*	33	33
Maximum Daily Weekend Traffic (Saturday)						
	Harvest	*Non-Harvest*				
FT Employees	5	5	3.05 one way trips/employee	FT Employee Daily Trips	15.3	15.3
PT Employees	0	0	1.9 one way trips/employee	PT Employee Daily Trips	0.0	0.0
Max Visitors	110	110	2.8 visitors/vehicle for 2 one way trips	Max Visitor Daily Trips	78.6	78.6
Max Event	0	0	2.8 visitors/vehicle for 2 one way trips	Max Event Daily Trips	0.0	0.0
Gallons of Production			0.000018 truck trips	Production Daily Trips	0.0	0.0
Tons of Grape Haul#	0.0		0.013889 truck trips	Grape Haul Daily Trips	0.0	0.0
				Total Weekend Daily Trips	94	94
				Total Weekend Peak Hour Trips*	50	50
Maximum Annual Traffic						
				Total Annual Trips**	34,365	

Net New Trips		Harvest	Non-Harvest
Maximum Weekday Traffic (Friday)			
If total net new daily trips is greater than 40, a TIS is required	**Net New Weekday Daily Trips**	95	94
	Net New Weekday Peak Hour Trips*	33	33
Maximum Weekend Traffic (Saturday)			
If total net new daily trips is greater than 40, a TIS is required	**Net New Weekend Daily Trips**	94	94
	Net New Weekend Peak Hour Trips*	50	50
Maximum Annual Traffic			
Please Prepare a Traffic Impact Study	**Net New Annual Trips****	34,365	

#Trips associated with Grape Haul represent harvest season only.

*Weekday peak hour trips are calculated as 38% of daily trips associated with visitors and production plus one trip per employee. Weekend peak hour trips are calculated as 57% of daily trips associated with visitors and production plus one trip per employee.

**Annual trips represent a conservative calculation that assumes 11 weeks of harvest, all weekdays are Fridays, all weekends are Saturdays, and assumes that the largest event that occurs two or more times per month on average occurs every day.