



# Transportation Impact Study

The Winery at Mount Veeder Use Permit P22-00248-UP, Exception  
to the Conservation Regulations P25-00088-UP, and Exception to  
the Roads and Street Standards  
Planning Commission Hearing - June 4, 2025



June 3, 2024

Officer of P&M Vineyard Holdings LLC  
1370 Trancas Street, Suite 143  
Napa, CA 94558

## **Transportation Impact Study for the Winery at Mount Veeder Project**

W-Trans has completed an evaluation of potential transportation impacts associated with the proposed Winery at Mount Veeder to be located at 1300 Mount Veeder Road in the County of Napa. The purpose of this letter is to set forth our findings regarding the project's potential impacts under CEQA as well as to address policy issues required by the County of Napa.

The study area encompasses the section of Mount Veeder Road north and south of the project access driveway, which is located approximately 0.9 miles north of the intersection of Redwood Road/Mount Veeder Road.

### **Project Description**

The project as proposed is a winery producing 25,000 gallons of wine annually with up to 18 daily tasting room guests, and two full-time and two part-time employees.

### **Trip Generation**

The anticipated trip generation for the proposed project was estimated using the County of Napa's Winery Trip Generation Worksheet. As indicated on the enclosed copy of the worksheet, the project would be expected to generate 24 daily trips during non-harvest months and 26 daily trips during harvest. Peak hour volumes would range from nine to 12 trips between weekdays and weekends as well as during typical operation and harvest.

Based on the trip generation as estimated using the County's worksheet, the project would generate fewer than 40 trips daily, so a full operational study was not prepared.

### **Trip Distribution**

Given the location of the project site northwest of the City of Napa as well as the limited number of circulation options in the area, it is anticipated that all or nearly all project trips would be from or to the southeast using Mount Veeder Road and Redwood Road.

### **Collision History**

The collision history for the segment of Mount Veeder Road within one-half mile of the project site was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. During the five-year study period between January 1, 2018, and December 31, 2022, there were four collisions reported on this roadway segment. This translates to a collision rate of 3.09 collisions per million vehicles miles (c/mvm). This calculated collision rate was compared to the average collision rate for similar facilities statewide, as indicated in *2021 Collision Data on California State Highways*, California Department of Transportation (Caltrans). The

statewide average rate of 1.09 c/mvm for two-lane roadways in a rural environment is less than the 3.09 c/mvm collision rate for Mount Veeder Road indicating that the roadway has experienced more collisions than are occurring on similar roadways.

All four crashes were single-vehicle incidents where drivers hit fixed objects; none were associated with turning movements into or out of the project driveway. One involved an impaired driver. The crashes were spread throughout the one-mile segment, with no locations having more than one crash. While there were injuries in two of the four crashes, the resulting 50 percent injury rate is only marginally above the statewide average of 40.7 percent given that each of crash comprises 25 percent of the total, so one less injury would have put the rate substantially below the statewide average. Given the lack of any specific locations or correctible patterns, no remedial action is recommended. The collision rate calculation is enclosed.

### **Vehicle Miles Traveled (VMT)**

Senate Bill (SB) 743 established the increase in Vehicle Miles Traveled (VMT) as a result of a project as the basis for determining impacts with respect to transportation under the California Environmental Quality Act (CEQA). The project-related VMT impacts were assessed based on guidance published in the *Napa County Traffic Impact Study Guidelines*, February 2022, which is consistent with the California Governor's Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018. Both documents identify several criteria that may be used by jurisdictions to identify certain types of projects that are unlikely to have a significant VMT impact and can be "screened" from further analysis.

One of these screening criteria pertains to small projects, which OPR identifies as generating fewer than 110 vehicle trips per day. As detailed above, the proposed project is anticipated to generate an average of 26 weekday and weekend daily trips during the harvest, which falls well below the OPR threshold. As a result, it is reasonable to conclude that the project can be presumed to have a less-than-significant impact on VMT.

### **Alternative Modes**

#### **Pedestrian Facilities**

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. There are no sidewalks along the project frontage on Mount Veeder Road, which is consistent with and appropriate for the rural character of the area. Sidewalks are not required, so the lack of such facilities is consistent with the County's policies.

#### **Bicycle Facilities**

- Bicyclists share the road with vehicular traffic on Mount Veeder Road. No facilities currently exist or are planned per the *Napa Countywide Bicycle Plan*, Napa Valley Transportation Authority (NVTA), 2019. The project would therefore not conflict with any planned improvements.

### **Transit Facilities**

There are no bus stops within a walkable distance of the project site; the nearest bus stop is located 4.9 miles southeast of the project site at the intersection of Redwood Road/Linda Vista Avenue in the City of Napa. While there are no adequate transit facilities within a walkable distance of the project site, no demand for transit travel is anticipated given the rural nature of the project area. The project would therefore be consistent with transit plans.

Given the rural location of the project site, all trips to and from the site are anticipated to be vehicle trips. The project would be expected to generate no new walking, bicycling, or transit trips for project patrons or employees to reach the project site. The lack of facilities for these modes would therefore not affect travel to the project site.

### **Vehicle Access**

The project would be accessed via the existing 14-foot-wide bridge over Pickle Creek and the existing two-way driveway leading from Mount Veeder Road to the project site. As part of the proposed project, the bridge and driveway would be rebuilt and widened to 20 feet.

### **Sight Distance**

Sight distance along Mount Veeder Road at the location of the project driveway was evaluated based on sight distance criteria contained in *Highway Design Manual* published by Caltrans. The recommended sight distances for driveway approaches are based on stopping sight distance with approach travel speed used as the basis for determining the recommended sight distance.

Based on the posted speed limit of 25 mph on Mount Veeder Road, the minimum stopping sight distance needed is 150 feet, and the minimum corner sight distance needed for exiting vehicles is 275 feet. Based on a review of field conditions, sight lines to and from the project driveway on Mount Veeder Road extend nearly 280 feet to the north and approximately 275 feet to the south, which are adequate to meet both stopping sight distance and corner sight distance criteria. Adequate stopping sight distance is available for a following driver to notice and react to a preceding motorist slowing to turn right or stopped to turn left into the project driveway. To maintain adequate corner sight lines along Mt. Veeder Road, vegetation and foliage should be kept low-lying (three feet high or less) and trees with all branches kept trimmed to a minimum height of seven feet above the roadway.

### **Left-Turn Warrant**

The need for a left-turn lane on Mount Veeder Road at the project driveway was evaluated based on criteria contained in the *Napa County Road and Street Standards*, using traffic volume data collected on October 13, 2023. The values provided in the graph on Page 21 of this document were applied to existing volumes with project traffic added.

Based on the average daily traffic (ADT) volume plus the estimated project trips during the weekday, a left-turn lane is not warranted on Mount Veeder Road at the proposed project driveway; it is noted that the collected weekday counts were used for the analysis because they are higher than the collected weekend volumes. Based on the trip distribution assumptions, it is not expected that motorists would be turning left into the driveway as all the project-generated inbound trips would be traveling northbound

from Redwood Road and turning right onto the project site; however, per County policy the warrant was evaluated and determined not to be met.

Copies of the turn lane warrant graph and traffic count data are enclosed.

### Emergency Access

The project access road and driveway should be designed to meet Napa County design criteria, which includes criteria for the radius of roadway curves and turns at the proposed driveway. Assuming these criteria are met, emergency access would be adequate.

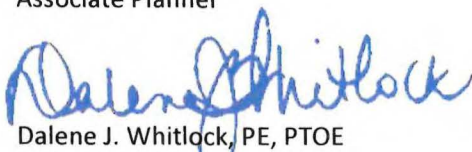
### Conclusions and Recommendations

- The proposed project would be expected to generate an average of 24 to 26 trips daily during non-harvest and harvest operation, respectively.
- The lack of existing dedicated facilities for pedestrians, bicyclists, and transit riders in the project vicinity is consistent with the rural setting and consistent with policies for these modes.
- The project is anticipated to result in a less-than-significant transportation impact on VMT based on application of guidelines from the County of Napa.
- It is recommended that the existing vegetation southeast of the project driveway be maintained such that they are either low-lying (three feet high or less) or trees with all branches trimmed to a minimum height of seven feet above the roadway elevation to avoid any impediments to sight distance.
- A left-turn lane is not warranted at the proposed project driveway based on Existing plus Project volumes.

We hope this information is of assistance to the County in evaluating the proposed Winery at Mount Veeder project. Thank you for giving us the opportunity to provide these services.

Sincerely,

  
Mark Brown  
Associate Planner

  
Dalene J. Whitlock, PE, PTOE  
Senior Principal



DJW/mjb/NAX184.L1

Enclosures: Napa County Trip Generation Worksheet, Collision Rate Worksheet, ADT Traffic Counts, Left Turn Lane Warrant





A Tradition of Stewardship  
A Commitment to Service

# WINERY TRIP GENERATION WORKSHEET

Planning, Building & Environmental Services

1195 Third Street, Suite 210

Napa, CA 94559-3082

(707) 253-4417

## PROJECT DESCRIPTION

Clear Form

Winery Name: The Winery At Mt Veeder Date Prepared: 1/20/20

| Existing Entitled Winery  |         | Harvest | Non-Harvest |
|---|---------|---------|-------------|
| Number of Full Time Employees*  | Weekday |         |             |
|   | Weekend |         |             |
| Number of Part Time Employees*  | Weekday |         |             |
|   | Weekend |         |             |
| Maximum Daily Visitation  | Weekday |         |             |
|   | Weekend |         |             |
| Annual Gallons of Production  |         |         | 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 |         |             |
|   | Weekend |         |             |

| Proposed Winery   |         | Harvest | Non-Harvest |
|---|---------|---------|-------------|
| Number of Full Time Employees*  | Weekday | 2       | 2           |
|   | Weekend | 2       | 2           |
| Number of Part Time Employees*  | Weekday | 2       | 2           |
|   | Weekend | 2       | 2           |
| Maximum Daily Visitation  | Weekday | 18      | 18          |
|   | Weekend | 18      | 18          |
| Annual Gallons of Production  |         | 25,000  | 25,000      |
| Annual Tons of Grape Haul   |         | 156.2   | N/A         |
| Number of Visitors at the Largest Event that occurs two or more times per month, on average | Weekday | 0       |             |
|   | Weekend | 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).

## The Winery At Mt Veeder TRIP GENERATION

| Existing Winery                                 |                |                    |  |                         | Harvest                               | Non-Harvest |
|---|----------------|--------------------|--|-------------------------|---------------------------------------|-------------|
| <u>Maximum Daily Weekday Traffic (Friday)</u>   |                |                    |  |                         |                                       |             |
|   | <u>Harvest</u> | <u>Non-Harvest</u> |  |                         |                                       |             |
| 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              |                    | 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         |
|   |                |                    |  |                         | <b>Total Weekday Daily Trips</b>      | <b>0</b>    |
|   |                |                    |  |                         | <b>Total Weekday Peak Hour Trips*</b> | <b>0</b>    |
| <u>Maximum Daily Weekend Traffic (Saturday)</u> |                |                    |  |                         |                                       |             |
|   | <u>Harvest</u> | <u>Non-Harvest</u> |  |                         |                                       |             |
| 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              |                    | 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         |
|   |                |                    |  |                         | <b>Total Weekend Daily Trips</b>      | <b>0</b>    |
|   |                |                    |  |                         | <b>Total Weekend Peak Hour Trips*</b> | <b>0</b>    |
| <u>Maximum Annual Traffic</u>                   |                |                    |  |                         |                                       |             |
|   |                |                    |  |                         | <b>Total Annual Trips**</b>           | <b>0</b>    |

| Proposed Winery                                 |                |                    |  |                         | Harvest                               | Non-Harvest  |
|---|----------------|--------------------|--|-------------------------|---------------------------------------|--------------|
| <u>Maximum Daily Weekday Traffic (Friday)</u>   |                |                    |  |                         |                                       |              |
|   | <u>Harvest</u> | <u>Non-Harvest</u> |  |                         |                                       |              |
| FT Employees                                    | 2              | 2                  | 3.05 one way trips/employee              | FT Employee Daily Trips | 6.1                                   | 6.1          |
| PT Employees                                    | 2              | 2                  | 1.9 one way trips/employee               | PT Employee Daily Trips | 3.8                                   | 3.8          |
| Max Visitors                                    | 18             | 18                 | 2.6 visitors/vehicle for 2 one way trips | Max Visitor Daily Trips | 13.8                                  | 13.8         |
| Max Event                                       | 0              | 0                  | 2.6 visitors/vehicle for 2 one way trips | Max Event Daily Trips   | 0.0                                   | 0.0          |
| Gallons of Production                           | 25,000         |                    | 0.000018 truck trips                     | Production Daily Trips  | 0.5                                   | 0.5          |
| Tons of Grape Haul#                             | 156.2          |                    | 0.013889 truck trips                     | Grape Haul Daily Trips  | 2.2                                   | 0.0          |
|   |                |                    |  |                         | <b>Total Weekday Daily Trips</b>      | <b>26</b>    |
|   |                |                    |  |                         | <b>Total Weekday Peak Hour Trips*</b> | <b>10</b>    |
| <u>Maximum Daily Weekend Traffic (Saturday)</u> |                |                    |  |                         |                                       |              |
|   | <u>Harvest</u> | <u>Non-Harvest</u> |  |                         |                                       |              |
| FT Employees                                    | 2              | 2                  | 3.05 one way trips/employee              | FT Employee Daily Trips | 6.1                                   | 6.1          |
| PT Employees                                    | 2              | 2                  | 1.9 one way trips/employee               | PT Employee Daily Trips | 3.8                                   | 3.8          |
| Max Visitors                                    | 18             | 18                 | 2.8 visitors/vehicle for 2 one way trips | Max Visitor Daily Trips | 12.9                                  | 12.9         |
| Max Event                                       | 0              | 0                  | 2.8 visitors/vehicle for 2 one way trips | Max Event Daily Trips   | 0.0                                   | 0.0          |
| Gallons of Production                           | 25,000         |                    | 0.000018 truck trips                     | Production Daily Trips  | 0.5                                   | 0.5          |
| Tons of Grape Haul#                             | 156.3          |                    | 0.013889 truck trips                     | Grape Haul Daily Trips  | 2.2                                   | 0.0          |
|   |                |                    |  |                         | <b>Total Weekend Daily Trips</b>      | <b>26</b>    |
|   |                |                    |  |                         | <b>Total Weekend Peak Hour Trips*</b> | <b>12</b>    |
| <u>Maximum Annual Traffic</u>                   |                |                    |  |                         |                                       |              |
|   |                |                    |  |                         | <b>Total Annual Trips**</b>           | <b>8,914</b> |

| Net New Trips  |  | Harvest                                 | Non-Harvest  |
|--|--|---|--------------|
| <u>Maximum Weekday Traffic (Friday)</u>                            |  |   |              |
| If total net new daily trips is greater than 40, a TIS is required |  |   |              |
|  |  | <b>Net New Weekday Daily Trips</b>      | <b>26</b>    |
|  |  | <b>Net New Weekday Peak Hour Trips*</b> | <b>10</b>    |
| <u>Maximum Weekend Traffic (Saturday)</u>                          |  |   |              |
| If total net new daily trips is greater than 40, a TIS is required |  |   |              |
|  |  | <b>Net New Weekend Daily Trips</b>      | <b>26</b>    |
|  |  | <b>Net New Weekend Peak Hour Trips*</b> | <b>12</b>    |
| <u>Maximum Annual Traffic</u>                                      |  |   |              |
| <b>A Traffic Impact Study is NOT Required</b>                      |  | <b>Net New Annual Trips**</b>           | <b>8,914</b> |

#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.

## Roadway Segment Collision Rate Worksheet

**NAX184**

**Location:** Mount Veeder Road

**Date of Count:** Friday, October 13, 2023

**Average Daily Traffic (ADT):** 710

**Number of Collisions:** 4

**Number of Injuries:** 3

**Number of Fatalities:** 0

**Start Date:** January 1, 2018

**End Date:** December 31, 2022

**Number of Years:** 5

**Highway Type:** Conventional 2 lanes or less

**Area:** Rural

**Design Speed:** ≤55

**Terrain:** Flat

**Segment Length:** 1.0 miles

**Direction:** North/South

Collision Rate =  $\frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Segment Length} \times \text{Number of Years}}$

Collision Rate =  $\frac{4}{710} \times \frac{1,000,000}{365 \times 1 \times 5}$

|                    | Collision Rate | Fatality Rate | Injury Rate |
|--------------------|----------------|---------------|-------------|
| Study Segment      | 3.09 c/mvm     | 0.0%          | 75.0%       |
| Statewide Average* | 1.09 c/mvm     | 3.0%          | 40.7%       |

**Notes**

ADT = average daily traffic volume

c/mvm = collisions per million vehicle miles

\* 2021 Collision Data on California State Highways, Caltrans



**VOLUME****1300 Mt Veeder Rd N/O Redwood Rd**

Day: Friday

Date: 10/13/2023

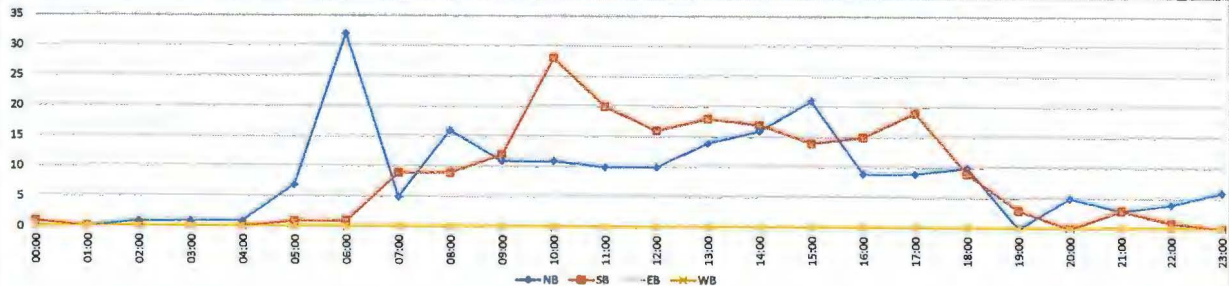
City: Napa

Project #: CA23\_080316\_001

| DAILY TOTALS        |     |     |    |    |       | NB      |     |     |    |    | SB    |                  |       |       |       | EB |       |  |  |  | WB |  |  |  |  | Total |  | DAILY TOTALS |  |  |  |  |  |
|---------------------|-----|-----|----|----|-------|---------|-----|-----|----|----|-------|------------------|-------|-------|-------|----|-------|--|--|--|----|--|--|--|--|-------|--|--------------|--|--|--|--|--|
|                     |     |     |    |    |       | 347     |     |     |    |    | 365   |                  |       |       |       | 0  |       |  |  |  | 0  |  |  |  |  | 712   |  |              |  |  |  |  |  |
| 15-Minutes Interval |     |     |    |    |       |         |     |     |    |    |       | Hourly Intervals |       |       |       |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| TIME                | NB  | SB  | EB | WB | TOTAL | TIME    | NB  | SB  | EB | WB | TOTAL | TIME             | NB    | SB    | EB    | WB | TOTAL |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 00:00               | 1   | 0   |    |    | 1     | 12:00   | 5   | 8   |    |    | 13    | 00:00 01:00      | 13    | 1     |       |    | 14    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 00:15               | 4   | 0   |    |    | 4     | 12:15   | 7   | 14  |    |    | 21    | 01:00 02:00      | 1     | 0     |       |    | 1     |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 00:30               | 8   | 0   |    |    | 8     | 12:30   | 2   | 15  |    |    | 17    | 02:00 03:00      | 2     | 0     |       |    | 2     |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 00:45               | 0   | 1   |    |    | 1     | 12:45   | 11  | 15  |    |    | 26    | 03:00 04:00      | 3     | 7     |       |    | 10    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 01:00               | 0   | 0   |    |    | 0     | 13:00   | 8   | 11  |    |    | 19    | 04:00 05:00      | 2     | 3     |       |    | 5     |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 01:15               | 1   | 0   |    |    | 1     | 13:15   | 9   | 6   |    |    | 15    | 05:00 06:00      | 17    | 6     |       |    | 23    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 01:30               | 0   | 0   |    |    | 0     | 13:30   | 7   | 5   |    |    | 12    | 06:00 07:00      | 56    | 6     |       |    | 62    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 01:45               | 0   | 0   |    |    | 0     | 13:45   | 5   | 12  |    |    | 17    | 07:00 08:00      | 21    | 17    |       |    | 38    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 02:00               | 0   | 0   |    |    | 0     | 14:00   | 4   | 11  |    |    | 15    | 08:00 09:00      | 24    | 14    |       |    | 38    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 02:15               | 1   | 0   |    |    | 1     | 14:15   | 6   | 4   |    |    | 10    | 09:00 10:00      | 20    | 16    |       |    | 36    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 02:30               | 0   | 0   |    |    | 0     | 14:30   | 6   | 7   |    |    | 13    | 10:00 11:00      | 30    | 25    |       |    | 55    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 02:45               | 1   | 0   |    |    | 1     | 14:45   | 2   | 14  |    |    | 16    | 11:00 12:00      | 20    | 51    |       |    | 71    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 03:00               | 1   | 2   |    |    | 3     | 15:00   | 1   | 12  |    |    | 13    | 12:00 13:00      | 25    | 52    |       |    | 77    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 03:15               | 1   | 3   |    |    | 4     | 15:15   | 6   | 7   |    |    | 13    | 13:00 14:00      | 29    | 34    |       |    | 63    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 03:30               | 1   | 0   |    |    | 1     | 15:30   | 3   | 20  |    |    | 23    | 14:00 15:00      | 18    | 36    |       |    | 54    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 03:45               | 0   | 2   |    |    | 2     | 15:45   | 7   | 3   |    |    | 10    | 15:00 16:00      | 17    | 42    |       |    | 59    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 04:00               | 0   | 0   |    |    | 0     | 16:00   | 5   | 9   |    |    | 14    | 16:00 17:00      | 14    | 19    |       |    | 33    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 04:15               | 0   | 3   |    |    | 3     | 16:15   | 5   | 5   |    |    | 10    | 17:00 18:00      | 7     | 12    |       |    | 19    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 04:30               | 0   | 0   |    |    | 0     | 16:30   | 0   | 2   |    |    | 2     | 18:00 19:00      | 11    | 16    |       |    | 27    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 04:45               | 2   | 0   |    |    | 2     | 16:45   | 4   | 3   |    |    | 7     | 19:00 20:00      | 3     | 3     |       |    | 6     |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 05:00               | 1   | 0   |    |    | 1     | 17:00   | 3   | 3   |    |    | 6     | 20:00 21:00      | 7     | 3     |       |    | 10    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 05:15               | 4   | 2   |    |    | 6     | 17:15   | 0   | 3   |    |    | 3     | 21:00 22:00      | 1     | 1     |       |    | 2     |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 05:30               | 7   | 1   |    |    | 8     | 17:30   | 2   | 2   |    |    | 4     | 22:00 23:00      | 5     | 0     |       |    | 5     |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 05:45               | 5   | 3   |    |    | 8     | 17:45   | 2   | 4   |    |    | 6     | 23:00 00:00      | 1     | 1     |       |    | 2     |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 06:00               | 6   | 0   |    |    | 6     | 18:00   | 2   | 5   |    |    | 7     | STATISTICS       |       |       |       |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 06:15               | 15  | 2   |    |    | 17    | 18:15   | 5   | 1   |    |    | 6     |                  | NB    | SB    | EB    | WB | TOTAL |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 06:30               | 21  | 0   |    |    | 21    | 18:30   | 1   | 5   |    |    | 6     | Peak Period      | 00:00 | to    | 12:00 |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 06:45               | 14  | 4   |    |    | 18    | 18:45   | 3   | 5   |    |    | 8     | Volume           | 209   | 146   |       |    | 355   |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 07:00               | 9   | 4   |    |    | 13    | 19:00   | 2   | 0   |    |    | 2     | Peak Hour        | 6:15  | 11:00 |       |    | 10:45 |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 07:15               | 8   | 2   |    |    | 10    | 19:15   | 0   | 0   |    |    | 0     | Peak Volume      | 59    | 51    |       |    | 74    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 07:30               | 1   | 5   |    |    | 6     | 19:30   | 0   | 2   |    |    | 2     | Peak Hour Factor | 0.702 | 0.554 |       |    | 0.661 |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 07:45               | 3   | 6   |    |    | 9     | 19:45   | 1   | 1   |    |    | 2     |                  |       |       |       |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 08:00               | 8   | 5   |    |    | 13    | 20:00   | 1   | 0   |    |    | 1     | Peak Period      | 12:00 | to    | 00:00 |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 08:15               | 4   | 1   |    |    | 5     | 20:15   | 3   | 1   |    |    | 4     | Volume           | 138   | 219   |       |    | 357   |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 08:30               | 4   | 4   |    |    | 8     | 20:30   | 2   | 0   |    |    | 2     | Peak Hour        | 12:45 | 12:15 |       |    | 12:15 |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 08:45               | 8   | 4   |    |    | 12    | 20:45   | 1   | 2   |    |    | 3     | Peak Volume      | 35    | 55    |       |    | 83    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 09:00               | 6   | 2   |    |    | 8     | 21:00   | 1   | 0   |    |    | 1     | Peak Hour Factor | 0.795 | 0.917 |       |    | 0.798 |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 09:15               | 6   | 6   |    |    | 12    | 21:15   | 0   | 1   |    |    | 1     |                  |       |       |       |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 09:30               | 6   | 4   |    |    | 10    | 21:30   | 0   | 0   |    |    | 0     | Peak Period      | 07:00 | to    | 09:00 |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 09:45               | 2   | 4   |    |    | 6     | 21:45   | 0   | 0   |    |    | 0     | Volume           | 45    | 31    |       |    | 76    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 10:00               | 3   | 9   |    |    | 12    | 22:00   | 2   | 0   |    |    | 2     | Peak Hour        | 8:00  | 7:15  |       |    | 7:00  |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 10:15               | 7   | 6   |    |    | 13    | 22:15   | 1   | 0   |    |    | 1     | Peak Volume      | 24    | 18    |       |    | 38    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 10:30               | 7   | 5   |    |    | 12    | 22:30   | 1   | 0   |    |    | 1     | Peak Hour Factor | 0.750 | 0.750 |       |    | 0.731 |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 10:45               | 13  | 5   |    |    | 18    | 22:45   | 1   | 0   |    |    | 1     |                  |       |       |       |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 11:00               | 5   | 23  |    |    | 28    | 23:00   | 0   | 1   |    |    | 1     | Peak Period      | 16:00 | to    | 18:00 |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 11:15               | 5   | 8   |    |    | 13    | 23:15   | 0   | 0   |    |    | 0     | Volume           | 21    | 31    |       |    | 52    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 11:30               | 4   | 11  |    |    | 15    | 23:30   | 1   | 0   |    |    | 1     | Peak Hour        | 16:00 | 16:00 |       |    | 16:00 |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| 11:45               | 6   | 9   |    |    | 15    | 23:45   | 0   | 0   |    |    | 0     | Peak Volume      | 14    | 19    |       |    | 33    |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| TOTALS              | 209 | 146 | 0  | 0  | 355   | TOTALS  | 138 | 219 | 0  | 0  | 357   | Peak Hour Factor | 0.700 | 0.528 |       |    | 0.589 |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |
| SPLIT %             | 59% | 41% | 0% | 0% | 50%   | SPLIT % | 39% | 61% | 0% | 0% | 50%   |                  |       |       |       |    |       |  |  |  |    |  |  |  |  |       |  |              |  |  |  |  |  |

**VOLUME****1300 Mt Veeder Rd N/O Redwood Rd**Day: Saturday  
Date: 10/14/2023City: Napa  
Project #: CA23\_080316\_001

| DAILY TOTALS        |     |     |    |    |       | NB      |     |     |    | SB  |       |                  |       | EB    |       |    |       | WB |  |  |  | Total |  | DAILY TOTALS |  |  |  |  |  |
|---------------------|-----|-----|----|----|-------|---------|-----|-----|----|-----|-------|------------------|-------|-------|-------|----|-------|----|--|--|--|-------|--|--------------|--|--|--|--|--|
|                     |     |     |    |    |       | 203     |     |     |    | 196 |       |                  |       | 0     |       |    |       | 0  |  |  |  | 399   |  |              |  |  |  |  |  |
| 15-Minutes Interval |     |     |    |    |       |         |     |     |    |     |       | Hourly Intervals |       |       |       |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| TIME                | NB  | SB  | EB | WB | TOTAL | TIME    | NB  | SB  | EB | WB  | TOTAL | TIME             | NB    | SB    | EB    | WB | TOTAL |    |  |  |  |       |  |              |  |  |  |  |  |
| 00:00               | 1   | 0   |    |    | 1     | 12:00   | 5   | 8   |    |     | 13    | 00:00            | 01:00 | 1     | 1     |    | 2     |    |  |  |  |       |  |              |  |  |  |  |  |
| 00:15               | 0   | 1   |    |    | 1     | 12:15   | 2   | 3   |    |     | 5     | 01:00            | 02:00 | 0     | 0     |    | 0     |    |  |  |  |       |  |              |  |  |  |  |  |
| 00:30               | 0   | 0   |    |    | 0     | 12:30   | 0   | 2   |    |     | 2     | 02:00            | 03:00 | 1     | 0     |    | 1     |    |  |  |  |       |  |              |  |  |  |  |  |
| 00:45               | 0   | 0   |    |    | 0     | 12:45   | 3   | 3   |    |     | 6     | 03:00            | 04:00 | 1     | 0     |    | 1     |    |  |  |  |       |  |              |  |  |  |  |  |
| 01:00               | 0   | 0   |    |    | 0     | 13:00   | 3   | 8   |    |     | 11    | 04:00            | 05:00 | 1     | 0     |    | 1     |    |  |  |  |       |  |              |  |  |  |  |  |
| 01:15               | 0   | 0   |    |    | 0     | 13:15   | 6   | 3   |    |     | 9     | 05:00            | 06:00 | 7     | 1     |    | 8     |    |  |  |  |       |  |              |  |  |  |  |  |
| 01:30               | 0   | 0   |    |    | 0     | 13:30   | 3   | 2   |    |     | 5     | 06:00            | 07:00 | 32    | 1     |    | 33    |    |  |  |  |       |  |              |  |  |  |  |  |
| 01:45               | 0   | 0   |    |    | 0     | 13:45   | 2   | 5   |    |     | 7     | 07:00            | 08:00 | 5     | 9     |    | 14    |    |  |  |  |       |  |              |  |  |  |  |  |
| 02:00               | 0   | 0   |    |    | 0     | 14:00   | 4   | 6   |    |     | 10    | 08:00            | 09:00 | 16    | 9     |    | 25    |    |  |  |  |       |  |              |  |  |  |  |  |
| 02:15               | 0   | 0   |    |    | 0     | 14:15   | 5   | 4   |    |     | 9     | 09:00            | 10:00 | 11    | 12    |    | 23    |    |  |  |  |       |  |              |  |  |  |  |  |
| 02:30               | 1   | 0   |    |    | 1     | 14:30   | 2   | 3   |    |     | 5     | 10:00            | 11:00 | 11    | 28    |    | 39    |    |  |  |  |       |  |              |  |  |  |  |  |
| 02:45               | 0   | 0   |    |    | 0     | 14:45   | 5   | 4   |    |     | 9     | 11:00            | 12:00 | 10    | 20    |    | 30    |    |  |  |  |       |  |              |  |  |  |  |  |
| 03:00               | 0   | 0   |    |    | 0     | 15:00   | 9   | 1   |    |     | 10    | 12:00            | 13:00 | 10    | 16    |    | 26    |    |  |  |  |       |  |              |  |  |  |  |  |
| 03:15               | 1   | 0   |    |    | 1     | 15:15   | 4   | 4   |    |     | 8     | 13:00            | 14:00 | 14    | 18    |    | 32    |    |  |  |  |       |  |              |  |  |  |  |  |
| 03:30               | 0   | 0   |    |    | 0     | 15:30   | 3   | 4   |    |     | 7     | 14:00            | 15:00 | 16    | 17    |    | 33    |    |  |  |  |       |  |              |  |  |  |  |  |
| 03:45               | 0   | 0   |    |    | 0     | 15:45   | 5   | 5   |    |     | 10    | 15:00            | 16:00 | 21    | 14    |    | 35    |    |  |  |  |       |  |              |  |  |  |  |  |
| 04:00               | 0   | 0   |    |    | 0     | 16:00   | 5   | 3   |    |     | 8     | 16:00            | 17:00 | 9     | 15    |    | 24    |    |  |  |  |       |  |              |  |  |  |  |  |
| 04:15               | 0   | 0   |    |    | 0     | 16:15   | 0   | 5   |    |     | 5     | 17:00            | 18:00 | 9     | 19    |    | 28    |    |  |  |  |       |  |              |  |  |  |  |  |
| 04:30               | 1   | 0   |    |    | 1     | 16:30   | 2   | 3   |    |     | 5     | 18:00            | 19:00 | 10    | 9     |    | 19    |    |  |  |  |       |  |              |  |  |  |  |  |
| 04:45               | 0   | 0   |    |    | 0     | 16:45   | 2   | 4   |    |     | 6     | 19:00            | 20:00 | 0     | 3     |    | 3     |    |  |  |  |       |  |              |  |  |  |  |  |
| 05:00               | 0   | 0   |    |    | 0     | 17:00   | 5   | 4   |    |     | 9     | 20:00            | 21:00 | 5     | 0     |    | 5     |    |  |  |  |       |  |              |  |  |  |  |  |
| 05:15               | 0   | 1   |    |    | 1     | 17:15   | 1   | 6   |    |     | 7     | 21:00            | 22:00 | 3     | 3     |    | 6     |    |  |  |  |       |  |              |  |  |  |  |  |
| 05:30               | 2   | 0   |    |    | 2     | 17:30   | 2   | 2   |    |     | 4     | 22:00            | 23:00 | 4     | 1     |    | 5     |    |  |  |  |       |  |              |  |  |  |  |  |
| 05:45               | 5   | 0   |    |    | 5     | 17:45   | 1   | 7   |    |     | 8     | 23:00            | 00:00 | 6     | 0     |    | 6     |    |  |  |  |       |  |              |  |  |  |  |  |
| 06:00               | 4   | 0   |    |    | 4     | 18:00   | 2   | 1   |    |     | 3     | STATISTICS       |       |       |       |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| 06:15               | 4   | 1   |    |    | 5     | 18:15   | 5   | 4   |    |     | 9     |                  | NB    | SB    | EB    | WB | TOTAL |    |  |  |  |       |  |              |  |  |  |  |  |
| 06:30               | 19  | 0   |    |    | 19    | 18:30   | 1   | 2   |    |     | 3     | Peak Period      | 00:00 | to    | 12:00 |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| 06:45               | 5   | 0   |    |    | 5     | 18:45   | 2   | 2   |    |     | 4     | Volume           | 96    | 81    |       |    | 177   |    |  |  |  |       |  |              |  |  |  |  |  |
| 07:00               | 2   | 1   |    |    | 3     | 19:00   | 0   | 2   |    |     | 2     | Peak Hour        | 5:45  | 10:00 |       |    | 10:00 |    |  |  |  |       |  |              |  |  |  |  |  |
| 07:15               | 1   | 2   |    |    | 3     | 19:15   | 0   | 0   |    |     | 0     | Peak Volume      | 32    | 28    |       |    | 39    |    |  |  |  |       |  |              |  |  |  |  |  |
| 07:30               | 1   | 5   |    |    | 6     | 19:30   | 0   | 1   |    |     | 1     | Peak Hour Factor | 0.421 | 0.636 |       |    | 0.750 |    |  |  |  |       |  |              |  |  |  |  |  |
| 07:45               | 1   | 1   |    |    | 2     | 19:45   | 0   | 0   |    |     | 0     | Peak Period      | 12:00 | to    | 00:00 |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| 08:00               | 5   | 2   |    |    | 7     | 20:00   | 2   | 0   |    |     | 2     | Volume           | 107   | 115   |       |    | 222   |    |  |  |  |       |  |              |  |  |  |  |  |
| 08:15               | 1   | 3   |    |    | 4     | 20:15   | 1   | 0   |    |     | 1     | Peak Hour        | 14:15 | 17:00 |       |    | 15:00 |    |  |  |  |       |  |              |  |  |  |  |  |
| 08:30               | 7   | 4   |    |    | 11    | 20:30   | 1   | 0   |    |     | 1     | Peak Volume      | 21    | 19    |       |    | 35    |    |  |  |  |       |  |              |  |  |  |  |  |
| 08:45               | 3   | 0   |    |    | 3     | 20:45   | 1   | 0   |    |     | 1     | Peak Hour Factor | 0.583 | 0.679 |       |    | 0.875 |    |  |  |  |       |  |              |  |  |  |  |  |
| 09:00               | 3   | 1   |    |    | 4     | 21:00   | 1   | 0   |    |     | 1     | Peak Period      | 07:00 | to    | 09:00 |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| 09:15               | 6   | 2   |    |    | 8     | 21:15   | 1   | 2   |    |     | 3     | Volume           | 21    | 18    |       |    | 39    |    |  |  |  |       |  |              |  |  |  |  |  |
| 09:30               | 1   | 4   |    |    | 5     | 21:30   | 1   | 0   |    |     | 1     | Peak Hour        | 8:00  | 7:30  |       |    | 8:00  |    |  |  |  |       |  |              |  |  |  |  |  |
| 09:45               | 1   | 5   |    |    | 6     | 21:45   | 0   | 1   |    |     | 1     | Peak Volume      | 16    | 11    |       |    | 25    |    |  |  |  |       |  |              |  |  |  |  |  |
| 10:00               | 7   | 3   |    |    | 10    | 22:00   | 2   | 0   |    |     | 2     | Peak Hour Factor | 0.571 | 0.550 |       |    | 0.568 |    |  |  |  |       |  |              |  |  |  |  |  |
| 10:15               | 1   | 7   |    |    | 8     | 22:15   | 0   | 0   |    |     | 0     | Peak Period      | 16:00 | to    | 18:00 |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| 10:30               | 2   | 11  |    |    | 13    | 22:30   | 1   | 0   |    |     | 1     | Volume           | 18    | 34    |       |    | 52    |    |  |  |  |       |  |              |  |  |  |  |  |
| 10:45               | 1   | 7   |    |    | 8     | 22:45   | 1   | 1   |    |     | 2     | Peak Hour        | 16:30 | 17:00 |       |    | 17:00 |    |  |  |  |       |  |              |  |  |  |  |  |
| 11:00               | 4   | 2   |    |    | 6     | 23:00   | 1   | 0   |    |     | 1     | Peak Volume      | 10    | 19    |       |    | 28    |    |  |  |  |       |  |              |  |  |  |  |  |
| 11:15               | 1   | 7   |    |    | 8     | 23:15   | 3   | 0   |    |     | 3     | Peak Hour Factor | 0.500 | 0.679 |       |    | 0.778 |    |  |  |  |       |  |              |  |  |  |  |  |
| 11:30               | 4   | 8   |    |    | 12    | 23:30   | 1   | 0   |    |     | 1     |                  |       |       |       |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| 11:45               | 1   | 3   |    |    | 4     | 23:45   | 1   | 0   |    |     | 1     |                  |       |       |       |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| TOTALS              | 96  | 81  | 0  | 0  | 177   | TOTALS  | 107 | 115 | 0  | 0   | 222   |                  |       |       |       |    |       |    |  |  |  |       |  |              |  |  |  |  |  |
| SPLIT %             | 54% | 46% | 0% | 0% | 44%   | SPLIT % | 48% | 52% | 0% | 0%  | 56%   |                  |       |       |       |    |       |    |  |  |  |       |  |              |  |  |  |  |  |





## Napa County Left Turn Lane Warrant Graph

