

“E”

## Sewer Feasibility Report

## MEMORANDUM

**To:** Shea Rhoda

**From:** Paul Schneider, P.E.

**Date:** 03/14/2025

**Re:** **Napa Gateway Sewer Feasibility Report**



### I. Introduction

Our office has been retained to document the design and operational parameters for the proposed wastewater disposal system for the Gateway Building. The facility is proposing to allow for wine production during peak season which will generate process waste water.

### II. Employees, Visitors, and Wine Production

The facility does not anticipate visitors as there is no retail operation planned. Wastewater generation is based on the County of Napa use table of 15 gpd per employee. The maximum number of employees onsite is 15, however this waste does not enter the hold and haul system. The facility is proposing to produce 250,000 gallons of wine per year, which according to Exhibit A generates 450,000 gallons of process waste water at peak daily flow of 8,250 gallons.

### III. Proposed Hold and Haul System

The project proposes to utilize a hold and haul system to dispose of the process wastewater. The system will have the following design elements:

- Odor control and venting
- High water alarm set to 70% of the full volume
- 7 day peak flow capacity
- Tanks will be below grade Xerxes tanks
- Manway access will be elevated 2" minimum above grade to prevent intake of water and will be H2O traffic rated

| <b>Stockton</b>  | <b>San Jose</b>  | <b>Sacramento</b>   | <b>Modesto</b>   |
|--|--|---|--|
| 3428 Brookside Rd.,<br>Stockton, CA 95219<br>t: 209.943.2021 | 111 N. Market St., #300<br>San Jose, CA 95113<br>t: 408.754.2021 | 1164 National Dr., #20<br>Sacramento, CA 95825<br>t: 916.520.2777 | 100 Sycamore Ave, #100<br>Modesto, CA 95354<br>t: 209.762.3580 |

# MEMORANDUM

Gateway  
Napa, CA

Page 2 of 4



The anticipated total volume required is 8,250 gallons per day (gpd) for 7 days shown in Table A below:

| Table B: Available Capacity (gpd) |      |                    |
|-----------------------------------|------|--------------------|
| Process Waste (gpd)               | Days | Total Volume (gal) |
| 8,250                             | 7    | 57,750             |

Per Exhibit B the project proposes to install 60,000 gallons of waste storage capacity.

## IV. Conclusion

The projects hold and haul system has been designed per the County requirements and is a viable solution to hold up to 7 days of peak waste flow before operations have to cease.

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Gateway  
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Page 3 of 4



## Exhibit A: Industrial Water Demand Estimate

| Converter            | Tons/Cases/Gallons of Wine (input blue number)                          |                                    |       |                          |
|----------------------|---|------------------------------------|-------|--------------------------|
|                      | ENTER   | Cases                              | Tons  | Gallons of Finished Wine |
| Tons                 | 1   | 63                                 |       | 150                      |
| Cases                | 22575   | -                                  | 358.3 | 53729                    |
| Gallon finished Wine | 250,000   | 105042                             | 1667  | -                        |
| Total WW/year        | 3650000   | 383403                             | 6086  | 912500                   |
|                      |   |                                    |       |                          |
|                      |   |                                    |       |                          |
|                      |   |                                    |       |                          |
| 105042               | Cases/Year  |                                    |       |                          |
| 63                   | Cases/Ton   |                                    |       |                          |
| 2.38                 | Gal of Wine/Case  |                                    |       |                          |
| 4                    | Gal of PW:Wine Ratio  |                                    |       |                          |
| 45                   | % of Annual PW Used During Vintage                                      |                                    |       |                          |
| 60                   | Days of Vintage   |                                    |       |                          |
| 305                  | Days/Year   |                                    |       |                          |
| 1.1                  | SF for Peak/Max Daily Flow  |                                    |       |                          |
|                      |   |                                    |       |                          |
| 250000               | Total Finished Wine/Year, in Gallons                                    |                                    |       |                          |
| 1000000              | Total PW/Year, in Gallons   |                                    |       |                          |
| 450000               | Total Volume of Wastewater Generated During Vintage, in Gallons         |                                    |       |                          |
| 7500                 | Average Daily Wastewater Production During Vintage, in Gallons          |                                    |       |                          |
| 1803                 | Average Daily Wastewater Production During Rest of the Year, in Gallons |                                    |       |                          |
| 8250                 | Peak Daily Flow During Vintage, in Gallons                              | (System Size Based On This Number) |       |                          |
| 16500                | Recommended EQ Capacity (2-Day Minimum), in Gallons                     |                                    |       |                          |

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Page 4 of 4



## Exhibit B: Hold and Haul Schematic

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**SIEGFRIED**  
3428 Brookside Road  
Stockton, California 95219  
209-943-2021  
Fax: 209-942-0214  
www.siegfriedeng.com

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REVISIONS  
No. Date Description

PROJECT

**NAPA GATEWAY ROAD**

GATEWAY ROAD  
NAPA, CALIFORNIA



SHEET TITLE

**UTILITY PLAN**

Proj Mgr PJS  
Drawn by KJG  
Date 03/14/2025  
Job No. 23347  
SHEET:  
**C6.0**  
—OF: 1

UTILITY LEGEND

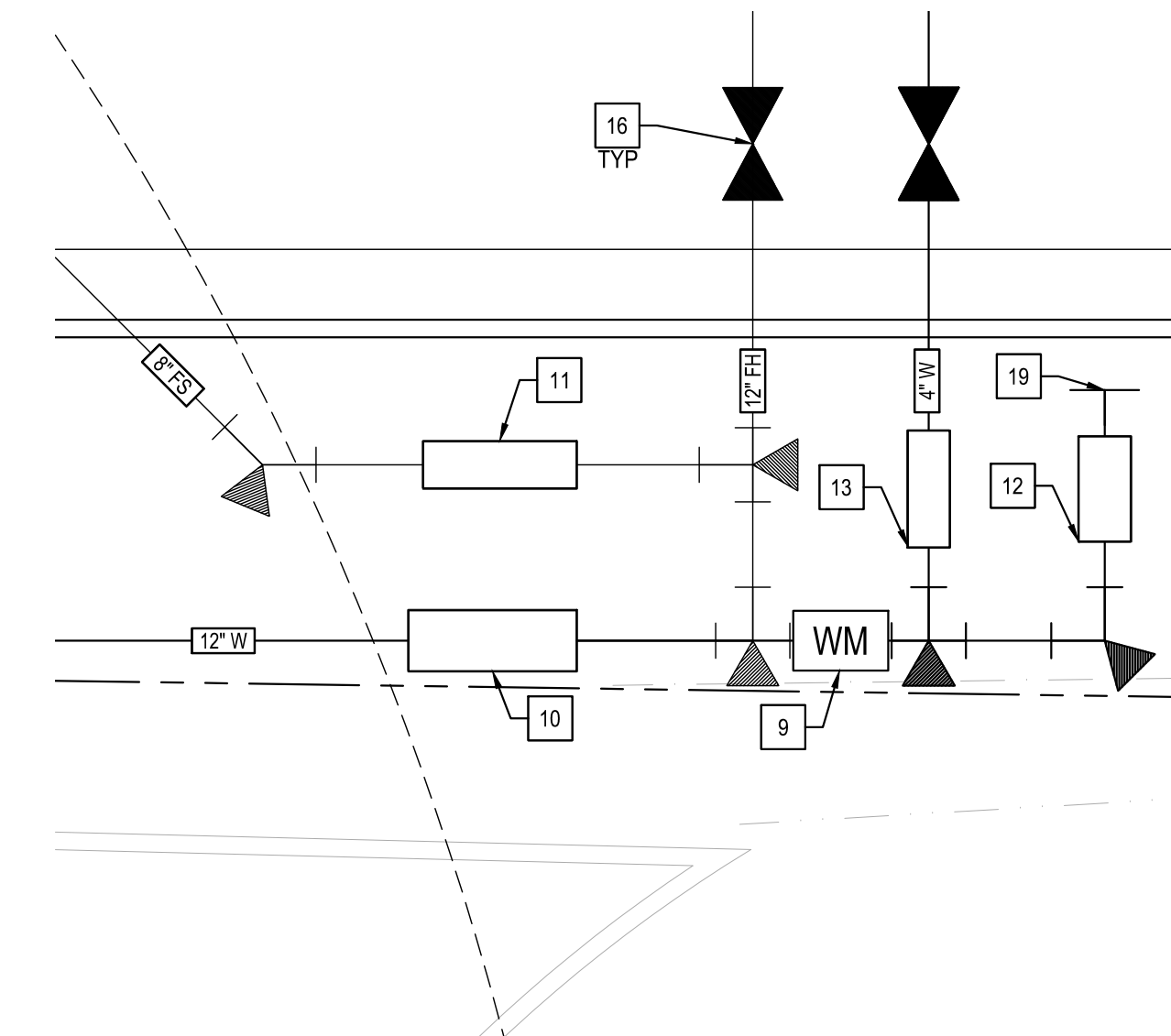
- PROPOSED MAINTENANCE HOLE
- PROPOSED STORM CATCH BASIN
- PROPOSED AREA DRAIN
- PROPOSED SANITARY SEWER CLEANOUT
- ⋈ GATE VALVE
- ⌒ PROPOSED FIRE DEPARTMENT CONNECTION
- ⊗ PROPOSED FIRE HYDRANT
- SS— PROPOSED SANITARY SEWER LINE
- SD— PROPOSED STORM DRAIN LINE
- FS— PROPOSED FIRE SERVICE LINE
- SD— EXISTING STORM DRAIN LINE
- SS— EXISTING SANITARY SEWER LINE
- GAS— EXISTING GAS LINE
- W— EXISTING WATER LINE
- E— EXISTING ELECTRICAL CONDUIT

UTILITY NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY OF THE EXISTING UTILITIES, INCLUDING, BUT NOT LIMITED TO UTILITY BOXES, THAT ARE FOUND TO BE BROKEN, CRACKED, OR OTHERWISE DAMAGED.
- ALL UTILITY BOXES AND MAINTENANCE HOLES SHALL BE PROTECTED AND ADJUSTED TO FINISH GRADE, UNLESS OTHERWISE NOTED.

UTILITY KEY NOTES

- CONNECT TO EXISTING WATER MAIN
- CONNECT TO EXISTING STORM DRAIN MANHOLE
- INSTALL STORM DRAIN MANHOLE
- INSTALL STORM DRAIN DRAIN INLET
- INSTALL SANITARY SEWER MANHOLE
- INSTALL SANITARY SEWER CLEANOUT
- INSTALL FIRE DEPARTMENT CONNECTION
- INSTALL FIRE HYDRANT
- INSTALL WATER METER
- INSTALL FIRE HYDRANT DOUBLE DETECTOR CHECK ASSEMBLY
- INSTALL FIRE SPRINKLER DOUBLE DETECTOR CHECK ASSEMBLY
- INSTALL LANDSCAPE BACKFLOW PREVENTER
- INSTALL DOMESTIC WATER BACKFLOW PREVENTER
- DOMESTIC WATER BUILDING POINT OF CONNECTION, SEE PLUMBING PLANS FOR CONTINUATION
- SANITARY SEWER BUILDING POINT OF CONNECTION
- INSTALL GATE VALVE
- INSTALL STORM DRAIN STUB FOR FUTURE USE
- FIRE SPRINKLER BUILDING POINT OF CONNECTION
- LANDSCAPE POINT OF CONNECTION
- STORM DRAIN OUTFALL
- INSTALL STORM DRAIN DRAIN INLET WITH SOLID TOP
- INDUSTRIAL WASTEWATER HOLD TANK
- EQUIPMENT PAD



**1 WATER CONNECTION DETAIL**  
1" = 5'

