



Prepared for:
City of Benicia

Land Use Permit Application Crude by Rail Project

Valero Benicia Refinery
Benicia, California

December 2012

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1.0 INTRODUCTION

1.1 Project Overview

Valero owns and operates an oil refinery located in Benicia, California. Valero is proposing the Crude by Rail Project (“project”) to allow the refinery to receive a larger proportion of its crude oil deliveries by railcar.

1.2 Project Purpose

Valero currently processes crude oil received by pipeline and by marine vessels. The purpose of this project is to allow Valero to receive a larger proportion of its crude oil by railcar, up to 70,000 barrels per day of North American crude. The project would not increase the refinery’s total crude oil throughput or result in an increase in the production of existing products or byproducts because the increase in crude oil deliveries by railcar would be offset by a corresponding decrease in crude oil deliveries by marine vessels. No modifications would be made to refinery process equipment and there would be no net increase in operational emissions.

2.0 USE PERMIT APPLICATION

2.1 Use Permit Application Checklist

See following pages.

2.2 Planning Application Form

See following pages.



Community Development Department Planning Division

Project Address: Valero Refinery, 3400 East Second St. Date: 12/2012 Planner: Charlie Knox
Benicia, CA 94510

For Applicant's Use	For Staff Use	Use Permit Application Checklist Please note: Your project planner may require additional information depending on the specifics of your project.	Use Permit Type			
			Temp	Day care	Staff	PC
			Requirement			
X		Application Form	(Yes)			
X		Project Summary Sheet	No	(Yes)		
X		Environmental Checklist	Depending on Project			
		Mailing Labels	No	Yes (See <u>Mailing Notice</u> handout)		
		Filing fee Write amount here: \$2,730	(Yes) (see <u>Fee Schedule</u>)			
For the following items, see <u>Submittal Standards</u> sheet						
X		Written Statement	(Yes)			
X		Site Plan	6 sets			
		Elevations and Architectural Plans Parking and Circulation Plan Landscaping Plan Lighting Plan Floor Plan (Plans may be combined with the site plan or may be provided on separate sheets)	6 sets, if required (Depending upon project)			
X		Photographs (1 set printed and 1 set electronic)	Yes	No	(Yes)	
		Additional documents and materials, as needed Architectural historian's report Historic photographs and/or maps Title report Traffic report	Depending upon project			
		Additional Plans Required Subsequent to Initial Submittal Plans – If revised, but needs further staff review: Plans – Ready for Commission review:	6 sets 1 set 11" x 17" size 1 full-size set, rolled 7 full-size sets, folded			





250 East L Street • Benicia, CA 94510 • (707) 746-4280 • Fax (707) 747-1637

Public Works & Community Development Department
Planning Division

Staff Use
30-Day Review:

PLANNING APPLICATION FORM

** Applications are only accepted between the hours of 8:30 – 9:30 a.m. and 1:00 – 2:00 p.m.
To schedule an appointment outside of these hours, please call 707-746-4280.

1. Type of Application. Check all applicable items below.

- Use Permit (circle: PC Staff, Day Care, Temp)
Design Review (circle: PC, HPRC, Staff, Minor)
Variance (circle: PC, SFR)
Planned Development
General Plan amendment
Zoning Text amendment
Zone Change/Overlay District
Extension of Approval (write Planning Application # under Other)
Revision to approved project (write Planning Application # under Other)
Other
Check here if project is located within 100 feet of the shoreline (mean high tide) (Requires BCDC review)
Check here if there will be any sale/service of alcoholic beverages. (Please describe below)

2. Property Information.

Address/location: 3400 East Second Street, Benicia, CA 94510
APN(s) 0080110480 Parcel area (sq. ft. or ac) 14,143,496 sq. ft.

3. Project Description. Describe the type of development, use being proposed, exterior alterations, need for variance, etc. Attach additional sheets if necessary.

Crude by Rail project. See attachments for details.

4. Contact Information. Check the [] to indicate the primary contact.

- Property Owner
Name John Hill, Vice President & General Manager Organization Valero
Mailing address 3400 E. Second St., Benicia, CA 94523
Phone 707-745-7613 Fax 707-745-7452 E-mail john.hill@valero.com
Applicant, if different from owner
Name Don Cuffel Organization Valero
Mailing address 3400 E. Second St., Benicia, CA 94510
Phone 707-745-7545 Phone (2)
E-mail Donald.cuffel@valero.com Fax 707-745-7600
Architect/Engineer/Contractor
License # License Type (Arch, Eng, Contr, etc.)
Business RDS Engineering Individual's Name Keith Johnston
Mailing address 750 Pearl Street, Beaumont, TX 77701
Phone 409-832-7827 Fax 409-727-3426 E-mail

5. Signatures. Applicant and Property Owner must sign on reverse side.

Table with 4 columns: For Staff Use, Appl. #(s), Date Filed, Total Fees Paid. Rows include Date Entered, Fee Breakdown, GP designation, Entered By, Receipt #, Current zoning, Historical Dist./designation.

DESIGNATION OF A REPRESENTATIVE FORM

Applicants or property owners who desire to authorize a representative or representatives to act on their behalf in conjunction with this application shall provide the following information:

Name of authorized representative(s): _____

Address of representative(s): _____

Phone number of representative(s): _____

The above named representative(s) is authorized as follows:

File any and all papers in conjunction with the application including the signing of the application. ___ (initial)

Speak on behalf of, or representing, the [choose owner and/or applicant and fill in blank] _____ at any staff meeting and/or public hearing. _____(initial)

Sign any and all papers on my behalf, with the exception of the application form. . _____(initial)

This authorization is valid until revoked in writing and filed with the Community Development Department.

Owner/ Applicant (specify)

Date

2.3 Project Summary Sheet

2.3.1 Project Components

The project would consist of the following primary components:

- Changing an existing external floating roof tank to crude oil service from JP4 service (Valero Tank No. TK-1776 / Bay Area Air Quality Management District Source No. S-97).
- Installing one offloading rack capable of offloading two parallel rows of crude oil rail cars and transferring crude oil to TK-1776.
- Constructing two offloading rail spurs, a parallel engine runaround track, and a “wye connector” track on refinery property to allow receipt of rail cars at the offloading racks. The rail spurs and parallel engine runaround track would be constructed between the east side of the lower tank farm and Sulphur Springs Creek. The wye connector track would be constructed on the south side of the intermediate tank farm and be used for moving empty rail cars between the offloading rail spurs and the existing upper coke silo track.
- Installing approximately 4,000 feet of 12-inch diameter crude oil pipeline and associated components and infrastructure between the offloading racks and TK-1776 (S-97).
- Relocating approximately 1,500 feet of tank farm dike wall and an existing firewater pipeline to accommodate the new rail tracks.
- Increasing the volume of crude oil received by rail (up to 100 rail cars per day, equivalent to approximately 70,000 barrels per day of crude oil). Overall there would be no net increase in crude oil deliveries because railcar crude oil deliveries would be offset by a corresponding decrease in marine vessel crude oil deliveries.

The project would require up to two additional employees or contractors. The vehicle traffic associated with the project would be one or two additional locomotive trips per day with 100 or 50 railcars, respectively. The locomotive trips are scheduled for around noon each day, but this could change for the project as potentially required for mitigation of local traffic impacts.

Construction of the new rail spurs and runaround track would involve some dust generation and noise and odors associated with minor amounts of heavy construction equipment, but this would be temporary. The project involves bringing in more crude via rail, but also decreases the amount of crude brought in by ship. There would be no net increase in hazardous materials involved with this project, but the location would be different, i.e. at the rail unloading rack versus the dock.

2.3.2 Project Schedule

Valero plans to begin construction in mid-2013 and to commence operating the rail offloading facility in early 2014.

2.4 Environmental Checklist

See following page.



Community Development Department
Planning Division

ENVIRONMENTAL CHECKLIST FORM

1. Property Information.

Address/location Valero Refinery, 3400 East Second Street, Benicia, CA 94510

APN(s) 0080110480 Parcel area (sq. ft. or ac) 14,143,496 sq. ft

Other permits/approvals required for this project (federal, state, regional, etc.)

BAAQMD – Authority to Construct

City of Benicia – Use Permit, Grading Permit, Building Permit

CALTRANS – Encroachment Permit

2. Project Information. Indicate which of the following types of impacts may be applicable to or generated by the project. Discuss below all items checked "Yes" or "Maybe". Attach additional sheets if necessary.

Table with 4 columns: Type of Impact, Yes, Maybe, No. Rows include: Change in existing features of any bay, tidelands, beaches, lakes or hills, or substantial alteration of ground cover; Change in scenic views or vistas from existing residential areas or public lands or roads; Change in pattern, scale, or character of general area of project; Creation of significant amounts of solid waste or litter; Change in dust, ash, smoke, fumes, or odors in vicinity; Change in bay, lake, stream, or groundwater quality or quantity, or alteration of existing drainage patterns; Change in existing noise or vibration levels in the vicinity; Site on filled land or slope of 10 percent or more; Use or disposal of potentially hazardous materials (toxic substances, flammables, explosives, etc.); Substantial change in demand for municipal services (police, fire, water, etc.); Substantial increase in fossil fuel consumption (oil, natural gas, etc.); Relationship to a larger project or series of projects; Construction in a floodplain.

Use this space to discuss items checked "Yes" or "Maybe" (attach additional sheet if necessary)

SEE ATTACHED SHEET.

3. Applicant's Signature. By signing below, I hereby certify that the information I am submitting is complete and accurate to the best of my knowledge. I understand that any misstatement or omission of the requested information may cause unforeseen delays in the processing of my application.

Applicant _____ Date _____

For Staff Use: Appl. #(s) _____ Date Filed _____

City of Benicia Environmental Checklist Form (7/04)

Environmental Checklist

e. Change in dust, ash, smoke, fumes, or odors in vicinity.

The proposed Project is anticipated to generate dust during construction activities, particularly during the relocation of the tank dike walls. This dust would be mitigated, as required by the BAAQMD, by applying Basic Construction Mitigation Measures, such as watering areas of bare soil several times per day. Operational emissions would occur primarily due to additional locomotive engines delivering rail cars carrying crude oil to the Benicia refinery. However, since no increase in the refinery's crude oil processing capacity will be permitted, less crude oil would be delivered by marine shipments. As such, marine vessel emissions from crude oil deliveries would be reduced and are expected to cause a net decrease in air pollutant emissions. Valero will document the change in air pollutant emissions and seek approval for this project from the BAAQMD consistent with BAAQMD permitting requirements, rules and regulations.

f. Change in bay, lake, stream, or groundwater quality or quantity, or alteration of existing drainage patterns

Modifications to groundwater monitoring wells are being worked in parallel with this application, as they may need to be relocated between Sulphur Creek and the final proposed structure.

g. Change in existing noise or vibration levels in the vicinity.

Construction activities would result in temporary increases in noise and vibration in the vicinity. Operation of the rack will result in more frequent train traffic into the refinery and would likely result in increased periods of noise and vibration. However, the construction of this project will not involve pile driving for structures.

h. Site on filled land or slope of 10 percent or more.

The Valero Refinery is terraced with facilities located at multiple elevations. The rail unloading rack and track would be on a lower-lying area that borders the west side of Sulphur Creek. However, the departure track and wye connector and connecting pipelines to TK-1776 would cross into different terraces, and thus would be sloped.

i. Use or disposal of potentially hazardous materials (toxic substances, flammables, explosives, etc.).

The proposed Project would involve transporting additional crude oil by rail, to the Valero Refinery and converting use of an existing storage tank from JP4 to crude oil service. Crude oil is considered a hazardous substance. However, the Valero Refinery already handles crude oil, and the proposed Project would not result in a net increase in the amount of crude oil stored or processed at the Refinery.

2.5 Written Statement

Describe the proposed use, including:

1. Number of people involved (employees, clients, customers, etc.): **2 additional employees/contractors.**
2. Type of vehicle traffic (auto, truck, drop off, etc.): **locomotive/railcars**
3. Hours of operation (existing, proposed): **24 hours per day, 7 days per week, 365 days per year.**
4. Outdoor activities (storage, work areas, play areas, etc.): **rail unloading, crude storage and pumping, and pipeline transport.**
5. Purpose of new structures (if any), length of time they will be used on the site, and whether the structures will be permanent or temporary (Note: Permanent structures must undergo the normal design review process for new structures): **rail offloading rack, pump, piping, and crude storage tank – these would be permanent structures.**
6. Description of the previous use of the site, if the proposed use is new: **refinery operations; no new proposed use of the site.**
7. Description of any lease controls or management programs that will ensure that the use will not be detrimental to surrounding uses in the area or to the City in general: **continued use of the existing refinery site.**
8. Odors, noise, dust or glare involved: **see item (e) of the Environmental Checklist above.**
9. Hazardous or volatile materials or chemicals involved: **see item (i) of the Environmental Checklist above.**

2.6 Elevations and Architectural Plan

2.6.1 Elevation

The refinery facilities are constructed at multiple elevations located on an east-facing, 200-foot bedrock hill located at the northwestern edge of the refinery. Along the southwestern side of the refinery, a south-to-southeast trending alluvial valley and several east-to-west trending tributary valleys dissect this hill. At the eastern side of the refinery, the hill slopes downward to a broader, relatively flat south-to-southwest trending alluvial valley at an elevation of 10 to 20 feet above mean sea level.

The main refinery area is located at the base of the 200-foot hill and slopes downward to the southeast. Elevation ranges from 80 feet to 10 feet across the main refinery area.

The proposed unloading rack and tracks on the east side of the main refinery area would be at an elevation of approximately 10 feet, and would connect to the departure track on the west side of the main refinery area, which rises to elevations greater than 100 feet.

2.6.2 Architectural Plan

The architectural plot plan and plans depicting the rail unloading pumps and rack are shown in Figure 3.

2.7 Parking and Circulation Plan

The construction contractor parking for the Project would be in the two existing lots on the south side of the main refinery area (Figure 4). No new parking areas would be required.

2.8 Lighting Plan

See Figure 5 Lighting Plan.

2.9 Photographs

See following pages.



PHOTOGRAPH 1
View NW, Tank Farm Avenue A

ERM

Valero Refinery
Benicia, CA



PHOTOGRAPH 2

View SE along Avenue A (Sulphur Springs Creek on left, Lower Tank farm on right)

ERM	<i>Valero Refinery Benicia, CA</i>
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PHOTOGRAPH 3

View NW. Fire water pipeline, earthen Lower tank farm dike on left, Sulphur Springs Creek on right.

ERM	<i>Valero Refinery Benicia, CA</i>
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PHOTOGRAPH 4

View NW. Lower tank farm earthen dike, fire water pipeline.

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 5

View NW from Lower tank farm earthen dike

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 6
View S from Lower tank farm earthen dike.

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 7
View N along Avenue A.

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 8

View NW from Avenue A. Crude pipelines (yellow), firewater pipeline (red), Tank 1720 (center).

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 9

View NW from Avenue A. Crude pipelines, Tank 1739.

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 10

View SE. Crude pipeline, firewater pipeline, 9th Street, Tank 1820, railcars on existing rail spur

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 11

View S. Firewater pipeline, 9th Street, Tank 1820, railcars on existing rail spur.

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 12

View E. Existing LPG loading rack and rail spurs

ERM

*Valero Refinery
Benicia, CA*



PHOTOGRAPH 13

View SE on Avenue A. Intermediate tank farm far upper right.

ERM	<i>Valero Refinery</i> <i>Benicia, CA</i>
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2.10 Traffic Report

The proposed project would affect the railroad crossing at Park Road near Bayshore. In 2002, ESA prepared a traffic study associated with the Valero Improvement Project (VIP). The discussion of this study within the EIR did not mention Park Road specifically as a potential impact location. Since the concern with the proposed project is at Park Road, information was obtained from the City of Benicia traffic engineers regarding the current Level of Service (LOS) of Park Road near the railroad tracks into the refinery, which was found to be LOS B.

A traffic study is planned as part of the proposed project to assess current baseline traffic conditions and focus on impacts of the rail crossing at Park Road near Bayshore.

Figures

Figure 1 Site Plan

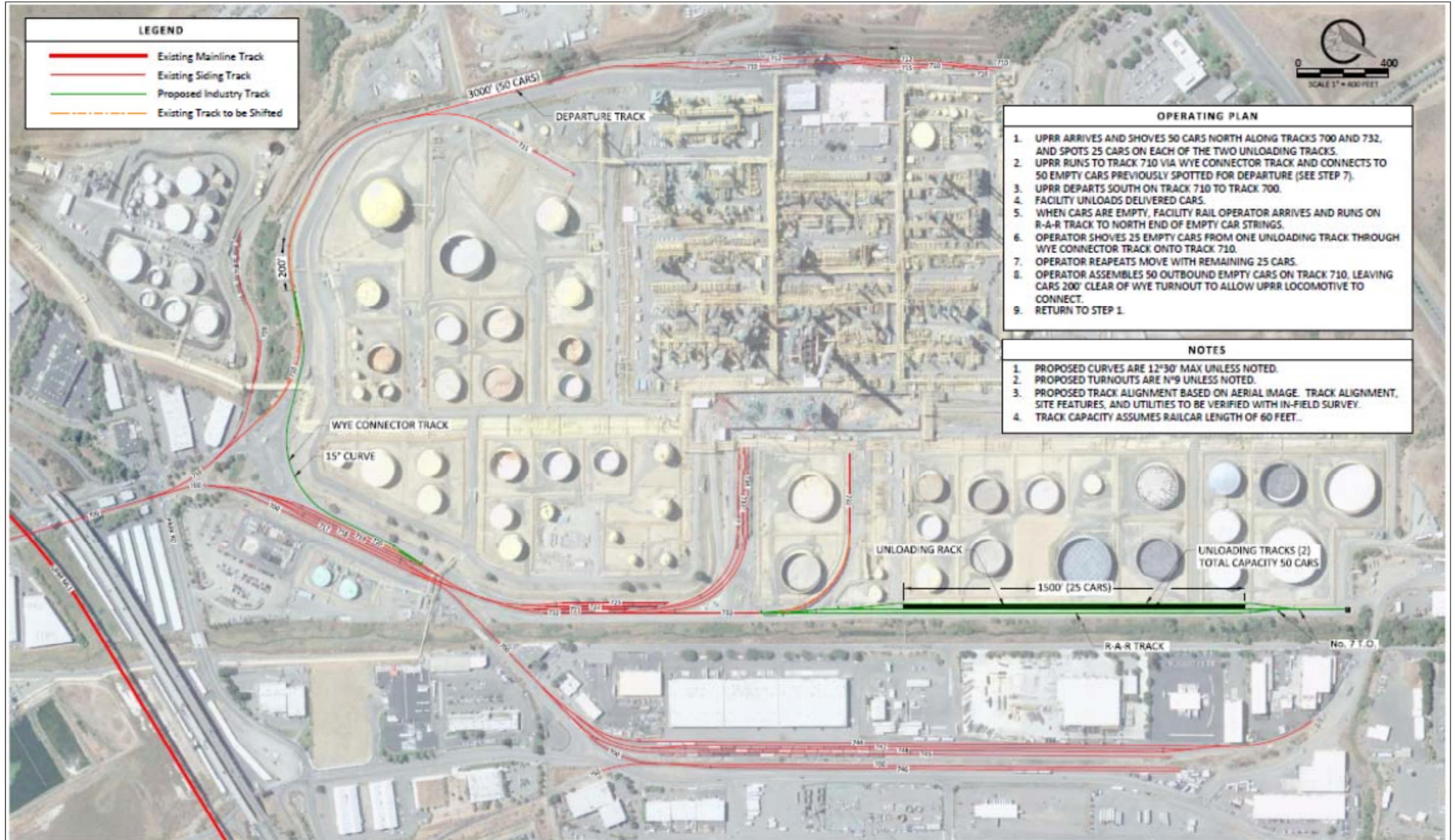


Figure 2 Facility Wide Plan



0 0.125 0.25 0.5
Miles

Legend
— Property Boundary

Figure 2

Valero Refining Company - California
Property Boundary

Figure 3 Architectural Plot Plan

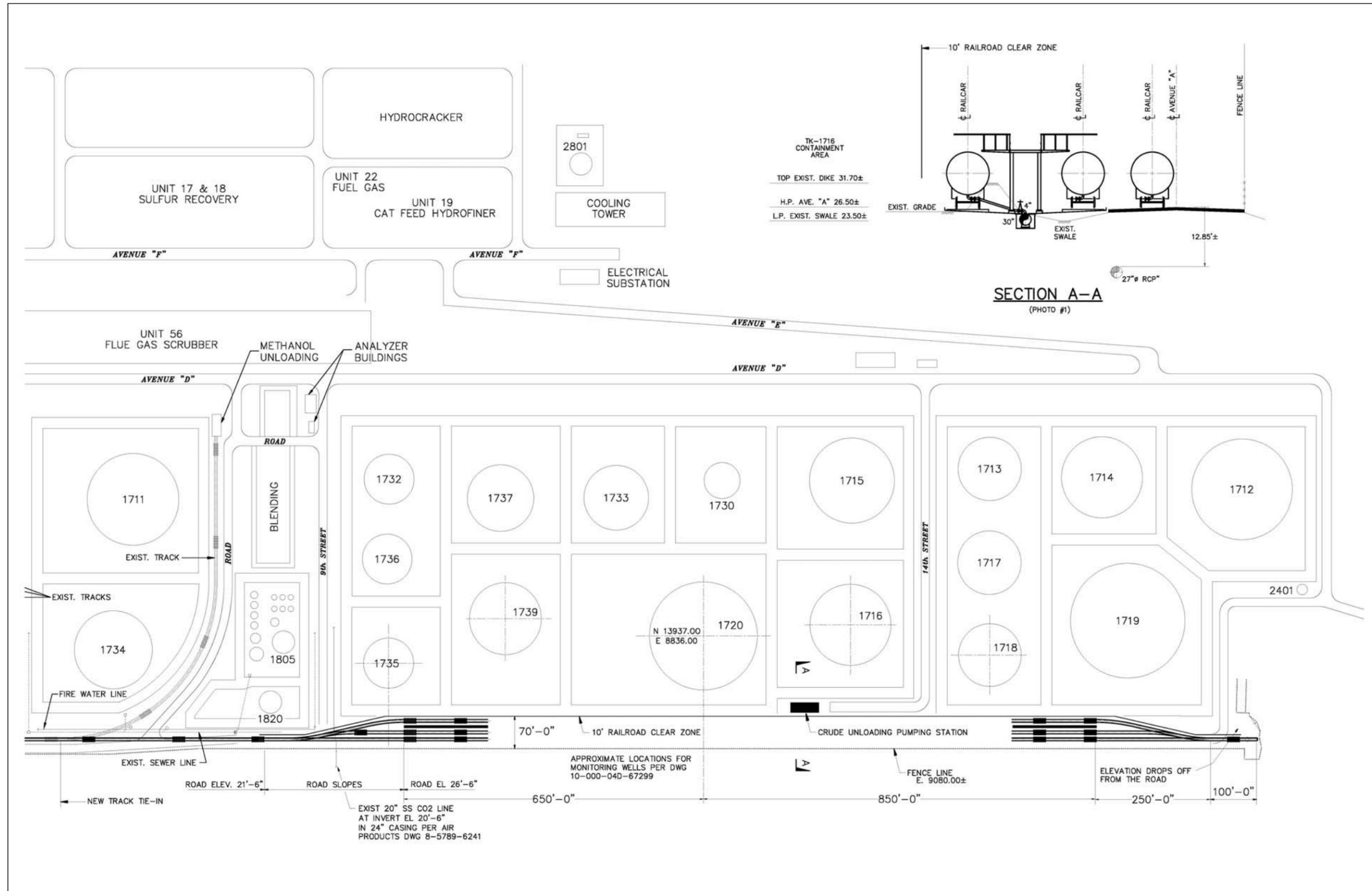


Figure 4 Construction Worker Parking Areas



Figure 5 Lighting Plan

