Project Execution Plan

Project: Pioneer Park

Date Prepared: 11/18/1998 1:31:04 PM

Workshop Date(s):
Workshop Location:

Attendees:

Project Description:
Development of an educational park area historic artifacts on the site of California's oldest oil refinery.

Project History:
Pioneer Refinery was initially built in 1876 to produce kerosene and grease from crude oil produced in Pico Canyon. The refinery operated for 12 years at a maximum capacity of 22,000 bbl per year.
In 1998 Chevron donated the site to the City of Santa Clarita and committed to spend an additional $15,000 toward the development of a park.

Miscellaneous:

A. Framing the Project

A1 Business Objectives

1. What are the Chevron corporate strategic intents that impact this project?

City of Santa Clarita
Preservation of areas history and history of petroleum
Create historic park district with recreations/re-enactments etc.
Education of the public on areas history.
Add to the tourism of the area.

Chevron
Protecting people & environment
Public perception/Good Public Relations
Educate the Public about the benefits and history of oil production and refining in California.
Optimum disposition non-producing properties.
Facilitate the Production Company's exit from the LA basin.

2. What are the Operating Company (OPCO) strategic objectives that impact this project?

Optimum disposition of non-producing properties.

3. What are the Strategic Business Unit (SBU) strategic objectives that may impact this project?

Not Applicable

4. How can this project support achievement of the Corporate strategic intents, and OPCO and Business Unit strategic objectives?

City of Santa Clarita
Addition to the City's historic district will enhance tourism.
Add another reason for people to visit the area.
Create a visual history of the oil development the community was founded on.
Chevron
Build goodwill and benefit the community.
Chevron's participation with the community

5. What is the economic justification for this project?

City of Santa Clarita
City may want to do a cost-benefit analysis of addition expenditures.
Additional work may be done on a volunteer basis.

New jobs when historic district is operational.
State and federal funding possible for some parts of the work.
Chevron
This project is a donation of time and resources. Economic justification is not required.

6. What are the economic sensitivities for the project?

City of Santa Clarita
This project will compete with other parks and historic restorations in the area for additional funding .
Chevron
$15,000 cap on expenditures.

7. How do marketing goals impact the project?

City of Santa Clarita
Enhance tourism to the area.
Chevron
Education of the public on the oil industry's role in the early development of California.

8. What other projects may impact - or be impacted by - this project?

City of Santa Clarita
Competition for funding may adversely impact this or other historic restorations.
Chevron
Chevron Production does not have any on-going projects that will be impacted. Poor relations with the community may impact other operating companies projects. A successful project may increase Chevron's participation in similar projects in other communities.

9. What tax-related financial strategies may impact project plans?

City of Santa Clarita
?
Chevron
Possible tax deductions due to the donation of resources to a non-profit organization. Reduction of tax liabilities due to the transfer of property that is no longer producing income.

10. What public relations policies, goals or practices may impact the project?

City of Santa Clarita

Make others in the nearby cities aware of the City of Santa Clarita. Make it a "fun" place to spend the day.
Provide safe educational opportunity for local schools.
Chevron
Project is being done with the participation of the public affairs department at the ElSegundo refinery.
Chevron hopes to maintain and enhance the positive working relationship with the City.
Enhance the perception the public has for Chevron, and the oil industry.
Provides opportunity to show how much the oil production practices have improved, especially environmentally.

11. What business objectives may pertain to the demonstration of new technology?

None

A2 Project Execution Objectives

1. How sensitive are the project's economics to cost?

City of Santa Clarita

Chevron
This is an expense project for restoration of a historic park. Project economics are not a factor. Chevron's expenditures are subject to a $15,000 cap.

2. What is the current cost estimate? What is the probability level and accuracy of this estimate?

Plans are not well enough defined to make any prediction of costs. Chevron USA will expend the first $15,000.00. This will include site layout, recommendations of next steps, and initial estimates.

3. What cashflow constraints may impact the project?

First $15,000 to be spent by Chevron. Funding is committed and available

Funding on remainder of park subject to City of Santa Clarita budget requirements. Funding on additional requirements uncertain. Some work may be done on a volunteer basis.

4. What are the strategic milestone dates that must be met?

Site presentation to City Council on 9/98
Preview plans with park division on 8/18/98
City and Chevron must agree on the project plan before expenditures on detailed design and construction can be made.
Per the transfer agreement, Chevron expenditures to be complete by April 99.
Park will not be fully open until structures are restored. Park my be opened for guided tours prior to being completely open.

5. How sensitive are the project's economics to the achievement of the overall schedule?

This is an expense project to Chevron. Normal economics cannot be calculated. The City of Santa Clarita may want to calculate cost/benefit ratios on additional funding.

6. What are the project's "drivers" that have the strongest impact on project success?

Some structures are still standing.
Structures have been restored to near original condition.
No accidents during construction.
Used by public.
Placards are still readable and standing.
Trails accessible and used.
Public is more aware of oil's history and positive contributions to California.
Park equipment is installed.
Park complies with applicable ADA requirements and other regulations.
Chevron
City and Chevron agree on the vision.
Increased understanding of the oil industry's history.

7. What new technology is involved, and what are the uncertainties associated with its use?

No new technology is currently anticipated.

8. What will be the nature and extent of pre-investment for additional, future capabilities?

9. What are the project's safety objectives, and what must be done to achieve them?

Compliance with building code for historic buildings.

Zero incidents during construction.

Close construction areas to public.
Trails well built and maintained.
Designs will be approved by the applicable agencies.
Safety plans will be prepared by all contractors. Any company under contract to Chevron will be subject to Chevron's safety policies as well as the city's policies.

10. What are the project's objectives for environmental compliance?

Construction and restoration activities will comply with all applicable regulations concerning air emissions, worker health & safety, debris disposal, etc. Threatened and Endangered species review should be done before construction activities begin.
Soil surface is not to be disturbed. No material, including soil, is to be removed from the site.

11. What Operations requirements impact the project's design or schedule?

City
Startup of the project does not need to be coordinated with any other projects.
Chevron
There are no Chevron production operations in the area.

12. What are the facility performance objectives that must be met?

Compliance with Americans with Disabilities Act where applicable, and with the Historic Building Code.
The public trail is a safe way for people to visit the site and learn about the history of oil refining.
Placards and educational information is available to the public.

13. What are the project's quality objectives?

Restoration of structures that will last if maintained.
Site map meets city requirements.
Provide visual and educational center for the public to learn about oil refining.

14. What is the potential for significant changes to any of the project's objectives?

Time required to bring site to completion.
Changing political and economic climate in City of Santa Clarita.
Extensive earthquake damage to remaining structures.
Competition for funding with other city projects.
Changes in funding available from state and federal sources.
Availability of volunteer resources.

15. What are the overall Project Management Objectives?

Chevron is to complete its expenditures prior to the April 1999 deadline.
To the extent possible, Chevron will provide a well planned project definition and partner with the city for its completion.

A3 Scope of Work

1. What are the physical deliverables that will be produced by the project?

Historic Park.
Restored artifacts.
Parking Lot ADA compliant.
Trails, Picnic benches, Scout camping area or meeting grounds.
Restrooms
Landscape
Fencing, Lighting
Signs indicating the function of structures and facilities.
Road into area.

2. What necessary or desirable physical deliverables are currently excluded from the project's scope of work?

Due to Chevron's funding commitment, most of the project will be completed by others.
Paving of road.
Parking lot is being build by other parities.

3. What are the major activities that are included in the project's scope of work?

Eagle Scout participation in trail building.
Layout./plot plan of park.
Design of signs.

Seismic analysis of structures still standing.
Rebuilding of stack and firebox.. - masonry inventory ready for review.
Restoration of Stills.
Park Division approval of recommendations.

4. What necessary or desirable activities are currently excluded from the project's scope of work?

5. What is a Work Breakdown Structure (WBS) for the project's scope of work?

6. What potential exists for significant changes to the scope of work?

Public and city input
Funding limitations

A4 CPDEP Implementation Plan

1. How will each CPDEP phase be carried out? Prepare a CPDEP Roadmap.

Associated File(s):
P:\Pioneer Park\cpdep.ppt

Cost Estimate Summary
Historic Pioneer Refinary
City of Santa Clarita

Task	Low Cost	Most Likely Cost	High Cost	Source
Preliminary Seismic Engineering	$ 1,000	$ 1,200	$ 3,000	Consultant verbal estimate
Seismic Analysis of Existing Structures	$ 13,800	$ 24,800	$ 46,800	Consultant verbal estimate
Prepare Scope for Rebuilt Structures	$ 200	$ 700	$ 2,700	Consultant verbal estimate
Replicate Acid Treating Tank and Wash Tank platform	$ 300	$ 800	$ 1,700	Internal Calculations
Design Ramps, Parking Lot, Entrance (ADA)	$ 500	$ 1,500	$ 2,800	Internal Calculations
Purchase Placards	$ 5,000	$ 6,000	$ 8,000	Sign Company verbal estimates
Interior Fencing	$ 4,000	$ 4,200	$ 4,800	Verbal Quote from fencing company
Construction	$ 24,000	$ 29,000	$ 48,000	Consultant verbal estimate
Restore Structures				Included Above
Repair Foundations				Included Above
Corrosion Cleansing	$ 8,500	$ 9,400	$ 11,800	Verbal Estimate from Contractor
Realign Still w/crane	$ 1,300	$ 2,500	$ 8,500	Internal Calculations
Brick Restoration	$ 15,000	$ 20,000	$ 30,000	contractor proposal
Rebuild Missing Structures	$ 59,000	$ 96,200	$ 104,200	Internal Calculations
Install Trail	$ -	$ -	$ -	Assumed Volunteer Work
Install Placards	$ 300	$ 600	$ 2,000	Internal Calculations
Total	$ 132,900	$ 196,900	$ 274,300	
Chevron Commitment	$ 15,000	$ 15,000	$ 15,000	
Remaining Expenditures	$ 117,900	$ 181,900	$ 259,300	

CHEVRON MAKES NO WARRANTY, IMPLED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE ITS OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOALS SET FORTH AND THE COST OF SUCH WORK

DETAIL ESTIMATE SHEET

22-Oct-98

Description	Qty	Units	Unit Cost	Mat'l Cost	Unit Hours	Labor Hours	Wage Rate	Labor Cost	Subs	Total
	0		$0	$0	0.00	0	$0	$0	$0	$0
Top & Btm Slab	4.3	CY	$62	$268	3.50	15.16	$56	$849	$0	$1,117
Forms	60	SF	$4	$240	0.25	15	$56	$840	$0	$1,080
Re-bar	90	lbs	$0.85	$77	0.02	1.62	$56	$91	$0	$167
	0		$0	$0	0.00	0	$0	$0	$0	$0
Concrete Walls	0		$0	$0	0.00	0	$0	$0	$0	$0
Ends	3	CY	$62	$186	0.78	2.34	$56	$131	$0	$317
Forms	225	SF	$1.6	$360	0.17	39.02	$56	$2,185	$0	$2,545
Re-bar	299	lbs	$0.58	$174	0.01	2.394	$56	$134	$0	$308
	0		$0	$0	0.00	0	$0	$0	$0	$0
Bricks	945	EA.	$0.65	$614	0.03	23.63	$56	$1,323	$0	$1,937
Mortar	11	CF	$2.54	$28	0.00	0	$0	$0	$0	$28
	0		$0	$0	0.00	0	$0	$0	$0	$0
Steel Door 1	1	EA.	$800	$800	4.00	4	$56	$224	$0	$1,024
Steel Door 2	1	EA.	$800	$800	4.00	4	$56	$224	$0	$1,024
	0		$0	$0	0.00	0	$0	$0	$0	$0
Vessel 1	1	EA.	$9,600	$9,600	33.00	33	$56	$1,848	$0	$11,448
Vessel 2	1	EA.	$11,500	$11,500	33.00	33	$56	$1,848	$0	$13,348
	0		$0	$0	0.00	0	$0	$0	$0	$0
Stack	1	EA.	$500	$500	0.00	5	$56	$280	$0	$780
	0		$0	$0	0.00	0	$0	$0	$0	$0
Furnance	430	lbs	$4	$1,720	0.04	17.2	$56	$963	$0	$2,683
Forms	60	SF	$4	$240	0.25	15	$56	$840	$0	$1,080
Re-bar	90	lbs	$0.85	$77	0.02	1.62	$56	$91	$0	$167
	0		$0	$0	0.00	0	$0	$0	$0	$0
Condensor Box	0		$0	$0	0.00	0	$0	$0	$0	$0
2x10 planking	3.9	bf	$590	$2,276	0.00	0	$0	$0	$0	$2,276
2x4 studs	0.5	bf	$550	$272	0.00	0	$0	$0	$0	$272
Hardware	1	EA.	$500	$500	0.00	0	$0	$0	$0	$500
2x10 planking	204	EA.	$0	$0	0.26	53.04	$56	$2,970	$0	$2,970
2x4 studs	85	EA.	$0	$0	0.22	18.7	$56	$1,047	$0	$1,047
Concrete	6	cy	$60	$360	1.00	6	$56	$336	$0	$696
Forms	362	SF	$4	$1,448	0.25	90.53	$56	$5,069	$0	$6,518
Re-bar	50	lbs	$0.85	$43	0.02	0.9	$56	$50	$0	$93
	0		$0	$0	0.00	0	$0	$0	$0	$0
Piping	110	ft	$3	$330	0.15	16.5	$56	$924	$0	$1,254
Pipe Supports	3	EA.	$200	$600	3.00	9	$56	$504	$0	$1,104
	0		$0	$0	0.00	0	$0	$0	$0	$0
Painting	600	SF	$0.30	$180	0.04	25.2	$56	$1,411	$0	$1,591
	0		$0	$0	0.00	0	$0	$0	$0	$0
	0		$0	$0	0.00	0	$0	$0	$0	$0
Sub Totals				$33,192		432		$24,183	$0	$57,375

Tax	8.25%		$2,738
Freight	5.00%		$1,660
Sub total			$61,773
Contractor Profit & OH	10.00%		$6,177 / $67,950
Engineering	18.00%		$12,231 / $80,181
Company Cost	0.00%		$0 / $80,181
Contingency	20.00%		$16,036 / $96,217

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Composite Wage Rate
Small jobs
9/7/96

Directs	Rich			Bakersfield			Pasca		
Boiler Maker	0%	$27.68	$0.00	0%	$0.00	$0.00	8%	$17.78	$1.42
Carpenter GF	3%	$26.00	$0.78	10%	$26.18	$2.62	2%	$15.50	$0.31
Carpenter	21%	$24.50	$5.15	31%	$24.18	$7.50	6%	$13.50	$0.81
Iron Worker GF	3%	$23.33	$0.70	2%	$27.69	$0.55	2%	$18.83	$0.38
Iron Worker	30%	$21.83	$6.55	4%	$25.69	$1.03	4%	$16.83	$0.67
Electrician GF	0%	$28.37	$0.00	0%	$0.00	$0.00	2%	$18.20	$0.36
Electrician	0%	$26.87	$0.00	0%	$0.00	$0.00	12%	$16.20	$1.94
Fitter-Welder GF	3%	$33.54	$1.01	2%	$29.21	$0.58	2%	$20.84	$0.42
Fitter-Welder	30%	$32.04	$9.61	41%	$27.21	$11.16	41%	$18.84	$7.72
Laborer	10%	$20.71	$2.07	10%	$19.62	$1.96	10%	$10.00	$1.00
Operating Eng	0%	$25.82	$0.00	0%	$0.00	$0.00	6%	$8.00	$0.48
Teamster	0%	$19.00	$0.00	0%	$0.00	$0.00	5%	$15.44	$0.77
Totals	100%		$26	100%		$25.40	100%		$16.29
Indirects									
Construction Mgt	5%	$1.29		10%	$2.54		5%	$0.81	
Temp Facilities	0%	$0.00		0%	$0.00		0%	$0.00	
Premium Time	0%	$0.00		0%	$0.00		0%	$0.00	
Fringes	26%	$6.72		30%	$7.62		20%	$3.26	
Payroll Taxes	10%	$2.59		34%	$8.64		10%	$1.63	
Small Tools	10%	$2.59		10%	$2.54		10%	$1.63	
Consumables	5%	$1.29		5%	$1.27		5%	$0.81	
Const Equip	20%	$5.17		15%	$3.81		20%	$3.26	
Rentals-Scaffold	10%	$2.59		5%	$1.27		10%	$1.63	
Fee + Per diem	8%	$2.07		10%	$2.54		8%	$1.30	
Safety Incentive	5%	$1.29		0%	$0.00		5%	$0.81	
	94%			119%			88%		
Total Indirects			$24.31			$30.22			$14.34
			Rich			Bakersfield			Pasca
Total Composite Rate			$50.17			$55.62			$30.63

Fee = $5.50/hr = 6% of $4.5MM (direct cost)

Per Diem = 11.0$/hr

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Chevron

Page of

Subject

File/
Estimate No.

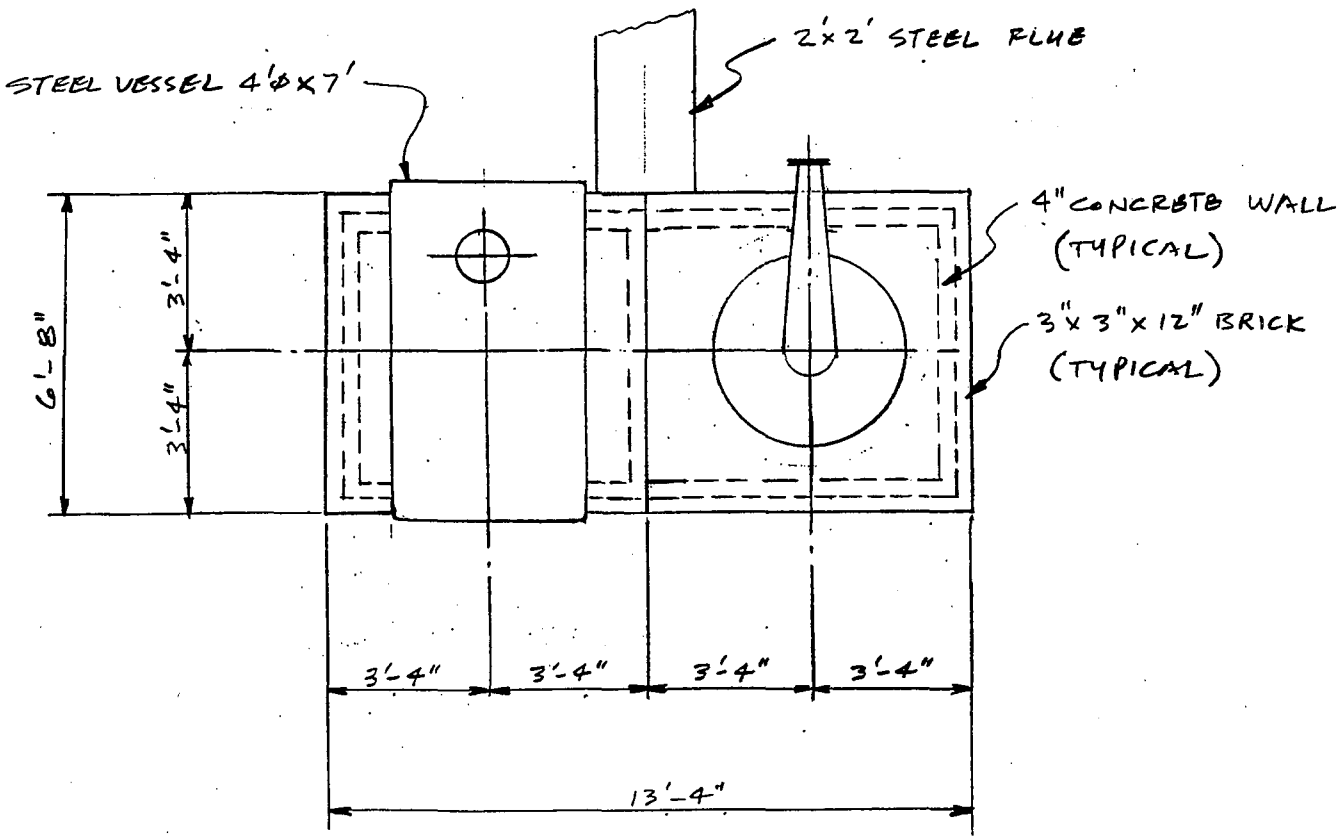
Charge Code/
Project No.

Date

By

Description

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.



PLAN

1/4"=1'-0"

Chevron

Page of

Subject

File/
Estimate No.

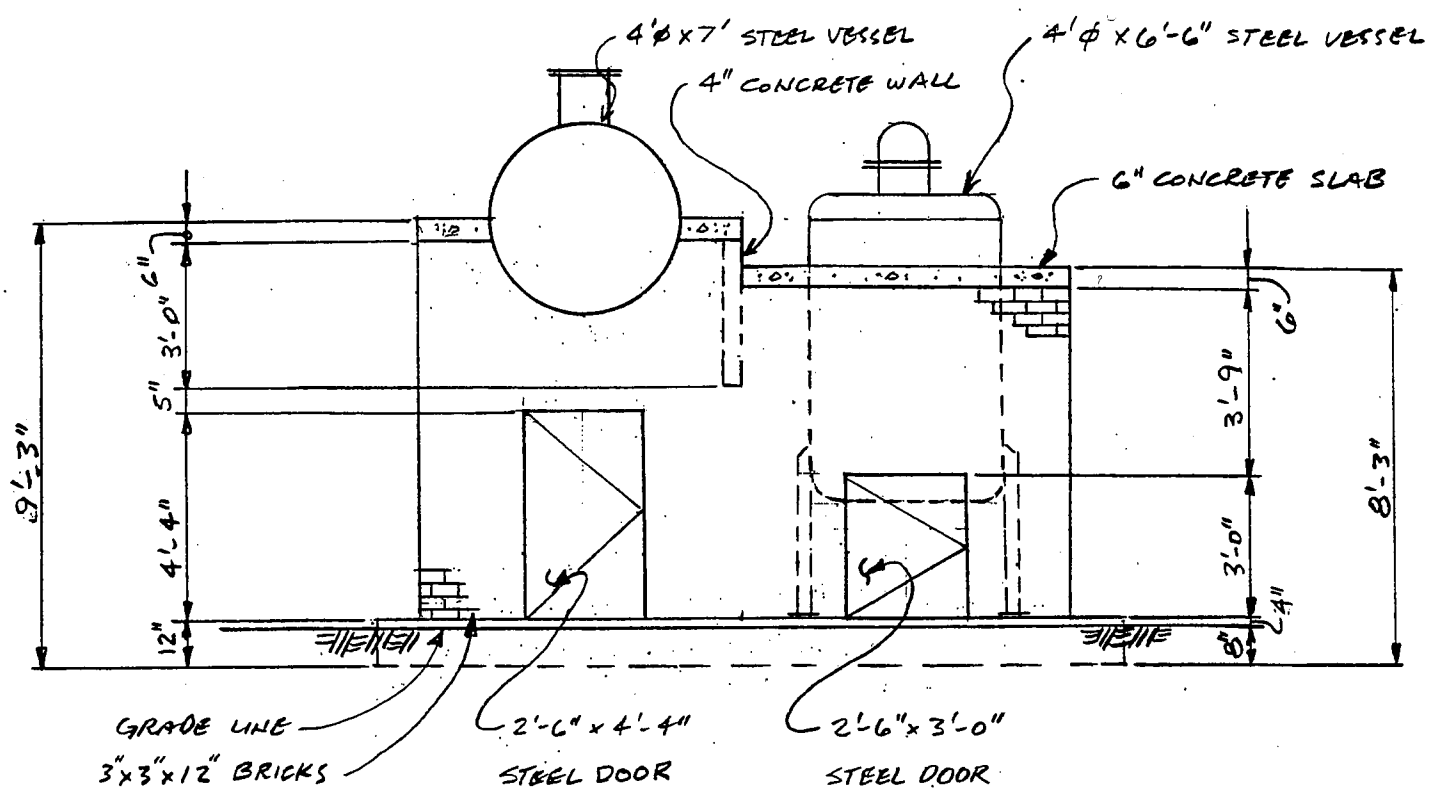
Description

Charge Code/
Project No.

Date

By

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.



ELEVATION

1/4" = 1'-0"

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Chevron

Subject

Description

Page of

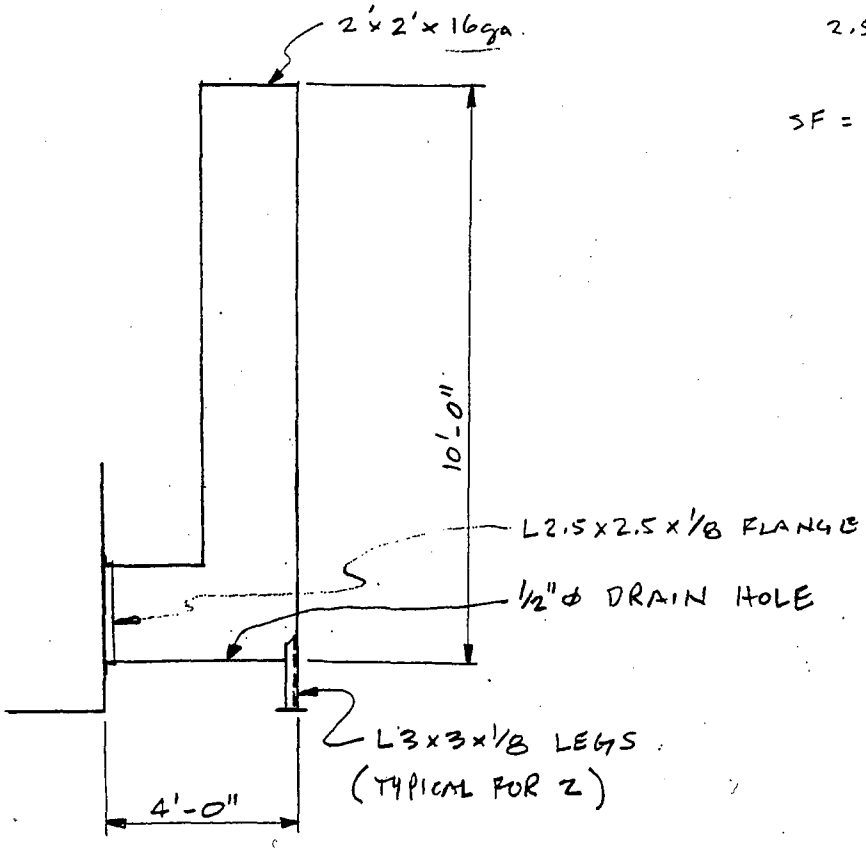
File/ Estimate No.

Charge Code/ Project No.

Date

By

STACK A 5/5 2'Ø x 10'



16 ga.

2.5 lbs / (12" x 12" x .059") = .29 lbs/in³

SF = 10' x 4 sides = 40'

2 x 4 = 8

480' x 2.5 = 120 lbs

STACK ELEVATION

1/4" = 1'-0"

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Chevron

Subject

Description

Page of

File/ Estimate No.

Charge Code/ Project No.

Date

By

Materials & Quantities

1. Btm slab $\frac{(13.33 \times 6.66 \times 1.0)}{27} = 3.3$ yds ; FORMS $[(13.33 \times 2) + (6.66 \times 2)] \times 1.0 = 40$ SF

2. Top slab $\frac{[6.66^2 - (4 \times 6.66)] \times .5}{27} = .33$ yds $[(13.33 \times 2) + (6.66 \times 2)] \times .5 = 20$ SF

$\frac{[6.66^2 - (\pi \frac{3}{2}^2)] \times .5}{27} = .70$ yds

3. Concrete Walls

ENDS $\frac{(6.66' \times 8.25' \times .33')}{27} = .68$ cyds ; $(6.66 \times 8.25) = 55$ SF

SIDE 1 $\frac{(13.25' \times 7.75 \times .33')}{27} - \frac{(2.5 \times 4.33 \times .33)}{27} - \frac{(2.5 \times 3 \times .33)}{27}$

$- \frac{(1 \times 6.66 \times .33)}{27} = .95$ cyds

$(13.25 \times 7.75) - (2.5 \times 4.33) - (2.5 \times 3) - (6.66 \times 1.0) = 78$ SF

SIDE 2 $\frac{(13.25 \times 7.75 \times .33)}{27} - \frac{(2 \times 2 \times .33)}{27} - \frac{(1 \times 6.66 \times .33)}{27} = 1.12$ cyds

$(13.25 \times 7.75) - (2 \times 2) - (1 \times 6.66) = 92.0$ SF

Center Wall $\frac{(5.6' \times 3.0 \times .33)}{27} = .20$ cyds

4. Bricks 3" x 3" x 12" TOTAL SF OF WALL = 225

No. of Bricks $225/100 \times 400 = 900 \times 1.05\%$ WASTE $= 945$ ea.

Mortar $225/100 \times 4.57 = 10.3 \times 1.2$ waste $= 12.3$ CU FT

REFERENCE NO: 108 VERT CATEGORY/TYPE: VT /CYLINDER

USER EQUIPMENT TAG: ESTIMATED COST: USD 11500

ITEM DETAILS

SHELL MAT'L A 515		CAPACITY	620.00 GALLONS
DIAMETER	4.00 FEET	HEIGHT	6.50 FEET
DESIGN TEMP.	650.00 DEG F	DESIGN PRESS	15.00 PSIG
APPLICATION CONT		THICKNESS	0.31 INCHES
TOTAL WEIGHT	2500 LBS		

INSTALLATION SUMMARY

INSTALLATION ACCOUNT	DIRECT MAT'L USD	DIRECT FIELD LABOR MAN-HOURS	DIRECT FIELD LABOR USD	TOTAL DIRECT USD
EQUIPMENT	11500	33	2763	14263
PIPING	0	0	0	0
CIVIL,SITEWORK	0	0	0	0
STEELWORK	0	0	0	0
INSTRUMENTATION	0	0	0	0
ELECTRICAL	0	0	0	0
INSULATION	0	0	0	0
PAINTING	0	0	0	0
TOTAL DIRECT COST:	11500	33	2763	14263

Chevron

Page of

Subject

File/
Estimate No.

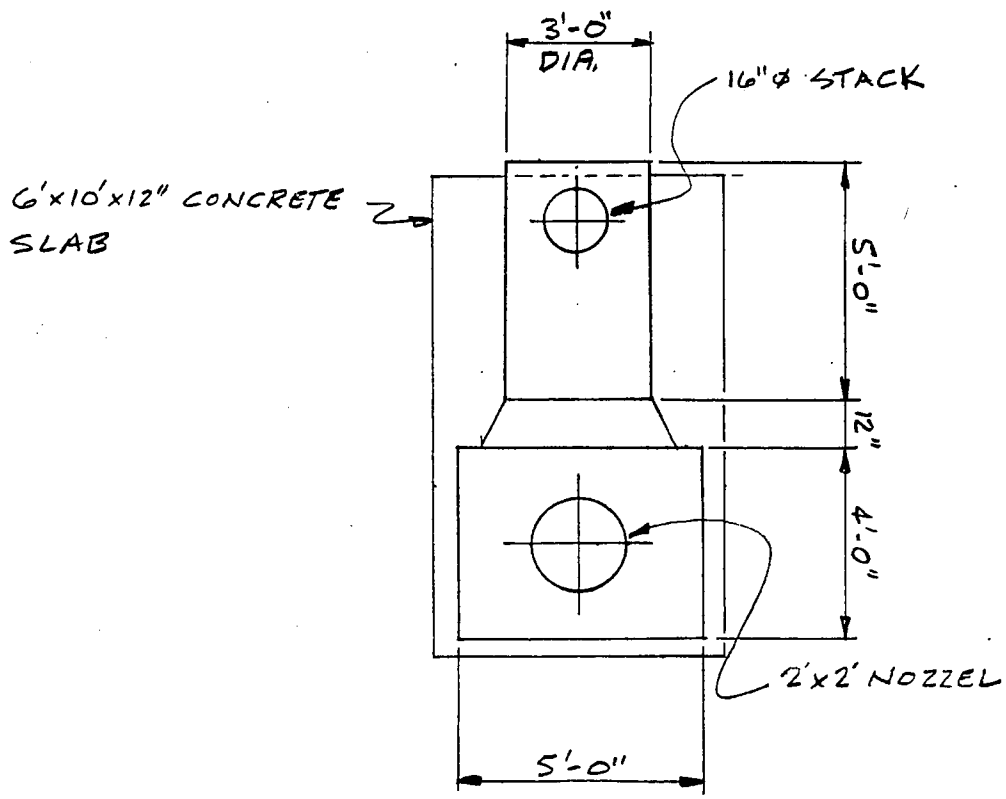
Description

Charge Code/
Project No.

Date

By

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.



FURNANCE PLAN

1/4"=1'-0"

Chevron

Page of

Subject

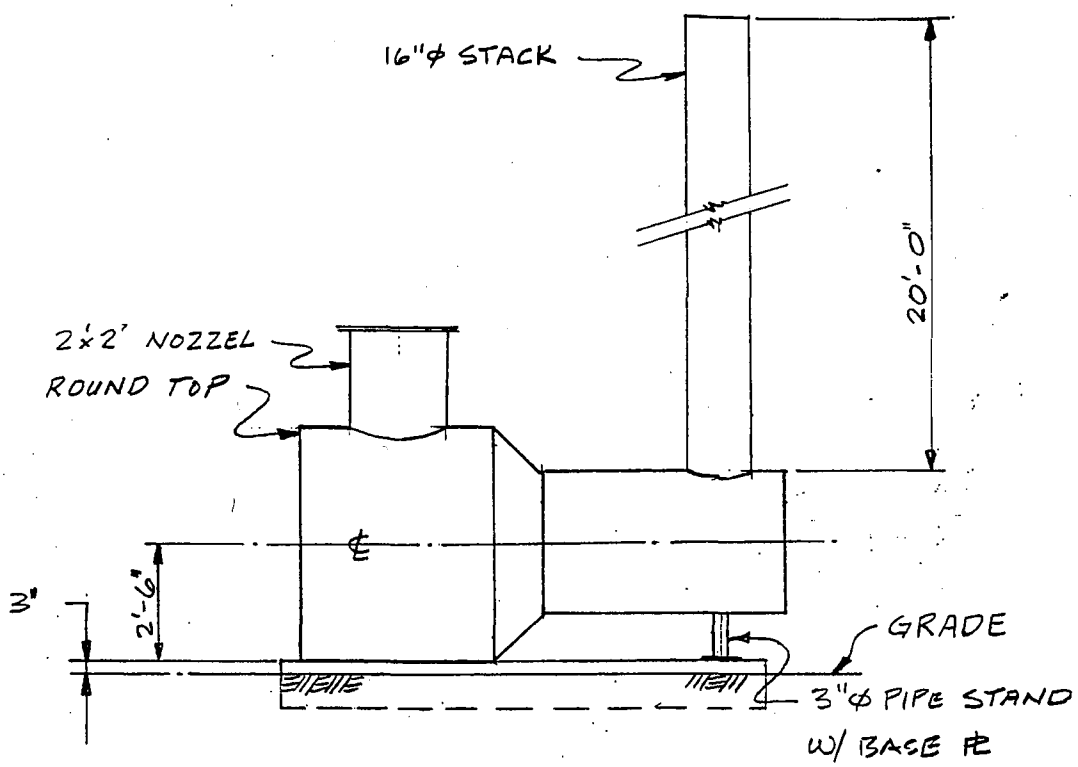
File/
Estimate No.

Description

Charge Code/
Project No.

Date

By



FURNANCE ELEVATION

1/4"=1'-0"

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

GO-144-6 (2-93)
Printed in U.S.A.

Chevron

Page of

Subject

File/
Estimate No.

Description

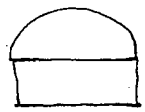
Charge Code/
Project No.

Date

By

FURNANCE BOX 16ga.

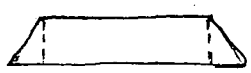
$C = \frac{\pi D}{2} = \frac{\pi 5'}{2} = 7.85$



$7.85 \times 4' = 31.4$ SF

$2.5 \times 4' =$ 10.0 SF

TRANSITION



$C = \pi D = \pi 5' = 15.7'$

$\pi 3' = 9.4'$

$C = \sqrt{1.0^2 + 1.0} = 1.41$

$h = 12"$

$\frac{5' - 3'}{2} = 1.0$

$SF = \frac{1}{2} L (P_1 + P_2) = \frac{1}{2} \times 1.41' \times (15.7 + 9.4) =$ 17.7 SF

CONE

$C = \pi D = \pi 3' \times 5' =$ 47.1 SF

STACK

$C = \pi D = \pi 1.33 = 4.2 \times 20' = 83.6$ SF

NOZZEL

$C = \pi D = 2' \pi = 6.3 \times 2' = 12.6$ SF

TOTAL $10 + 18 + 47.1 + 84 + 13 = 172$ SF $\times 2.5$ lbs/SF $= 430$ lbs

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

PROJECT: West Coast Basis

DATE PREPARED: 16 OCT 1998 PREPARED BY: DEM PROJECT DATABASE: RIC

REFERENCE NO: 107 HORIZ CATEGORY/TYPE: HT /HORIZ-DRUM

USER EQUIPMENT TAG: ESTIMATED COST: USD 9600

ITEM DETAILS

SHELL MAT'L A 515		CAPACITY	660.00 GALLONS
DIAMETER	4.00 FEET	LENGTH	7.00 FEET
DESIGN TEMP.	650.00 DEG F	DESIGN PRESS	15.00 PSIG
APPLICATION CONT		THICKNESS	0.31 INCHES
TOTAL WEIGHT	2400 LBS		

INSTALLATION SUMMARY

INSTALLATION ACCOUNT	DIRECT MAT'L USD	DIRECT FIELD LABOR MAN-HOURS	DIRECT FIELD LABOR USD	TOTAL DIRECT USD
EQUIPMENT	9600	33	2763	12363
PIPING	0	0	0	0
CIVIL,SITEWORK	0	0	0	0
STEELWORK	0	0	0	0
INSTRUMENTATION	0	0	0	0
ELECTRICAL	0	0	0	0
INSULATION	0	0	0	0
PAINTING	0	0	0	0
TOTAL DIRECT COST:	9600	33	2763	12363

Chevron

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Subject

Description

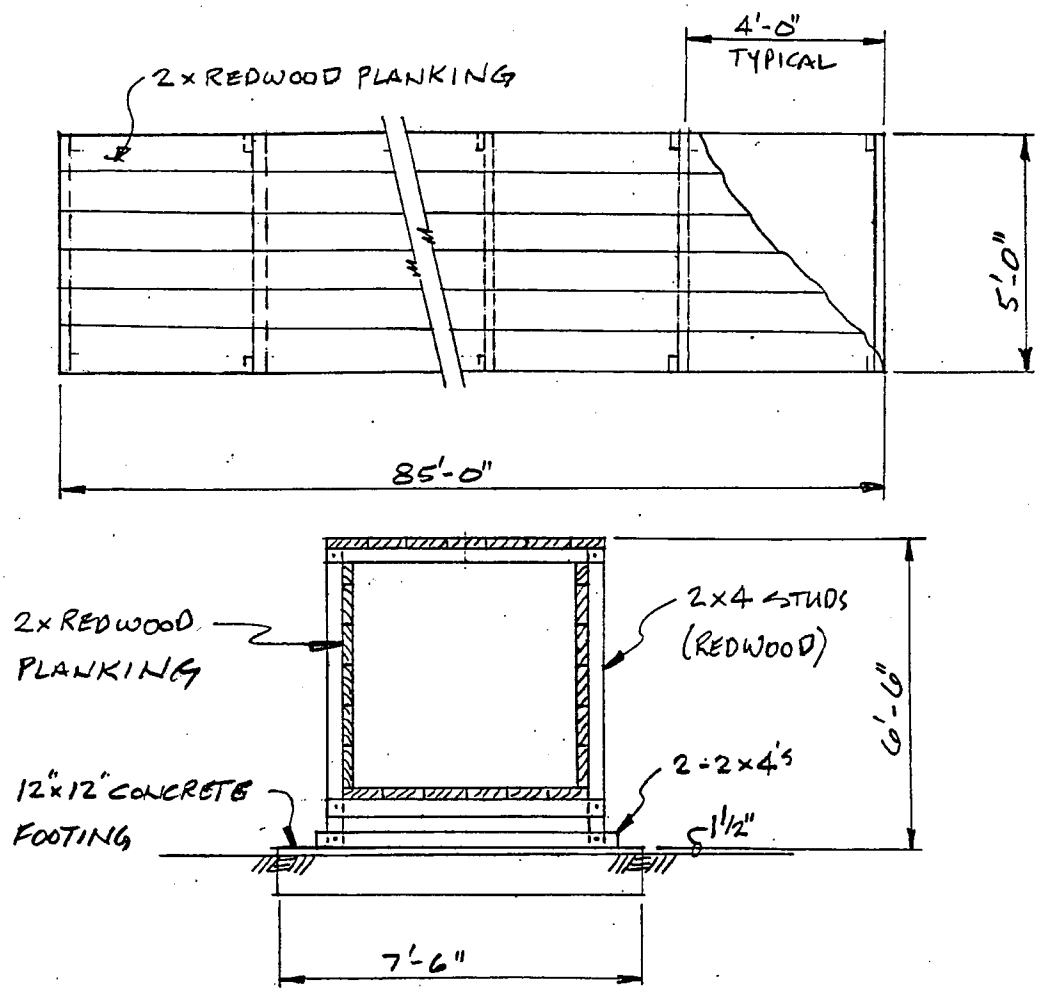
Page of

File/ Estimate No.

Charge Code/ Project No.

Date

By



PLAN AN SECTION

CONDENSOR BOX

1/4"=1'-0"

Chevron

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Subject

Description

Page of

File/ Estimate No.

Charge Code/ Project No.

Date

By

Condenser Box

2x planking = 1.67 BF x 85' x 6 PLANKS x 4 SIDES = 3,407 BF

ENDS = 1.67 x 5' x 6 ea x 2 SIDES = 100 BF

2 x 4's BRACES .66 x 5' x 4 ea. x 85'/4' = 281 BF

2 x 4 STRUTS .66 x 6' x 2 x 85'/4' = 168.3 BF

TOTAL BF 3407 + 100 + 281 + 168.3 = 3956.3 ≈ 4,000 BF

10% waste 4000 x 1.1 = 4400/1000 = 4.4 MBF

2"x10"-10' 590 #MBF PLANKING 3507 x 1.1 = 3858 BF

2"x4"-10' 550 #MBF 2x4 449.3 x 1.1 = 494.2 BF

85'÷10' = 8.5 ea. x 6 x 4 SIDES = 204 planks (2x10)

85'/4' = 21.3 ea x 4 = 85.2 ea. (2x4s)

FOUNDATION (7.5 x 2) + (1.0 x 2) = 17 SF

85' ÷ 4 = 21.3 ea

17 x 21.3 = 362.1 SF Re-bar 362.1 x .14 lbs/SF = 50 lbs

7.5 x 1.0 x 1.0 / 27 = .28 cy ea.

21 x .28 = 5.9 ≈ 6.0 CY

Chevron

Page of

Subject

File/
Estimate No.

Description

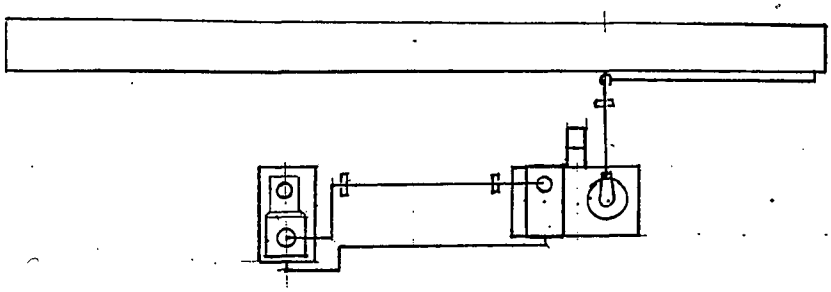
Charge Code/
Project No.

Date

By

Piping

CONDENSOR BOX



FURNANCE STILE 1 & 2

PLAN

1"=20'-0"

3/4" PIPE 30'+30'+10'+20' = 90' HORIZ
90 x .20 = 18' VERT } 108 Deg 110 FT.

3 TYPE 1 PIPE SUPPORTS

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

GO-144-6 (2-93)
Printed in U.S.A.

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Chevron

Subject

Description

Page of

File/ Estimate No.

Charge Code/ Project No.

Date

By

Painting

Vessels 4'Ø x 7' HORIZ

$\pi r^2 \times 7 = 88$ SF plus ends + $\pi r^2 \times 2 = 25$

TOTAL 113 SF

4'Ø x 6.5' VERT

$\pi r^2 \times 6.5 = 82$ Ends $\pi r^2 \times 2 = 25$ LEGS 1'x4'x4 LEGS = 16 SF

TOTAL 123 SF

STACK (10' + 2') x 2' x 2' = 48 SF
MISC (LEGS) = 2 SF } 50 SF

STEEL DOORS 2.5' x 4.3' x 2 = 22 SF
2.5 x 3.0 x 2 = 15 SF } 37 SF

FURNANCE
BOX = 10 SF
TRANSITION = 18 SF
CONE = 47.1 SF
STACK = 84 SF
NOZZEL = 13 SF

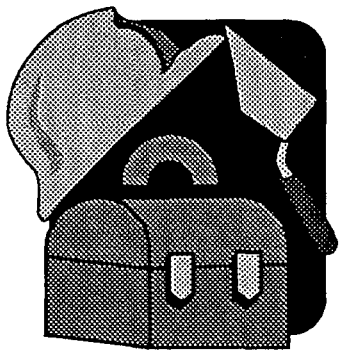
172 SF

bcc
THE BAKER COMPANY
CONSTRUCTORS

NEWHALL OIL REFINERY

BRICK RESTORATION PROPOSALS

Date: 07/20/98



CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Prepared By:
Kevin Connington
The Baker Company Constructors
19215 Vicci Street
Canyon Country, CA 91351
Phone (805) 298-9136

bcc
THE BAKER COMPANY
CONSTRUCTORS

Proposal For Furnace Stacks

Newhall Oil Refinery

MATERIAL ESTIMATE			
Material	**Quantity/Type**		**Amount**
Concrete *(Footings)*	6	Cubic Yards	$480.00
Concrete *(Block Grouting)*	4	Cubic Yards	$320.00
Blocks *(8" x 8" x 16")*	300	Gray Medium Weight	$600.00
Steel - Rebar *(5/8")*	24	Pieces @ 20 Feet	$240.00
Steel - Rebar *(1/2")*	12	Pieces @ 20 Feet	$70.00
Steel *(Railroad Pencil)*	30	Pieces @ 8 Feet	$100.00
Cement *(Plastic)*	20	Sacks	$160.00
Sand *(Dry Plaster)*	4	Scoops	$75.00
Jack Hammer	1	40 lbs. With Chisel Bit *(3 Days)*	$210.00
Total Material Cost			***$2,255.00***
LABOR			
Total Manpower	**Estimated Time**		**Total Payroll**
5 Men	10 Days		$8,000.00
Total Project Cost			***$10,255.00***

Date: 07/20/98

Scope of Work:

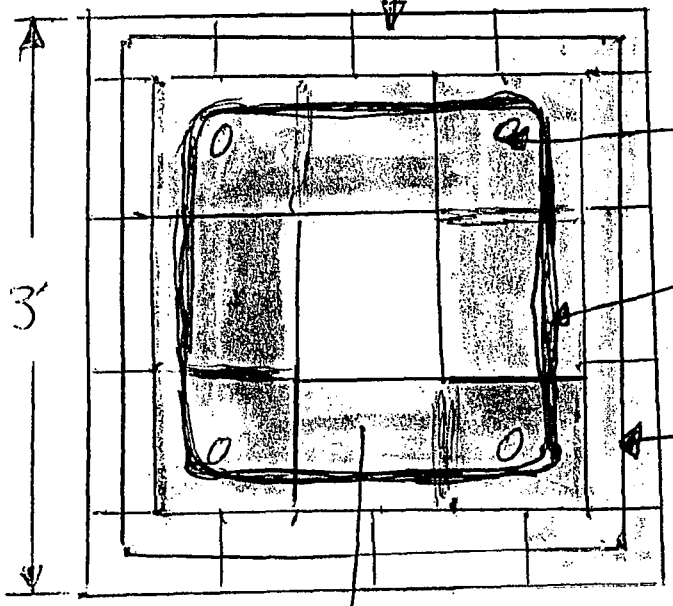
1. Demo two (2) existing stacks (*24' high by 3' x 3' wide).*
2. Chip and clean 3,450 existing used brick for reuse.
3. Remove debris from work area *(dump fees and site remove not included).*
4. Rebuild both stacks as per attached plan.
5. Does not include excavation of existing footings.

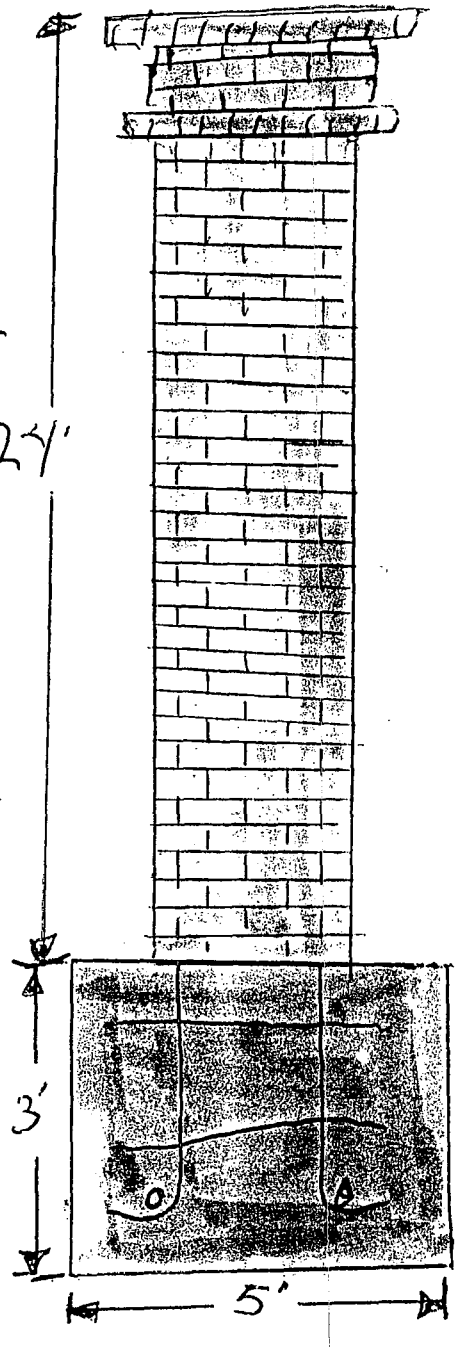
Note 1: Estimated value of existing cleaned bricks = $2,000.00
Note 2: Materials supplied by client will be deducted from total cost.
NOTE 3: DOES NOT INCLUDE PERMITS

CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Kevin Connington
Phone (805) 298-9136
19215 Vicci Street
Canyon Country, CA 91351
License #554962

USED BRICK VENEER (18 BRICK PER COURSE 8" 96 COURSES HIGH)





CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

bcc
THE BAKER COMPANY
CONSTRUCTORS

Proposal For 'Beehive' Downdraught Furnaces

Newhall Oil Refinery

MATERIAL ESTIMATE			
Material	**Quantity/Type**		**Amount**
Cement	10	Sacks *(Plastic)*	$100.00
Sand	3	Scoops *(Dry Plaster)*	$60.00
Bricks	200	Used	$150.00
Makita Grinders	2	4 Inch *(For Grinding Mortar Joints)*	$300.00
Diamond Blades	4	All Purpose	$300.00
Epoxy *(See Note #1)*	TBD	Simpson Strong Tie	$300.00
Goggles and Respirator	2	OSHA Approved	$100.00
Total Material Cost			***$1,310.00***
LABOR			
Total Manpower	**Estimated Time**		**Total Payroll**
5 Men	6 Days		$4,800.00
Total Project Cost			***$6,110.00***

Date: 07/20/98

Furnace Description:

Furnace #1: 68 brick long per course by 36 courses high.
Furnace #2: 68 brick long per course by 30 courses high.

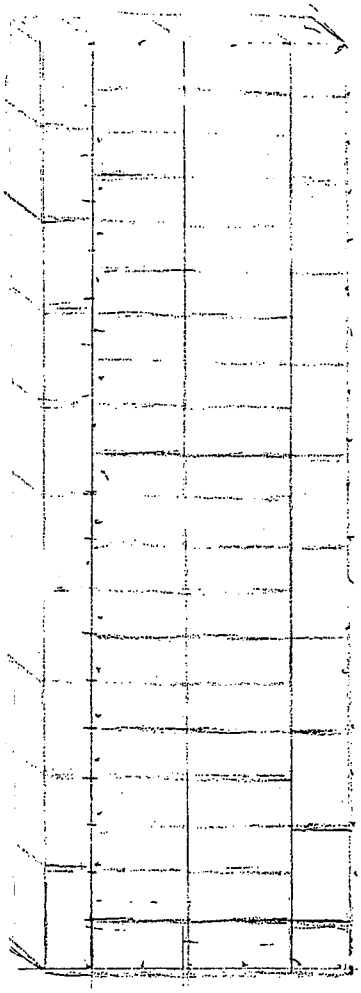
Scope of Work:

1. Regrout all exterior joints *(approximately 4,500 brick).*
2. Repair damaged areas as necessary *(exterior only).*
3. Epoxy all structural cracks *(exterior only).*

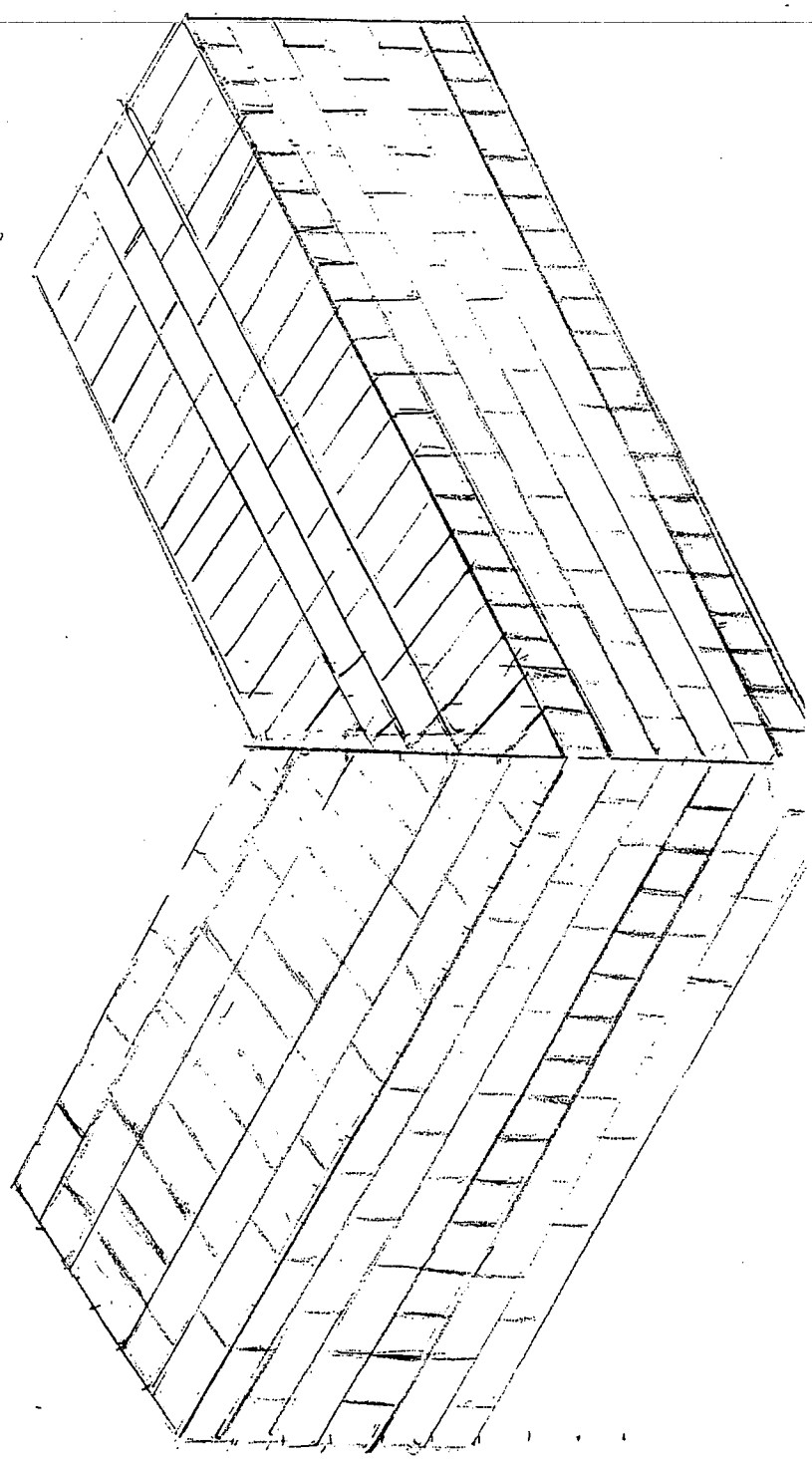
CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Note 1: Epoxy estimate may vary; will confirm cost per amount used. $300.00 is a ballpark estimate. Will adjust cost after work is completed.
Note 2: Suggest inspection of interior of furnace for additional reinforcement.
Example: Grouting of deteriorated joints, epoxying structural cracks.
Note 3: Suggest sand blasting of exterior bricks before regrouting.
Note 4: Furnace #1 - Client to supply crane to lift bell unit off of furnace to realign the circumference of brick cap *(as discussed with Paul).*
Note 5: Suggest inspection of existing footings for possible structural reinforcement.
Note 6: Material supplied by client will be deducted from total cost.

Kevin Connington
Phone (805) 298-9136
19215 Vicci Street
Canyon Country, CA 91351
License #554962

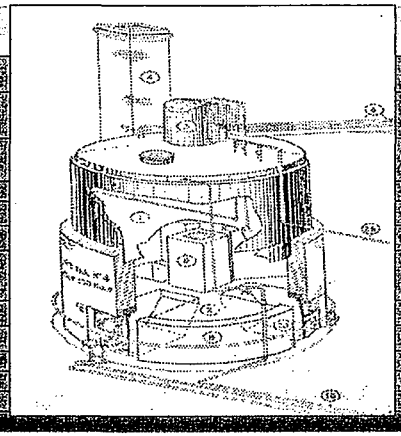
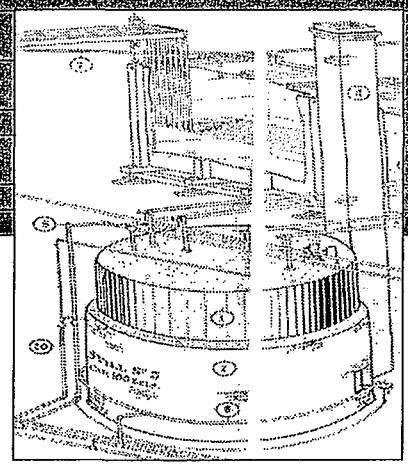


ASSUMED (NOT POSITIVE)
ALTERNATE PATTERNS
IN RUNNER WALL 3 BRICKS WIDE

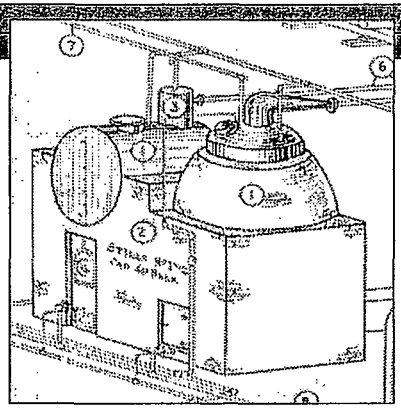
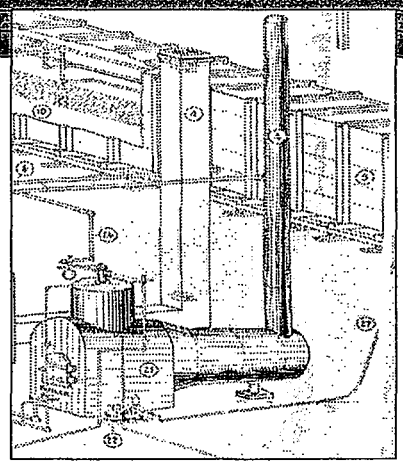


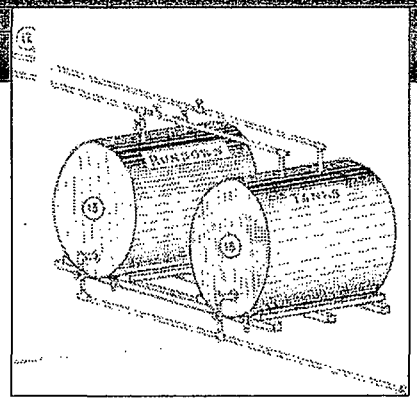
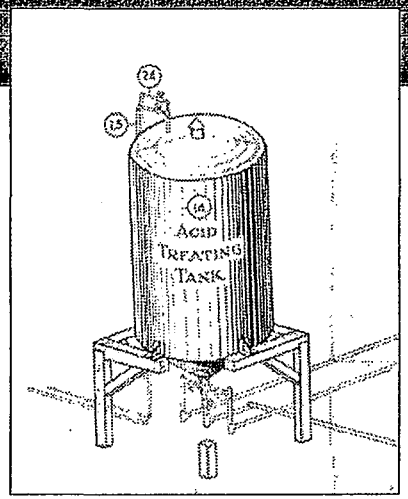
CHEVRON MAKES NO WARRANTY, IMPLIED OR EXPRESSED, AS TO THE ESTIMATES PROVIDED HEREIN. CHEVRON STRONGLY SUGGESTS THAT THE CITY OF SANTA CLARITA SHOULD MAKE IT'S OWN DETERMINATION AS TO THE SCOPE OF WORK NECESSARY TO ACCOMPLISH THE GOAL SET FORTH AND THE COST OF SUCH WORK.

Pioneer Refinery
Structure Inventory

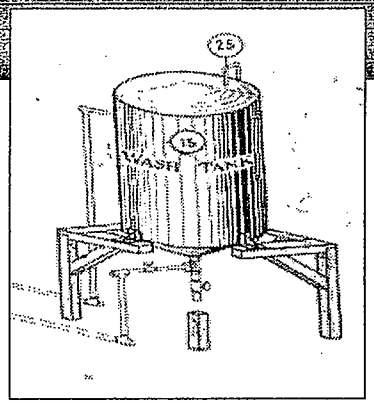
Structure		Problem/Damage	Potential Solution/Improvements
Still No.4		Corrosion	Corrosive Cleansing Process
			Preservation Coating - Crystal Clear Acrylic Spray Coating
Still (1)		Not firmly placed (center of fire box)	Place correctly - Crane to lift bell unit of furnace to realign
Dome (3)		Not firmly placed (center of still)	Place correctly
Fire Box (2)		Brick components are cracking and falling apart from structure	Restore affected areas w/excess brick from fallen stack
Stack/Chimney (4)			Preservation coating
		Unstable condition/Unsteady	Rebuild Stack
Still No.3		Corrosion	Corrosive Cleansing Process
Still (1)			Preservation Coating - Crystal Clear Acrylic Spray Coating
Fire Box (2)		Brick components	Restore affected areas w/excess brick from fallen stack
Landmark Plaque			
Stack/Chimney (4)		Fallen over condenser coil lines (10)	Use fire brick components to restore fire boxes
Vapor Lines (6)			
Oxide Charging Lines (7)			

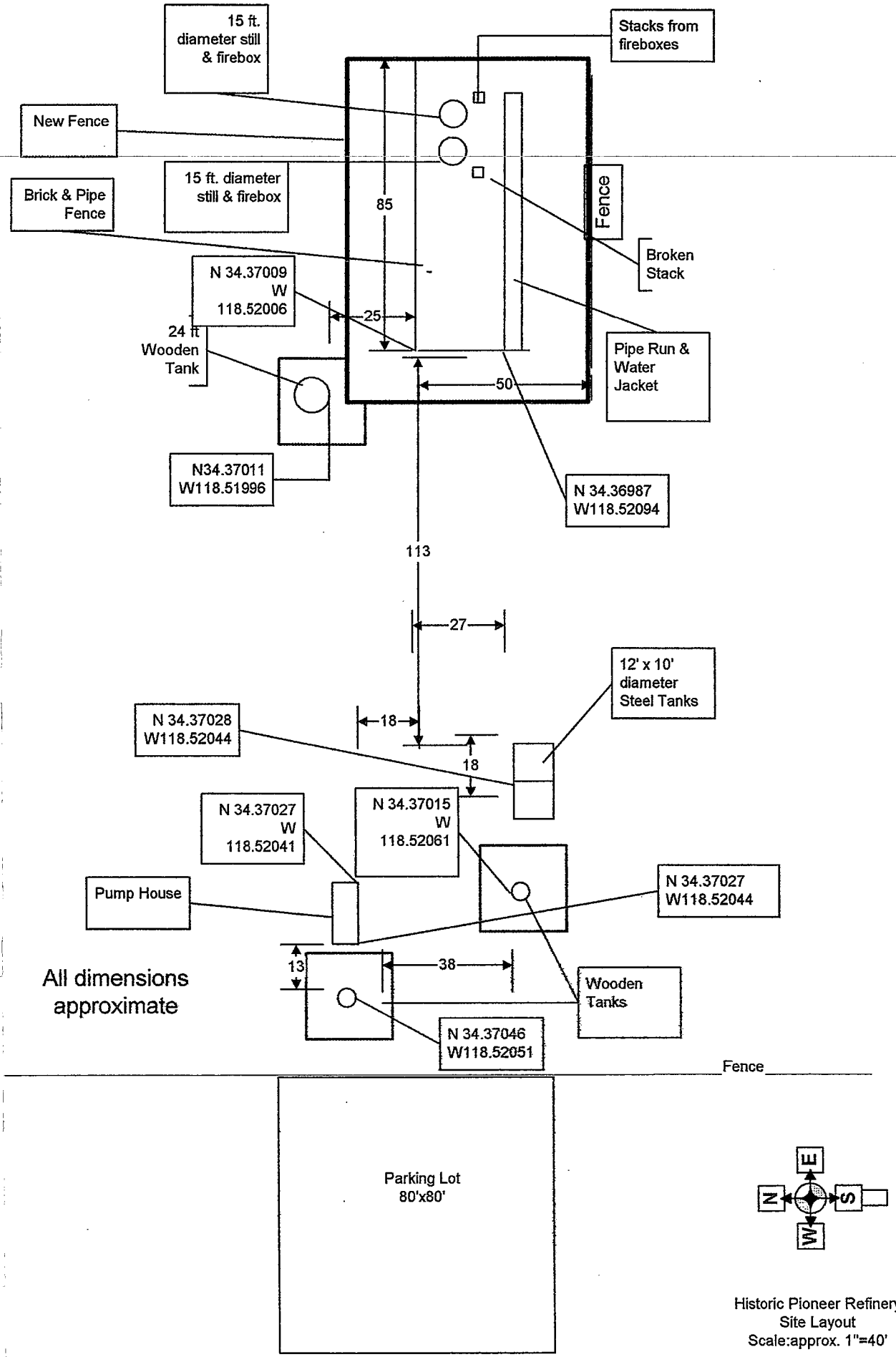
Pioneer Refinery
Structure Inventory

Structure		Problem/Damage	Potential Solution/Improvements
Still No. 1 and 2		Removed from site	Relocate from Richmond Museum
Boiler (21)		Removed from site	Relocate from Richmond Museum

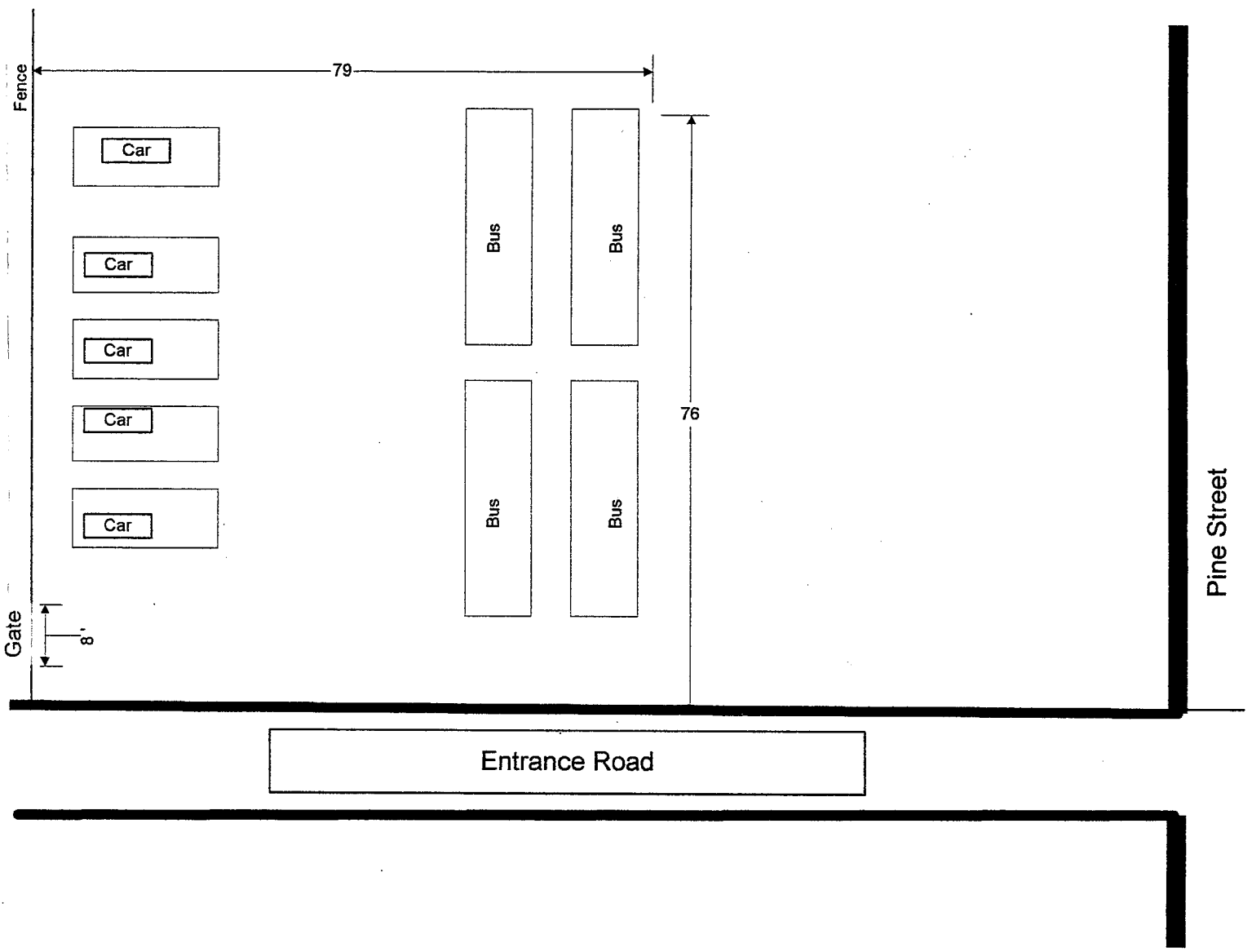
Structure		Problem/Damage	Potential Solution/Improvements
Rundown Tanks Tank (13-A) Tank (13-B)		Deterioration of interior and exterior surface Frontal Circular Tops deteriorating	Surface Improvement Replace Frontal Circular Tops or Restore Damaged Areas W/ ?
Acid Treating Tank (14)		Deterioration of wood platform Corrosion	Redesign a new platform or replicate original platform Corrosive Cleansing Process Preservation Coating - Crystal Clear Acrylic Spray Coating

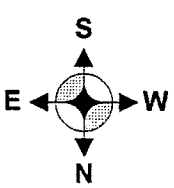
Pioneer Refinery
Structure Inventory

Structure		Problem/Damage	Potential Solution/Improvements
Wash Tank (15)		Deterioration of wooden platform Corrosion	Redesign a new platform or replicate original platform Corrosive Cleansing Process Preservation Coating - Crystal Clear Acrylic Spray Coating
Residuum Tank (18)		Deterioration of interior and exterior surface of treated wood	Restoration of wood (pine, fir, cedar, redwood,
Pump House		Surface Decomposition	Water Drainage/Rational Method
X Pipe Lines		Hazard	Fence around artifact



Historic Pioneer Refinery
Site Layout
Scale:approx. 1"=40'





Historic Pioneer Refinery
Parking Lot Layout
Scale: 1"=20'

FUTURE CONTACT

Please direct future correspondence to Ken Trone at the City of Santa Clarita Parks and Recreation Department.

Ken Trone
Park Development Coordinator
Parks Planning Division
City of Santa Clarita Parks and Recreation Department
23920 Valenica Blvd., Suite 120
Santa Clarita, CA 91355
(805) 284-1408
fax (805) 255-1996
ktrone@santaclarita.com

ACKNOWLEDGEMENTS

Chevron wishes to acknowledge the support and effort these individuals have given to help fulfill the vision of developing the Pioneer Refinery Park in Santa Clarita. Their sincere commitments have led us all to success.

Hank Arklin	Neighboring Landowner
Richard Conrad	State Historic Building /Safety Code
Doug Ford	Department of Rehabilitation/ADA
Joseph Inch	Santa Clarita Park and Development Coordinator
Paul Kreutzer	Historical Society – Executive Director
Jim McCarthy	Trail Specialist
Dr. Maria Todorovska	Research Assistant Professor of Civil Engineering at USC
Dr. Mihailo D. Trifunac	Professor of Civil Engineering at USC
Ken Trone	Santa Clarita Park and Development Coordinator
Wayne Weber	Santa Clarita Park and Development Administrator
Laurene Weste	Santa Clarita City Council Member
Leon Worden	*The Signal* – Special Sections Editor
Chevron Employees	Employees who gave talents and time for success