



CITY OF CHANDLER JOB ORDER PROJECT AGREEMENT

Project Name: **OCOTILLO BRINE REDUCTION FACILITY HYDROCHLORIC ACID STORAGE AND WEAK ACID CONTAINMENT MIXING IMPROVEMENTS**

Project No. **WW2001.403**

This JOB ORDER PROJECT AGREEMENT ("Job Order") is made this _____ day of _____ 2023 ("Effective Date"), by and between the City of Chandler, an Arizona municipal corporation, ("City") and **Garney Companies, Inc.**, a Missouri corporation, ("JOC Contractor") and is entered into pursuant to Job Order Master Agreement No. JOC1914.401 ("JOC Master Agreement"). City and JOC Contractor may be referred to individually as "Party" or collectively as "Parties").

City and JOC Contractor, in consideration of the mutual covenants herein set forth, agree as follows:

RECITALS

- A. On or about December 17, 2019, the Parties entered into the JOC Master Agreement, which terms and conditions are made a part of and incorporated into this Job Order Project Agreement by this reference.
- B. City proposes to engage JOC Contractor for Ocotillo Brine Reduction Facility Hydrochloric Acid Storage And Weak Acid Containment Mixing Improvements as more fully described in **Exhibit "A"**, which is attached to and made a part of this Job Order by this reference.
- C. JOC Contractor is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.

ARTICLE 1. DESCRIPTION OF WORK

The Parties enter into this Job Order Project Agreement for the **OCOTILLO BRINE REDUCTION FACILITY HYDROCHLORIC ACID STORAGE AND WEAK ACID CONTAINMENT MIXING IMPROVEMENTS**, Project Number **WW2001.403**. The scope of work consists of improvements to Ocotillo Brine Reduction Facility Hydrochloric Acid Storage And Weak Acid Containment Mixing, all as more particularly set forth in **Exhibit "A"** attached hereto and incorporated herein by reference.

The JOC Contractor will not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract amendment or change order and signed by the authorized signatories for each party.

Performance and Payment Bonds, as set forth in **Exhibit "C"** and **Exhibit "D"** respectively attached hereto and incorporated herein by reference, will be due prior to execution of each Job Order Project Agreement in the full amount of each Job Order.

At project completion, JOC Contractor must complete Contractor's Affidavit Regarding Settlement of Claims and Certificate of Completion, as set forth in **Exhibit "E"** and **Exhibit "F"** respectively attached hereto and incorporated herein by reference.

ARTICLE 2. PROJECT PRICE

City will pay JOC Contractor for completion of the Work in accordance with the JOC Master Agreement a fee not to exceed the Guaranteed Maximum Price of **\$1,878,326.92** Dollars determined and payable as set forth in JOC Master Agreement and **Exhibit "B"** attached hereto and made a part hereof by reference.

ARTICLE 3. CONTRACT TIME & SCHEDULE

JOC Contractor agrees to complete all Construction within **180** calendar days from the Notice to Proceed (NTP) Date.

ARTICLE 4. PARTICIPANTS

CITY:	Construction Project Manager: Russ Slotnick	
	Phone:	480-782-3411
	Email:	Russ.slotnick@chandleraz.gov
JOC CONTRACTOR:	Garney Companies, Inc.	
	4435 E. Holmes Ave., Ste. 102 Mesa, AZ 85206	
	JOC Contractor Representative: Shane O'Brien	
	Phone:	720-375-0988
	Email:	sobrien@garney.com

ARTICLE 5. FORCED LABOR OF ETHNIC UYGHURS PROHIBITED By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, the Parties have executed this Job Order as of the Effective Date.

"CITY"

CITY OF CHANDLER:

MAYOR Date

Recommended By:


Digitally signed by Kimberly Moon
DN: C=US, E=Kimberly.Moon@ChandlerAZ.gov,
O=City of Chandler, OU=Capital Projects
Division, CN=Kimberly Moon
Date: 2023.10.04 08:54:14-07'00'

Kimberly Moon, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney By: 

ATTEST:

City Clerk SEAL

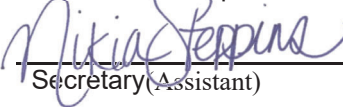
"JOC CONTRACTOR"

Garney Companies, Inc.:


Signature Date 9/28/2023
Joel Heimbuck
Print Name

Director of Operations
Title

ATTEST: If Corporation


Secretary (Assistant)



ADDRESS FOR NOTICE

Garney Companies, Inc.
4435 E. Holmes Ave., Ste. 102
Mesa, AZ 85206

EXHIBIT A
SCOPE OF WORK



EXHIBIT A – PROJECT WW2001.403

Ms. Sandra Story
Project Manager
City of Chandler
Public Works and Utilities Department
975 E. Armstrong Way, Building L
Chandler, AZ 85286

September 21st, 2023

RE: Project No. WW2001.403 – Ocotillo Brine Reduction Facility HCL Storage and Weak Acid Containment Mixing Improvements – Cost Proposal

Ms. Story,

Garney Construction has prepared the attached cost proposal to complete the following scope of work as identified in the project design documents, site visits and coordination meetings.

○ **Identified scope included in this proposal:**

a) Existing 5,000-Gallon Ferric Chloride Tank

- i) Removal of the existing 5,000-gallon Ferric Chloride Storage Tank and Associated Appurtenances.
- ii) Removal of the existing Ferric Chloride Pump 1 & 2 and associated discharge and intake piping.
- iii) Removal of the existing ½" pump discharge tubing and 2" containment piping.
- iv) Removal of existing 4" overflow, 4" and 3" drain, 3" inlet, 2" outlet and 6" vent piping in the ferric chloride tank area.
- v) Removal of the existing shade canopy fabric.

b) Existing 10,000-Gallon Hydrochloric Acid Tank

- i) Removal of the existing 10,000-gallon Hydrochloric Acid Tank.
- ii) Removal of the existing ladder system.
- iii) Removal of the existing 3" drain piping and appurtenances.

c) New 2" Acid Piping

- i) Installation of approximately 400 linear feet of 2" hydrochloric acid ABS plastic piping and pipe supports.
- ii) Of the 400 LF, approximately 220 linear feet will be dual contained with a 4" sch. 80 CPVC containment piping.
- iii) Core drill new pipe penetration through existing walls.

d) New 5,000-Gallon FRP HCL Storage Tank

- i) Supply and installation of a new 5,000-gallon FRP HCL Storage Tank and Appurtenances.
- ii) Supply and installation of 2 each HCL transfer pumps with control panels and 65KAIC rated breakers.
- iii) Supply and installation of Fume Scrubber and Appurtenances.
- iv) Supply and installation of HCL storage tank piping, transfer pump piping and scrubber system piping.
- v) Supply and installation of pipe and scrubber supports for the above listed systems.
- vi) Supply and installation of electrical appurtenances as required by the contract drawings for the above listed equipment. Proposal is based upon utilizing the existing underground ductbanks as stated on the drawings.

- vii) Installation of a new corrosion coatings in the containment area and coatings for the new piping systems.
- viii) Supply and installation of extension to existing shade structure and new shade fabric per contract drawings.
- e) **New Ion Exchange Waste Tank Mixer**
 - i) Supply and installation of a submersible mixer for the existing ion exchange waste tank with a control panel and 65KVIAC rated breaker.
 - ii) The City of Chandler preferred system integrator, Wunderlich-Malec Engineering, was unable to provide a programming proposal within the allotted amount of time. Ludvik has included an estimated plug for programming costs.
- f) **New 10,000-Gallon Hydrochloric Acid Tank**
 - i) Supply and installation of the new 10,000-gallon hydrochloric acid tank and SAF-T-Climb fall protection and associated piping.
 - ii) Installation of new 2" hydrochloric acid ABS plastic piping and 4" sch.80 CPVC containment piping.
 - iii) Supply and installation of the overflow and drain piping.
 - iv) Supply and installation of the 1.5" level transmitter.
 - v) 3" CPVC vented ball valve and 6" CPVC ball check valve, and 4" duckbill check valve
- o **Identified scope clarifications and exclusions in this proposal:**
 - a) A portion of the cost model back-up is created using recent quotes and invoices for similar unit price materials and services. In these instances, Garney has assumed the responsibility for determining quantities and durations for these scopes of work, using current market unit prices.
 - b) Several items in this proposal have been accounted for using cost plugs. It is understood these items will be sorted out by Garney and the City of Chandler project staff prior to issuing a contract for this project.
 - c) This is a ROM cost proposal and will be edited following the receipt of additional subcontractor and vendor quotes. There are still additional questions and clarifications which must be addressed prior to finalizing this cost proposal.
 - d) 2" Acid piping will be installed in the existing utility trench system. No underground utilities will be installed as part of this proposal.
 - e) The contract time for this proposal is based on the quoted lead time for equipment and materials during the bid process. It is understood there may be a shift in lead time between the time the proposal is submitted and when contracts are executed. Garney will work with the City of Chandler to provide periodic milestone updates in an effort to avoid any lead time delays.
- o **Schedule Items and Contract Time**
 - a) The actual schedule for construction will be coordinated with the City of Chandler project team. Below is our assumed schedule for this work.
 - i) Material Submittals and Administrative Paperwork – 3-6 weeks
 - ii) Material Procurement – 12-16 weeks from approved submittals
 - iii) Construction – 12-14 weeks and will run concurrently with lead times
 - iv) General Site Cleanup and Checkouts – 1-2 weeks
 - v) The construction window for this work is from 11-1-23 to 4-29-23.
 - vi) Estimated Contract Time: 180 Days
 - vii) Depending on material procurement, the tanks and equipment should be available in March for installation. If there are equipment and vendor delays outside of Garney's control, the City of Chandler will work with Garney to develop an alternative shutdown plan to tie-in the new equipment.

The total GMP cost for this scope of work is \$1,878,326.92.

Let us know if you have any questions or concerns.

Sincerely,
GARNEY COMPANIES, INC.

A handwritten signature in black ink, appearing to read 'Carl Rodgers', with a stylized, cursive script.

Carl Rodgers
Employee-Owner Since 2015

**EXHIBIT B
FEE SCHEDULE**

EXHIBIT "B"

JOB ORDER COST PROPOSAL

SUMMARY SHEET

Negotiated Prices		
Price of Subcontractor(s)	\$	482,434.00
Price of Subconsultant(s)	\$	-
General Conditions	\$	107,906.01
Preconstruction Labor (if applicable)	\$	-
Construction Labor (if applicable)	\$	332,771.92
Construction Materials	\$	550,727.84
SUBTOTAL (NEGOTIATED PRICES):		\$ 1,473,839.77
Overhead and Profit (Coefficient per Job Order Master Agreement)	8.00%	\$ 117,907.18
TOTAL (NEGOTIATED PRICES + OVERHEAD & PROFIT):		\$ 1,591,746.95
Insurance, Bonds, & Taxes		
Sales Tax Percentage (Current Tax Rate)	ENTER TAX % HERE: 5.07%	\$ 80,701.57
General Liability Insurance Percentage (Actual Cost per Job Order)		\$ 11,289.03
Builder's Risk Insurance Percentage (Actual Cost per Job Order)		\$ 11,289.03
Payment Bond (Actual Cost per Job Order)		\$ 6,271.68
Performance Bond (Actual Cost per Job Order)		\$ 6,271.68
SUBTOTAL (INSURANCE, BONDS, & TAXES):		\$ 115,822.98
COMBINED TOTAL (TOTAL + INSURANCE, BONDS, & TAXES):		\$ 1,707,569.93
City's Allowance		\$ 170,756.99
TOTAL JOB ORDER:		\$ 1,878,326.92

Per the Job Order Master Agreement - This Fee Table includes all fees, costs, insurance and bond premiums, allowances, construction contingency, and taxes of any type necessary to fully, properly and timely perform and construct the Work. Also per the Job Order Master Agreement - For any portion of the Work which, either through this Contract, Change Order or otherwise, is performed and paid for on a cost, or time and materials basis, the costs may be reimbursed to JOC Contractor and chargeable against the Contract Price will be determined as set forth in MAG 109.5.

SCHEDULE OF VALUES

GCI ITEM #	BID ITEM #	SIZE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENSION
10	HEADER	HEADER	GENERAL CONSTRUCTION:				\$ -
20			MOBILIZATION / DEMOBILIZATION	1.0	LUMP SUM	\$ 22,839.14	\$ 22,839.14
30			CONSTRUCTION WATER	1.0	LUMP SUM	\$ 3,365.00	\$ 3,365.00
50			MATERIALS TESTING	1.0	LUMP SUM	\$ 4,500.00	\$ 4,500.00
100	HEADER	HEADER	HCL STORAGE AND WEAK ACID MIXING IMPROVEMENTS				\$ -
110			DEMO EXISTING TANKS & APPURTENANCES	1.0	LUMP SUM	\$ 67,195.68	\$ 67,195.68
120			PURCHASE / INSTALL HCL TANKS & APPURTENANCES	1.0	LUMP SUM	\$ 261,771.07	\$ 261,771.07
130			PURCHASE / INSTALL FUME SCRUBBER & APPURTENANCES	1.0	LUMP SUM	\$ 158,366.03	\$ 158,366.03
140			PURCHASE / INSTALL CHEMICAL PUMPS & PIPING	1.0	LUMP SUM	\$ 214,040.06	\$ 214,040.06
150			PURCHASE / INSTALL YARD PIPING	1.0	LUMP SUM	\$ 98,581.52	\$ 98,581.52
160			PURCHASE / INSTALL TANK MIXER	1.0	LUMP SUM	\$ 52,902.14	\$ 52,902.14
170			INSTALL COATINGS	1.0	LUMP SUM	\$ 118,279.00	\$ 118,279.00
180			PURCHASE / INSTALL ELECTRICAL	1.0	LUMP SUM	\$ 352,355.00	\$ 352,355.00
190			START-UP AND TESTING	1.0	LUMP SUM	\$ 11,739.14	\$ 11,739.14
300	HEADER	HEADER	GMP SUMMARY:				\$ -
310		A1	SUBTOTAL: DIRECT COST	1.0	LUMP SUM	\$ 1,365,933.77	\$ 1,365,933.77
320		A2	SUBTOTAL: ALLOWANCES	1.0	LUMP SUM	\$ -	\$ -
330		A	TOTAL: DIRECT COST	1.0	LUMP SUM	\$ 1,365,933.77	\$ 1,365,933.77
340		B	GENERAL CONDITIONS	1.0	LUMP SUM	\$ 107,906.01	\$ 107,906.01
350	HEADER	HEADER	SUBTOTAL 1:				\$ 1,473,839.77
360		C	CONTRACTORS FEE	8.00%	PERCENT	\$ 1,473,839.77	\$ 117,907.18
370	HEADER	HEADER	SUBTOTAL 2:				\$ 1,591,746.95
380		D1	SALES TAX	5.070%	PERCENT	\$ 1,591,746.95	\$ 80,701.57
390		D2	TAX CREDITS	-5.070%	PERCENT		\$ -
400			SALES TAX TOTAL	1.0	LUMP SUM	\$ 80,701.57	\$ 80,701.57
410	HEADER	HEADER	SUBTOTAL 3:				\$ 1,672,448.52
420		E1	INSURANCE	1.3500%	PERCENT	\$ 1,672,448.52	\$ 22,578.05
430		E2	BONDS	0.7500%	PERCENT	\$ 1,672,448.52	\$ 12,543.36
440			INSURANCE & BONDS TOTAL	1.0	LUMP SUM	\$ 35,121.42	\$ 35,121.42
450	HEADER	HEADER	SUBTOTAL 4:				\$ 1,707,569.93
460		F	OWNERS CONTINGENCY	10.0%	PERCENT	\$ 1,707,569.93	\$ 170,756.99
470	HEADER	HEADER	GMP PROPOSAL:				\$ 1,878,326.92
480			GMP TOTAL	1.0	LUMP SUM	\$ 1,878,326.92	\$ 1,878,326.92

ESTIMATE

HIDE	GCI ITEM	BID ITEM	CATEGORY	TYPE	SIZE	DESCRIPTION	QUANTITY PER INSTALL	INSTALL MEASURE	BID ITEM INSTALLS	TOTAL BID ITEM INSTALLS	UNIT	UNIT COST	LINE ITEM TOTAL	BID ITEM TOTAL
	10 20	HEADER 0			HEADER 0	GENERAL CONSTRUCTION: MOBILIZATION / DEMOBILIZATION			0 1	0	LUMP SUM			\$ -
		20	0	Garney	Crew	JOC Mechanical	2.0	Shifts	1.00	2.00	Shifts	\$ 5,119.57	\$ 10,239.14	
		20	0	Site Conditions: Field	Material	Sanitary Facilities: Port-O-Lets	6	Months	1.00	6.00	LUMP SUM	\$ 750.00	\$ 4,500.00	
		20	0	Site Conditions: Field	Material	Waste Disposal: Roll Off Dumpster	6	Loads	1.00	6.00	LUMP SUM	\$ 750.00	\$ 4,500.00	
		20	0	Lowboys:	Material	Lowboy: Forklift	2	Moves	1.00	2.00	LUMP SUM	\$ 600.00	\$ 1,200.00	
		20	0	Lowboys:	Material	Lowboy: Articulated Boom Lift	2	Moves	1.00	2.00	LUMP SUM	\$ 600.00	\$ 1,200.00	
		20	0	Lowboys:	Material	Lowboy: Connex Boxes	2	Moves	1.00	2.00	LUMP SUM	\$ 600.00	\$ 1,200.00	
	30	0			0	CONSTRUCTION WATER			1		LUMP SUM			\$ 3,365.00
		30	0	Garney	Crew	JOC Mechanical	0.0	Shifts	1.00	-	Shifts	\$ 5,119.57	\$ -	
		30	0	Construction Water:	Material	Construction Water: Water	100000	Gallons	1.00	100,000.00	LUMP SUM	\$ 0.01	\$ 1,000.00	
		30	0	Construction Water:	Material	Construction Water: Meter	1	Each	1.00	1.00	LUMP SUM	\$ 1,650.00	\$ 1,650.00	
		30	0	Construction Water:	Material	Construction Water: Hydrant Usage Fees	1	Months	1.00	1.00	LUMP SUM	\$ 215.00	\$ 215.00	
		30	0	Construction Water:	Material	Construction Water: Connection Materials and Hoses	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 500.00	\$ 500.00	
	50	0			0	MATERIALS TESTING			1		LUMP SUM			\$ 4,500.00
		50	0	Materials Testing:	Subcontract	Materials Testing: Coatings Testing	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 4,500.00	\$ 4,500.00	
	100 110	HEADER 0			HEADER 0	HCL STORAGE AND WEAK ACID MIXING IMPROVEMENTS DEMO EXISTING TANKS & APPURTENANCES			0 1	0	LUMP SUM			\$ -
		110	0	Garney	Crew	JOC Mechanical	10.0	Shifts	1.00	10.00	Shifts	\$ 5,119.57	\$ 51,195.68	
		110	0	Lowboys:	Material	Demo Haul Off	4	Loads	1.00	4.00	LUMP SUM	\$ 1,000.00	\$ 4,000.00	
		110	0	Tank Disposal:	Material	Tank Disposal Fees: 5,000 Gallon	1	Each	1.00	1.00	LUMP SUM	\$ 3,000.00	\$ 3,000.00	
		110	0	Tank Disposal:	Material	Tank Disposal Fees: 10,000 Gallon	1	Each	1.00	1.00	LUMP SUM	\$ 5,000.00	\$ 5,000.00	
		110	0	Service: Crane	Material	Crane: Remove Existing Tanks	2	Moves	1.00	2.00	LUMP SUM	\$ 2,000.00	\$ 4,000.00	
	120	0			0	PURCHASE / INSTALL HCL TANKS & APPURTENANCES			1		LUMP SUM			\$ 261,771.07
		120	0	Garney	Crew	JOC Mechanical	15.0	Shifts	1.00	15.00	Shifts	\$ 5,119.57	\$ 76,793.52	
		120	0	Supply House:	Material	Pipe: 3" CPVC	60	Linear Feet	1.00	60.00	LUMP SUM	\$ 13.05	\$ 783.00	
		120	0	Supply House:	Material	Pipe: 3" CPVC Flex Coupling	1	Each	1.00	1.00	LUMP SUM	\$ 694.00	\$ 694.00	
		120	0	Supply House:	Material	Pipe: 3" CPVC Vanstone Flange	3	Each	1.00	3.00	LUMP SUM	\$ 82.14	\$ 246.42	
		120	0	Supply House:	Material	Pipe: 3" CPVC 90 elbow	8	Each	1.00	8.00	LUMP SUM	\$ 48.52	\$ 388.16	
		120	0	Supply House:	Material	Pipe: 3" CPVC Ball Check Valve	1	Each	1.00	1.00	LUMP SUM	\$ 1,074.00	\$ 1,074.00	
		120	0	Supply House:	Material	Pipe: 3" CPVC Vented Ball Valve	2	Each	1.00	2.00	LUMP SUM	\$ 990.00	\$ 1,980.00	
		120	0	Supply House:	Material	Pipe: 3" Camlock Fitting	1	Each	1.00	1.00	LUMP SUM	\$ 79.79	\$ 79.79	
		120	0	Supply House:	Material	Pipe: 4" CPVC Vanstone Flange	1	Each	1.00	1.00	LUMP SUM	\$ 110.96	\$ 110.96	
		120	0	Supply House:	Material	Pipe: 4" x 2" CPVC Reducer	1	Each	1.00	1.00	LUMP SUM	\$ 42.90	\$ 42.90	
		120	0	Supply House:	Material	Pipe: 4" CPVC Duckbill Check Valve	1	Each	1.00	1.00	LUMP SUM	\$ 1,103.32	\$ 1,103.32	
		120	0	Supply House:	Material	Misc: Nuts, Bolts, and Gaskets	1	Each	1.00	1.00	LUMP SUM	\$ 500.00	\$ 500.00	
		120	0	Supply House:	Material	Misc: Pipe Glue & Primer	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
		120	0	Supply House:	Material	Misc: Pipe Supports	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 2,500.00	\$ 2,500.00	
		120	0	Supply House:	Material	Misc: Anchor Bolts	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 500.00	\$ 500.00	
		120	0	Supply House:	Material	Misc: Epoxy	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 500.00	\$ 500.00	
		120	0	Supply House:	Material	Misc: Signage	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 500.00	\$ 500.00	
		120	0	Supply House:	Material	Misc: Labeling	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 750.00	\$ 750.00	
		120	0	Supply House:	Material	Misc: Level Sensor Spare per HDR comment	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 5,000.00	\$ 5,000.00	
		120	0	Ready Mix:	Material	Ready Mix: Grout	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
		120	0	FRP Tank:	Material	FRP Tank: 5,000 Gallon Tank	1	Each	1.00	1.00	LUMP SUM	\$ 76,225.00	\$ 76,225.00	
		120	0	FRP Tank:	Material	FRP Tank: 10,000 Gallon Tank	1	Each	1.00	1.00	LUMP SUM	\$ 87,500.00	\$ 87,500.00	
		120	0	Service: Crane	Subcontract	Crane: Crane Set New Tanks	2	Moves	1.00	2.00	LUMP SUM	\$ 2,000.00	\$ 4,000.00	
	130	0			0	PURCHASE / INSTALL FUME SCRUBBER & APPURTENANCES			1		LUMP SUM			\$ 158,366.03

ESTIMATE

HIDE	GCI ITEM	BID ITEM	CATEGORY	TYPE	SIZE	DESCRIPTION	QUANTITY PER INSTALL	INSTALL MEASURE	BID ITEM INSTALLS	TOTAL BID ITEM INSTALLS	UNIT	UNIT COST	LINE ITEM TOTAL	BID ITEM TOTAL
	130	0	Garney	Crew		JOC Mechanical	4.0	Shifts	1.00	4.00	Shifts	\$ 5,119.57	\$ 20,478.27	
	130	0	Supply House:	Material	6"	Pipe: 6" SCH 80 CPVC	60	Linear Feet	1.00	60.00	LUMP SUM	\$ 36.60	\$ 2,196.00	
	130	0	Supply House:	Material	6"	Pipe: 6" SCH 80 CPVC 90 elbow	8	Each	1.00	8.00	LUMP SUM	\$ 171.82	\$ 1,374.56	
	130	0	Supply House:	Material	6"	Pipe: 6" CPVC Flex Coupling	3	Each	1.00	3.00	LUMP SUM	\$ 1,271.00	\$ 3,813.00	
	130	0	Supply House:	Material	6"	Pipe: 6" Vacuum and Pressure Breather Vent Valve	1	Each	1.00	1.00	LUMP SUM	\$ 5,000.00	\$ 5,000.00	
	130	0	Supply House:	Material	6"	Pipe: 6" CPVC Vanstone Flange	2	Each	1.00	2.00	LUMP SUM	\$ 189.05	\$ 378.10	
	130	0	Supply House:	Material	6" x 3"	Pipe: 6" x 3" CPVC Tee	1	Each	1.00	1.00	LUMP SUM	\$ 373.10	\$ 373.10	
	130	0	Supply House:	Material	6"	Pipe: 6" CPVC Ball Check Valve	1	Each	1.00	1.00	LUMP SUM	\$ 3,503.00	\$ 3,503.00	
	130	0	Supply House:	Material		Misc: Nuts, Bolts, and Gaskets	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 750.00	\$ 750.00	
	130	0	Supply House:	Material		Misc: Pipe Glue & Primer	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
	130	0	Supply House:	Material		Misc: Pipe Supports	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 1,500.00	\$ 1,500.00	
	130	0	Supply House:	Material		Misc: Anchor Bolts	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
	130	0	Supply House:	Material		Misc: Epoxy	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
	130	0	Fume Scrubber:	Material		Fume Scrubber	1	Each	1.00	1.00	LUMP SUM	\$ 110,000.00	\$ 110,000.00	
	130	0	Supply House:	Material		Grating: FRP Grating	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 3,000.00	\$ 3,000.00	
	130	0	Ready Mix:	Material		Ready Mix: Grout	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
	130	0	Supply House:	Material		Metals: Miscellaneous Metals	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 5,000.00	\$ 5,000.00	
	140	0			0	PURCHASE / INSTALL CHEMICAL PUMPS & PIPING			1		LUMP SUM			\$ 214,040.06
	140	0	Garney	Crew		JOC Mechanical	15.0	Shifts	1.00	15.00	Shifts	\$ 5,119.57	\$ 76,793.52	
	140	0	Supply House:	Material	1"	Pipe: 1" SCH 80 CPVC	80	Linear Feet	1.00	80.00	LUMP SUM	\$ 3.16	\$ 252.80	
	140	0	Supply House:	Material	1"	Pipe: 1" SCH 80 CPVC Ball Valve	3	Each	1.00	3.00	LUMP SUM	\$ 168.00	\$ 504.00	
	140	0	Supply House:	Material	1"	Pipe: 1" SCH 80 CPVC Flowmeter, Max 10 GPM	1	Each	1.00	1.00	LUMP SUM	\$ 125.00	\$ 125.00	
	140	0	Supply House:	Material	1"	Pipe: 1" SCH 80 CPVC 90 elbow	10	Each	1.00	10.00	LUMP SUM	\$ 6.67	\$ 66.70	
	140	0	Supply House:	Material	1"	Pipe: 1" SCH 80 CPVC 45 elbow	2	Each	1.00	2.00	LUMP SUM	\$ 8.76	\$ 17.52	
	140	0	Supply House:	Material	1"	Pipe: 1" SCH 80 CPVC Tee	3	Each	1.00	3.00	LUMP SUM	\$ 9.60	\$ 28.80	
	140	0	Supply House:	Material	1"	Pipe: 1" Vacuum Breaker	1	Each	1.00	1.00	LUMP SUM	\$ 612.97	\$ 612.97	
	140	0	Supply House:	Material	1"	Pipe: 1" x 1/2" CPVC Reducer	1	Each	1.00	1.00	LUMP SUM	\$ 8.07	\$ 8.07	
	140	0	Supply House:	Material	1"	Pipe: 1" Pressure Regulator	2	Each	1.00	2.00	LUMP SUM	\$ 1,492.00	\$ 2,984.00	
	140	0	Supply House:	Material	1"	Pipe: 1" Pressure Gauge	2	Each	1.00	2.00	LUMP SUM	\$ 1,915.00	\$ 3,830.00	
	140	0	Supply House:	Material	2"x1"	Pipe: 2" x 1" CPVC Reducer	2	Each	1.00	2.00	LUMP SUM	\$ 21.12	\$ 42.24	
	140	0	Supply House:	Material	2"	Pipe: 2" CPVC Pipe	40	Linear Feet	1.00	40.00	LUMP SUM	\$ 8.14	\$ 325.60	
	140	0	Supply House:	Material	2"	Pipe: 2" CPVC 90 elbow	5	Each	1.00	5.00	LUMP SUM	\$ 19.36	\$ 96.80	
	140	0	Supply House:	Material	2"	Pipe: 2" CPVC 90 tee	3	Each	1.00	3.00	LUMP SUM	\$ 25.80	\$ 77.40	
	140	0	Supply House:	Material	2"	Pipe: 2" CPVC Flex Coupling	1	Each	1.00	1.00	LUMP SUM	\$ 498.00	\$ 498.00	
	140	0	Supply House:	Material	2"	Pipe: 2" CPVC Ball Check Valve	2	Each	1.00	2.00	LUMP SUM	\$ 394.00	\$ 788.00	
	140	0	Supply House:	Material	2"	Pipe: 2" CPVC Vented Ball Valve	4	Each	1.00	4.00	LUMP SUM	\$ 390.00	\$ 1,560.00	
	140	0	Supply House:	Material	2"	Pipe: 2" Pressure Relief Valve	1	Each	1.00	1.00	LUMP SUM	\$ 2,687.00	\$ 2,687.00	
	140	0	Supply House:	Material	2"	Pipe: 2" CPVC Ball Valve	1	Each	1.00	1.00	LUMP SUM	\$ 390.00	\$ 390.00	
	140	0	Supply House:	Material	2"	Pipe: Pulsation Dampener	1	Each	1.00	1.00	LUMP SUM	\$ 5,298.47	\$ 5,298.47	
	140	0	Supply House:	Material	2"	Pipe: 2" Back Pressure Valve	1	Each	1.00	1.00	LUMP SUM	\$ 1,718.76	\$ 1,718.76	
	140	0	Supply House:	Material	2"	Pipe: 2" Flow Switch	1	Each	1.00	1.00	LUMP SUM	\$ 300.00	\$ 300.00	
	140	0	Supply House:	Material	3" x 2.5"	Pipe: 3" x 2.5" CPVC Reducing Flange	2	Each	1.00	2.00	LUMP SUM	\$ 65.25	\$ 130.50	
	140	0	Supply House:	Material	2.5" x2"	Pipe: 2.5" x 2" CPVC Reducer	2	Each	1.00	2.00	LUMP SUM	\$ 25.46	\$ 50.92	
	140	0	Supply House:	Material	2.5"	Pipe: 2.5" CPVC Vanstone Flange	2	Each	1.00	2.00	LUMP SUM	\$ 78.46	\$ 156.92	
	140	0	Supply House:	Material	2.5"	Pipe: 2.5" CPVC Pipe	10	Linear Feet	1.00	10.00	LUMP SUM	\$ 10.53	\$ 105.30	
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC	80	Linear Feet	1.00	80.00	LUMP SUM	\$ 13.05	\$ 1,044.00	
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC Flex Coupling	3	Each	1.00	3.00	LUMP SUM	\$ 694.00	\$ 2,082.00	

ESTIMATE

HIDE	GCI ITEM	BID ITEM	CATEGORY	TYPE	SIZE	DESCRIPTION	QUANTITY PER INSTALL	INSTALL MEASURE	BID ITEM INSTALLS	TOTAL BID ITEM INSTALLS	UNIT	UNIT COST	LINE ITEM TOTAL	BID ITEM TOTAL
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC Vanstone Flange	2	Each	1.00	2.00	LUMP SUM	\$ 82.14	\$ 164.28	
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC 90 elbow	14	Each	1.00	14.00	LUMP SUM	\$ 48.52	\$ 679.28	
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC Vented Ball Valve	5	Each	1.00	5.00	LUMP SUM	\$ 990.00	\$ 4,950.00	
	140	0	Supply House:	Material	3"	Pipe: 3" Pneumatic Operated Valve	1	Each	1.00	1.00	LUMP SUM	\$ 1,947.89	\$ 1,947.89	
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC True Union	1	Each	1.00	1.00	LUMP SUM	\$ 272.25	\$ 272.25	
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC Y-Strainer	1	Each	1.00	1.00	LUMP SUM	\$ 1,125.00	\$ 1,125.00	
	140	0	Supply House:	Material		Pipe: Calibration Column	1	Each	1.00	1.00	LUMP SUM	\$ 547.95	\$ 547.95	
	140	0	Supply House:	Material	3" x 1"	Pipe: 3" x 1" CPVC Tee	1	Each	1.00	1.00	LUMP SUM	\$ 76.38	\$ 76.38	
	140	0	Supply House:	Material	3"	Pipe: 3" CPVC Tee	1	Each	1.00	1.00	LUMP SUM	\$ 61.74	\$ 61.74	
	140	0	Supply House:	Material		Misc: Nuts, Bolts, and Gaskets	1	Each	1.00	1.00	LUMP SUM	\$ 750.00	\$ 750.00	
	140	0	Supply House:	Material		Misc: Pipe Supports	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 5,000.00	\$ 5,000.00	
	140	0	Supply House:	Material		Misc: Anchor Bolts	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 500.00	\$ 500.00	
	140	0	Supply House:	Material		Misc: Epoxy	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 500.00	\$ 500.00	
	140	0	Supply House:	Material		Misc: Pipe Glue & Primer	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
	140	0	Pumps:	Material		Pumps: Chemical Pumps	2	Each	1.00	2.00	LUMP SUM	\$ 42,500.00	\$ 85,000.00	
	140	0	Supply House:	Material		Grating: FRP Grating	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 2,000.00	\$ 2,000.00	
	140	0	Ready Mix:	Material		Ready Mix: Grout	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 250.00	\$ 250.00	
	140	0	Supply House:	Material		Shade: Shade Fabric	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 2,390.00	\$ 2,390.00	
	140	0	Supply House:	Material		Metals: Miscellaneous Metals	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 5,000.00	\$ 5,000.00	
	150	0			0	PURCHASE / INSTALL YARD PIPING			1		LUMP SUM			\$ 98,581.52
	150	0	Garney	Crew		JOC Mechanical	15.0	Shifts	1.00	15.00	Shifts	\$ 5,119.57	\$ 76,792.52	
	150	0	Supply House:	Material	2"	Pipe: 2" Hydrochloric Acid ABS Plastic Pipe	200	Linear Feet	1.15	230.00	LUMP SUM	\$ 2.23	\$ 512.90	
	150	0	Supply House:	Material	2"	Pipe: 2" ABS Plastic Pipe 90 elbow	1	Each	1.00	1.00	LUMP SUM	\$ 4.92	\$ 4.92	
	150	0	Supply House:	Material	2"	Pipe: 2" ABS Plastic Pipe 45 elbows	2	Each	1.00	2.00	LUMP SUM	\$ 4.52	\$ 9.04	
	150	0	Supply House:	Material	2"	Pipe: 2" Hydrochloric Acid ABS Plastic Pipe with 4" CPVC containment pipe (double containment piping)	240	Linear Feet	1.15	276.00	LUMP SUM	\$ 30.63	\$ 8,453.88	
	150	0	Supply House:	Material	2"	Pipe: 2" Hydrochloric Acid ABS Plastic Pipe with 4" CPVC containment pipe (double containment piping) 90 elbow	14	Each	1.00	14.00	LUMP SUM	\$ 77.80	\$ 1,089.20	
	150	0	Supply House:	Material	2"	Pipe: 2"x 4" CPVC 80 B- TERM SOCKSOC	7	Each	1.00	7.00	LUMP SUM	\$ 118.14	\$ 826.98	
	150	0	Supply House:	Material	2"	Pipe: 2"x 4" CPVC 80 B- TERM SOCKSOC	7	Each	1.00	7.00	LUMP SUM	\$ 140.44	\$ 983.08	
	150	0	Supply House:	Material	4"	Pipe: Link seal for 4" CPVC	4	Each	3.00	12.00	LUMP SUM	\$ 34.00	\$ 408.00	
	150	0	Supply House:	Material		Misc: Pipe Supports - Uni-Strut Supports	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 7,500.00	\$ 7,500.00	
	150	0	Supply House:	Material		Misc: Pipe Glue & Primer	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 200.00	\$ 200.00	
	150	0	Coring:	Subcontract		Coring: Core 4" Hole	3	Each	1.00	3.00	LUMP SUM	\$ 600.00	\$ 1,800.00	
	160	0			0	PURCHASE / INSTALL TANK MIXER			1		LUMP SUM			\$ 52,902.14
	160	0	Garney	Crew		JOC Mechanical	2.0	Shifts	1.00	2.00	Shifts	\$ 5,119.57	\$ 10,239.14	
	160	0	Mixer:	Material		Mixer: Submersible Tank Mixer	1	Each	1.00	1.00	LUMP SUM	\$ 39,163.00	\$ 39,163.00	
	160	0	Mixer:	Material		Mixer: Anchor Chain and Hook	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 3,500.00	\$ 3,500.00	
	170	0			0	INSTALL COATINGS			1		LUMP SUM			\$ 118,279.00
	170	0	Coatings:	Subcontract		Coatings: Containment Areas	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 99,429.00	\$ 99,429.00	
	170	0	Coatings:	Subcontract		Coatings: Piping	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 18,850.00	\$ 18,850.00	
	180	0			0	PURCHASE / INSTALL ELECTRICAL			1		LUMP SUM			\$ 352,355.00
	180	0	Electrical:	Subcontract		Electrical: Complete Electrical	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 352,355.00	\$ 352,355.00	
	190	0			0	START-UP AND TESTING			1		LUMP SUM			\$ 11,739.14
	190	0	Garney	Crew		JOC Mechanical	2.0	Shifts	1.00	2.00	Shifts	\$ 5,119.57	\$ 10,239.14	
	190	0	Misc:	Subcontract		Misc: Testing Materials	1	Lump Sum	1.00	1.00	LUMP SUM	\$ 1,500.00	\$ 1,500.00	
	200	HEADER			HEADER	ALLOWANCES:			0		0			\$ -
	210	0			0	BLANK			1		LUMP SUM			\$ -
	300	HEADER			HEADER	GMP SUMMARY:			0		0			\$ -
	310	0			A1	SUBTOTAL: DIRECT COST			1		LUMP SUM			\$ -
	320	0			A2	SUBTOTAL: ALLOWANCES			1		LUMP SUM			\$ -

ESTIMATE

HIDE	GG ITEM	BID ITEM	CATEGORY	TYPE	SIZE	DESCRIPTION	QUANTITY PER INSTALL	INSTALL MEASURE	BID ITEM INSTALLS	TOTAL BID ITEM INSTALLS	UNIT	UNIT COST	LINE ITEM TOTAL	BID ITEM TOTAL
	330	0			A	TOTAL: DIRECT COST			1		LUMP SUM			\$ -
	340	0			B	GENERAL CONDITIONS			1		LUMP SUM			\$ 107,906.01
	340	0	Garney	Crew		JOC Project Management	60.0	Shifts	1.00	60.00	Shifts	\$ 1,798.43	\$ 107,906.01	
	350	HEADER			HEADER	SUBTOTAL 1:	0		0		0			\$ -
	360	0			C	CONTRACTORS FEE	0		0		PERCENT			\$ -
	370	HEADER			HEADER	SUBTOTAL 2:	0		0		0			\$ -
	380	0			D1	SALES TAX	0		0		PERCENT			\$ -
	390	0			D2	TAX CREDITS	0		0		PERCENT			\$ -
	400	0			0	SALES TAX TOTAL	1		1		LUMP SUM			\$ -
	410	HEADER			HEADER	SUBTOTAL 3:	0		0		0			\$ -
	420	0			E1	INSURANCE	0		0		PERCENT			\$ -
	430	0			E2	BONDS	0		0		PERCENT			\$ -
	440	0			0	INSURANCE & BONDS TOTAL	1		1		LUMP SUM			\$ -
	450	HEADER			HEADER	SUBTOTAL 4:	0		0		0			\$ -
	460	0			F	OWNERS CONTINGENCY	0		0		PERCENT			\$ -
	470	HEADER			HEADER	GMP PROPOSAL:	0		0		0			\$ -
	480	0			0	GMP TOTAL	1		1		LUMP SUM			\$ -

Resource: Hourly Labor	Personnel Quantity	Regular Time =SUM(D:Q)	Over Time =SUM(D:Q)*1.5	Regular Time	Over Time		Totals =SUM(F*D) +SUM(G*E)*C
	Total	Costs	Costs	Hours	Hours		
SALARY: SUPERINTENDENT	1.00	\$ 121.95	\$ 182.93	40	0		\$ 4,878.00
OPERATOR: BACKHOE	1.00	\$ 51.74	\$ 77.61	40	5		\$ 2,457.65
LABORER: PIPELAYER	1.00	\$ 57.28	\$ 85.92	40	5		\$ 2,720.80
LABORER: PIPELAYER	1.00	\$ 57.28	\$ 85.92	40	5		\$ 2,720.80
LABORER: COMMON	1.00	\$ 46.19	\$ 69.29	40	5		\$ 2,194.03
LABORER: COMMON	1.00	\$ 46.19	\$ 69.29	40	5		\$ 2,194.03
							\$ 17,165.30

Resource: Equipment	Monthly Rate (M)	Weekly Rate (W)	Daily Rate (D)	Hourly Rate (H)	Operating Cost Per Hour	FHWA Rate =SUM(B/176)+F	Hours This Analysis	Total Equipment Cost Non-Operated =SUM(H*I)	Total Equipment =J
BACKHOE: CAT 420 OR SIMILAR	\$ 6,930.00	\$ 1,940.00	\$ 485.00	\$ 73.00	\$ 35.97	\$ 75.35	45.0	\$ 3,390.53	\$ 3,390.53
SKID STEER: CAT 289 OR SIMILAR	\$ 7,130.00	\$ 1,995.00	\$ 500.00	\$ 75.00	\$ 29.06	\$ 69.57	45.0	\$ 3,130.71	\$ 3,130.71
ON-HIGHWAY: LIGHT DUTY 4X4 TRUCK - DIESEL	\$ 2,755.00	\$ 770.00	\$ 195.00	\$ 29.00	\$ 26.82	\$ 42.47	45.0	\$ 1,911.30	\$ 1,911.30
								\$ 8,432.54	\$ 8,432.54

CREW TYPE: JOC SUPPORT CREW

ITEMIZATION	TOTALS
Direct Cost of Labor:	\$ 17,165.30
Direct Cost of Equipment:	\$ 8,432.54
Subtotal Cost Per Week:	\$ 25,597.84
Days Per Week:	5
TOTAL PER SHIFT:	\$ 5,119.57

Resource: Hourly Labor	Personnel Quantity	Regular Time	Over Time	Regular Time	Over Time	Totals =SUM(F*D) +SUM(G*E)*C
		=SUM(D:Q)	=SUM(D:Q)*1.5			
		Total	Costs	Costs	Hours	
SALARY: PROJECT MANAGER	1.00	\$ 125.64	\$ 188.46	24	0	\$ 3,015.36
SALARY: PROJECT ENGINEER	1.00	\$ 83.15	\$ 124.73	40	0	\$ 3,326.00
						\$ 6,341.36

Resource: Equipment	Monthly Rate (M)	Weekly Rate (W)	Daily Rate (D)	Hourly Rate (H)	Operating Cost Per Hour	FHWA Rate =SUM(B/176)+F	Hours This Analysis	Total Equipment Cost Non-Operated =SUM(H*I)			Total Equipment =J
TRUCK: ON-HIGHWAY LIGHT DUTY 4X4 GAS	\$ 915.00	\$ 255.00	\$ 64.00	\$ 10.00	\$ 36.22	\$ 41.42	24.0	\$ 994.05			\$ 994.05
TRUCK: ON-HIGHWAY LIGHT DUTY 4X4 GAS	\$ 915.00	\$ 255.00	\$ 64.00	\$ 10.00	\$ 36.22	\$ 41.42	40.0	\$ 1,656.75			\$ 1,656.75
								\$ 2,650.81			\$ 2,650.81

CREW TYPE: JOC PROJECT MANAGEMENT CREW

ITEMIZATION	TOTALS
Direct Cost of Labor:	\$ 6,341.36
Direct Cost of Equipment:	\$ 2,650.81
Subtotal Cost Per Week:	\$ 8,992.17
Days Per Week:	5
TOTAL PER SHIFT:	\$ 1,798.43

Bid Solicitation List - Chandler OBRF Projects

Div.	Status	Company	Response Date	Quote Amount
5	Sent 8/31/2023	Aluma- Line Inc.	9/21/2023	\$ 2,390.00
5	Sent 8/31/2023	LJR Metals	No Response	
5	Sent 8/31/2023	Revolution Industrial	No Response	
5	Sent 8/31/2023	OLT Fabrication	No Response	
5	Sent 8/31/2023	Professional Piping Systems	No Response	
5	Sent 8/31/2023	SH Engineering & Mfg	9/19/2023	No Bid
6	Sent 8/31/2023	Fibergrate	9/14/2023	Completing Price
6	Sent 8/31/2023	Harrington Industrial Plastics	No Response	
9	Sent 8/31/2023	AO Painting	9/12/2023	\$ 118,279.00
9	Sent 8/31/2023	DE LEON PAINTING INC	No Response	
9	Sent 8/31/2023	Maxx Industrial Coatings LLC	No Response	
9	Sent 8/31/2023	Revolution Industrial	No Response	
9	Sent 8/31/2023	Riley Industrial Services Inc	9/11/2023	\$ 102,745.00
26	Sent 8/31/2023	Commonwealth Electric	No Response	
26	Sent 8/31/2023	Foster Electric	No Response	
26	Sent 8/31/2023	Keller Electrical Industries	No Response	
26	Sent 8/31/2023	Ludvik Electric	9/18/2023	\$ 352,355.00
26	Sent 8/31/2023	Rural Electric Inc.	9/5/2023	No Bid
26	Sent 8/31/2023	Swain Electric	No Response	
40	Sent 8/30/2023	Core & Main	9/21/2023	Varies
40	Sent 8/31/2023	Farwest Insulation	No Response	
40	Sent 8/30/2023	Ferguson Water Works	9/20/2023	Varies
40	Sent 8/31/2023	Ryan Herco	9/21/2023	Varies
43	Sent 8/30/2023	JCH (Diamond Fiberglass)	9/21/2023	\$ 240,422.00
43	Sent 8/31/2023	Daniel Mechanical	9/18/2023	No Bid
43	Sent 8/31/2023	Core-Rosion Products	9/11/2023	\$ 190,000.00
43	Sent 8/30/2023	American Fiberglass	9/11/2023	\$ 163,725.00
44	Sent 8/31/2023	Daniel Mechanical	9/18/2023	No Bid
44	Sent 8/31/2023	Indusco Environmental	ROM provided 9/18/2023	\$ 110,000.00
44	Sent 8/31/2023	The Fairchild Company (Bionomic Industries Inc)	No Response	
46	Sent 8/30/2023	JCH	9/18/2023	\$ 39,163.00
46	Sent 8/31/2023	Phoenix Pumps	ROM provided 9/19/2023	\$ 85,000.00
46	Sent 8/31/2023	Quadna	No Response	

EXHIBIT G

SUBCONTRACTOR DOCUMENTS WITH JOC CONTRACTOR

Any subcontractor assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the JOC Contractor and their subcontractors, and do not apply to the Agreement between the JOC Contractor and the City.

Proposal

ALUMA-LINE, INC.

529 E. Juanita Ave.

Mesa, AZ 85204

(480) 926-3831 • Fax (480) 545-9623

Mesa - Tempe

Phoenix - Sun City

PROPOSAL SUBMITTED TO Garney Construction	PHONE (480) 261-6137	FAX	DATE 9/21/23
STREET 840 E. McKellips Rd., Unit 110	JOB NAME Ocotillo Brine Reduction Facility		
CITY, STATE, and ZIP CODE Mesa, AZ 85203	JOB LOCATION HCL Storage & Weak Acid Containment Improvements		
CONTACT ATTN: Lynne Stocker	3737 Old Price Rd.		JOB PHONE

We hereby submit specifications and estimates for:

Manufacture and Install

New Shade Fabric at Ferric Chloride Tank

Textilene 95 - Color by Owner

Installed on Existing Canopy

**NOTE: Due to Market Volatility and Escalating Prices, Quotes May be Subject to Change
Due to Manufacturing Capacities and Availability, There May be Delays in Fabrication**

***Does NOT Include Engineering, Permits, Special Inspection Costs, (GPR) Costs**

We Propose hereby to furnish material and labor – complete in accordance with specifications below, for the sum of:

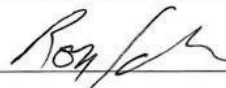
Two thousand three hundred ninety dollars & 00/100--- dollars (\$ **2,390.00**).

Payment to be made as follows:

Balance Due Net 30 Days

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from specifications below involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

Authorized
Signature



Note: This proposal may be withdrawn by us if not accepted within **60** days.

Acceptance of Proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Date of Acceptance: _____

Signature _____

Signature _____

Lynne Stocker

From: Andy Skiles <andy@shengmfg.com>
Sent: Tuesday, September 19, 2023 4:49 PM
To: Lynne Stocker
Subject: Re: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Metals

We decided this job wasn't really within our wheelhouse. None of our FRP suppliers wanted to quote the FRP structure that apparently wasn't designed. Thanks for the opportunity.

-Andy Skiles
andy@shengmfg.com
602-370-0069

On Sep 19, 2023, at 3:34 PM, Lynne Stocker <lynne.stocker@garney.com> wrote:

Andy,

Were you able to provide a quote for this project? If possible we would need it immediately.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: [480.261.6137](tel:480.261.6137)

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: Andy Skiles <andy@shengmfg.com>
Sent: Sunday, September 3, 2023 4:01 PM
To: Lynne Stocker <lynne.stocker@garney.com>
Subject: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Metals

External Message - Please be cautious when opening links or attachments in email

We will take a look at this ASAP.

-Andy Skiles

[SH Engineering & Mfg.](#)

andy@shengmfg.com

520-494-2900

<image001.png>

From: Lynne Stocker <lynne.stocker@garney.com>

Sent: Friday, September 1, 2023 4:30 PM

To: andy@shengmfg.com

Subject: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Metals

Andy,

See the attached plans and specifications for the Ocotillo Brine Reduction Facility – HCL Storage and Weak Acid Containment Mixing Improvements project.

Please review the plans and specs and provide a quote for the metals on this project.

Let me know if you have any questions and confirm if the quote can be sent by 9/11/2023.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: [480.261.6137](tel:480.261.6137)

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 [GARNEY.COM](http://www.Garney.com)

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September 12, 2023

Garney Construction
Lynne Stocker
4435 E. Holmes Ave
Suite 102
Mesa, AZ 85206

RE: City of Chandler- Ocotillo Brine Reduction Facility Chemical Containment

Lynne,

Below please find price to prepare and coat outlined items. Specified Coating Systems will be applied as outlined. Ultra High-Pressure Water Jetting will minimize dust created during surface preparation, thus eliminating any possible environmental concerns with Maricopa Air Quality Department.

Breakdown

- | | |
|--|---------------------|
| • Hydrochloric Acid Storage Containment Area | \$ 89,604.00 |
| • New Chemical Piping | \$ 18,850.00 |
| • Recoat Existing Shade Structure | \$ 9,825.00 |

Above Prices Include

- Labor
- Materials
- Equipment
- Special Surface Preparation Equipment
- Quality Control Documentation and Equipment
- Supervision
- Disposal

Exclusion

- Coating of Containment Walls
- Coating of Electrical Components
- Taxes and Bonds

If you have any questions, please feel free to contact me @ 520-271-1917

Best Regards,

Alex "Bruiser" Ortega

Alex "Bruiser" Ortega
General Manager
NACE Certified Coating Inspector
Level 3 –Cert. No. 47886



3237 E. President St. ▪ Tucson, AZ 85714 ▪ 520-573-0051 ▪ Fax 520-294-8353
ROC-095603 L-34 ▪ ROC-129492 L-05 ▪ Website: www.aopaintinginc.com





PLANT LOCATION
2615 SAN JUAN BLVD FARMINGTON, NM 87401
PHONE (505) 327-4947

MAILING ADDRESS
P.O. BOX 2014 FARMINGTON, NM 87499
FAX (505) 326-0305

September 11, 2023

Garney Construction

Attention: Lynne Stocker

Re: City of Chandler – Otillo Brine Reduction Facility HCL Storage and Weak Acid Containment Mixing Improvements

We hereby submit our proposal for the above referenced project. Our figures include the supervision, labor, equipment, and materials to complete the following scope of work.

Basic Scope & Pricing Breakdown

5,000-gallon Hydrochloric Acid Containment area

- Painting of CPVC Pipe \$8,768.00
 - Hand prep, solvent clean and application of paint system for “Outdoor atmospheric” per section 09 96 00.
- Concrete Secondary Containment \$61,142.00
 - Surface prep and application of coating system for “Outdoor-Secondary Containment” per section 09 96 00.
- Shade Frame \$7,447.00
 - Abrasive blast new and existing metal surfaces an application of paint system for “Outdoor atmospheric” per section 09 96 00.
- Painting of Exterior of FRP tank (if required) \$10,636.00
 - Hand prep, solvent clean and application of paint system for “Outdoor atmospheric” per section 09 96 00.

10,000-gallon Hydrochloric Acid Containment area

- Painting of CPVC Pipe \$8,220.00
 - Hand prep, solvent clean and application of paint system for “Outdoor atmospheric” per section 09 96 00
- Painting of Exterior of FRP tank (if required) \$14,122.00
 - Hand prep, solvent clean and application of paint system for “Outdoor atmospheric” per section 09 96 00.

Field Pipe (piping that is installed and runs between both tanks)

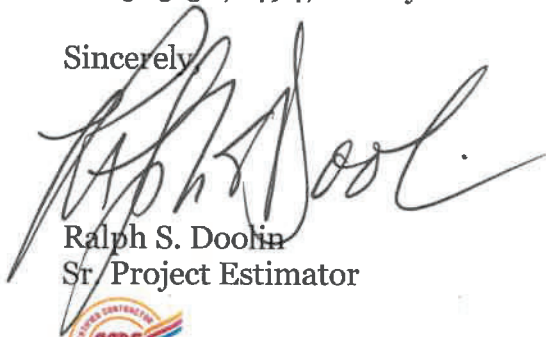
- Painting of CPVC Pipe \$17,168.00
 - Hand prep, solvent clean and application of paint system for “Outdoor atmospheric” per section 09 96 00

Notes:

1. No taxes or bonds have been added to our pricing above; our bond rate is 1.2% and any applicable taxes will be added to the billing invoice.
2. Garney to provide:
 - o Sanitary facilities
 - o Clean water supply
 - o Traffic Control if required
3. Exclusions from this bid:
 - o Underground pipe coating
 - o Below grade concrete coatings in contact with soil
 - o Painting galvanized /Aluminum metal
 - o Coating aluminum in contact with concrete
 - o Electrical cabinet units
 - o Touch up of factory finished equipment
 - o No pipe labels
 - o No tank labels
4. We have not included pricing for 3rd party NACE inspection services in the above figures.
5. We have received no addendums to date.

If you have any questions, please feel free to E-mail me at ralphd@rileyindustrial.com or call 505-327-4947 for my immediate attention.

Sincerely,



Ralph S. Doolin
Sr. Project Estimator



Reference: City of Chandler OBRF HCL Storage & Weak Acid Containment Improvements 90%

Subject: **ELECTRICAL BID SCOPE/PROPOSAL**

Bid Date: 09/18/2023

We submit our proposal for the Electrical and Instrumentation work of Specification Divisions 26 and 40 as shown on the 90% Electrical and Instrumentation Drawings, including Addenda NONE, and as follows:

Electrical and Instrumentation Bid Amount **\$ 352,355.00**

Option: ADD \$ 1% for Performance and Payment Bonds, if required.

EXCLUSIONS:

1. Taxes, permits, utility company costs and fees.
2. Temporary lighting and power. We will provide power for our tools as needed.
3. Removal of refuse from site. We deposit refuse in your dumpster.
4. Cutting and patching of concrete and asphalt.
5. Grouting and all formed concrete (i.e. pads, bases, curbs, etc.).
6. Unloading, storing, and setting of equipment we do not furnish.
7. Process and mechanical connections, piping, tubing, fittings, valves, spools, etc.
8. Surveying, traffic control, trench plating, dust control, construction water, compaction testing, concrete testing, de-watering, and shoring.
9. Hoisting and setting of electrical equipment and palletized materials.
10. Excavation, sand, concrete, and backfill for underground raceways. Ludvik proposal is based upon utilizing the existing underground ductbanks as stated on the drawings.

CLARIFICATIONS:

1. The City of Chandler preferred system integrator, Wunderlich-Malec Engineering, was unable to provide a programming proposal within the allotted amount of time. Ludvik has included an estimated plug for programming costs.
2. Ludvik Electric proposal is based upon 90% Drawings. We have not received 100% Drawings for this project.
3. Drawing E-101, Keyed Note No. 6 states contractor to provide equipment rack with shade canopy per detail C7 Sheet D-501. Detail C7 on drawing D-501 is for a combination Air Relief Valve Assembly. Ludvik has included an Electrical Equipment Rack with Sunshade for the electrical equipment.
4. Electrical and instrumentation items specified under other sections, identified to be furnished by other sections, or understood to be provided by others are not included. The following items are typical of these:
 - a. Section 46 33 11 Chemical Feed – Liquid Systems includes Pump Motors.
 - b. Section 46 41 23 Submersible Mixer Package includes: Electric Motor, MiniCas II Controller, Moisture Detection System, and Temperature Detection System.
 - c. NRD-154-1-50 New Electric Valve is provided by others.



CLARIFICATIONS (continued):

5. Landscaping, painting, bollards, and toilet facilities are not included.
6. Attachment points on fabricated tanks, such as metal or fiberglass tabs, are to be provided by others to facilitate anchoring of electrical work.
7. Project duration is understood to be approximately 3 months from NTP to Final Completion.

This proposal is submitted for a mutually agreeable subcontract and schedule. It is valid for award within 30 calendar days. Please contact us at 602-777-5000 with any questions or for additional information.

Sincerely,
LUDVIK ELECTRIC CO.

A handwritten signature in blue ink, appearing to read 'AJ Trotter', with a stylized flourish at the end.

Andrew J. Trotter
Estimator



Bid Proposal for OCOTILLO BRINE REDUCTION FACILITY HCL STORAGE

All Bidders
Job Location: CHANDLER, AZ

Engineer: HDR

Bid Date: 09/11/2023 02:00 pm

Core & Main 3111682

Core & Main

1410 W Harvard Ave

Gilbert, AZ 85233

Phone: 480-926-7003

Fax: 480-926-7050

Seq#	Qty	Description	Units	Price	Ext Price
20		YARD PIPING			
40		4" HCL-CPVC			
50		2" HCL-PFA TUBING			
60		FROM PUMPS TO 10,000 GAL			
70		STORAGE TANK			
80		DWG C-101			
90	240	4 SCH80 CPVC PIPE SWB 20'	FT	21.61	5,186.40
100	380	2 PFA TUBING	FT	1.82	691.60
110	13	4 CPVC S80 90 HXH 806-040C	EA	75.37	979.81
120	5	4 CPVC S80 45 HXH 817-040C	EA	62.27	311.35
130	2	4X2 CPVC S80 BUSH SXH 837-420C	EA	37.82	75.64
140	2	2 CPVC S80 HXBARB	EA	5.61	11.22
150	2	2 SS HOSE CLAMP 038-300	EA	3.14	6.28
160	3	LINK SEAL LS-300-SS	EA	7.67	23.01
170		-----			
180		-----			
200		10,000 GAL HCL ACID TANK			
210		TANK BY OTHERS			
230		3" DRAIN-CPVC			
240		FROM TANK TO 6" OVERFLOW			
250		D-203			
260	20	3 SCH80 CPVC PIPE SWB 20'	FT	14.79	295.80
270	1	3 CPVC S80 90 HXH 806-030C	EA	41.85	41.85
280	3	3 PVC S80 VANSTONE FLG SW SOCKET W/PVC RING 854-030	EA	24.64	73.92
290	1	3" CPVC T/U BALL VALVE	EA	669.83	669.83
		VITON GASKETS			
		HYDROCHLORIC ACID			
320	1	3 FLG FLEX COUPLING	EA	695.37	695.37
		HYDROCHLIRIC ACID			
		SPEC 40 05 00 2.1 5			
		PROCO PTFE 3 ARCH EXP JOINT			
360	3	3 316SS BOLT,NUT,WASHER KIT	EA	18.42	55.26
		WASHER BOTH SIDES			
380	3	3"X1/8" VITON FF GASKET	EA	28.12	84.36
400		6" OVERFLOW-CPVC			
410		OVERFLOW FROM TANK TO PIT			
420		D-203			
430	40	6 SCH80 CPVC PIPE SWB 20'	FT	42.07	1,682.80
440	4	6 CPVC S80 90 HXH 806-060C	EA	151.45	605.80
450	3	6 CPVC SCH80 SW FLG-VAN STONE 854-060C SOC	EA	111.41	334.23



Bid Proposal for OCOTILLO BRINE REDUCTION FACILITY HCL STORAGE

Bid #: 3111682

Seq#	Qty	Description	Units	Price	Ext Price
460	2	6 FLG FLEX COUPLING	EA	1,260.93	2,521.86
		HYDROCHLIRIC ACID			
		SPEC 40 05 00 2.1 5			
		PROCO PTFE 3 ARCH EXP JOINT			
500	3	6 316SS BOLT,NUT,WASHER KIT	EA	50.87	152.61
		WASHER BOTH SIDES			
520	3	6X1/8 FULL FACE VITON	EA	60.53	181.59
530		-----			
540		-----			
560		5000 GALLON HCL SYSTEM			
570		3" CPVC FILL-CPVC			
580		FROM CAMLOK TO TANK			
590		DWG D-201			
600	1	3 CAMLOCK X FIPT 316 SS	EA	115.41	115.41
610	1	3 CAMLOCK DUST CAP 316 SS	EA	85.28	85.28
620	40	3 SCH80 CPVC PIPE SWB 20'	FT	14.79	591.60
630	5	3 CPVC S80 90 HXH 806-030C	EA	41.85	209.25
640	1	3X1 CPVC SCH80 TEE HXH 801-335C	EA	81.42	81.42
650	3	3 CPVC SCH80 SW FLG-VAN STONE 854-030C SOC	EA	48.42	145.26
660	1	3" CPVC T/U BALL VALVE	EA	669.83	669.83
		VITON GASKETS			
		HYDROCHLORIC ACID			
690	1	3 CPVC BALL CHECK VALVE	EA	854.06	854.06
		VITON GASKETS			
		HYDROCHLORIC ACID			
720	3	3 316SS BOLT,NUT,WASHER KIT	EA	18.42	55.26
		WASHER BOTH SIDES			
740	3	3"X1/8" VITON FF GASKET	EA	28.12	84.36
750		-----			
770		1" TRUCK RELEIF VENT-CPVC			
780		FROM TRUCK FILL TO VENT			
790		DWG D-201			
800	60	1 SCH80 CPVC PIPE SWB 20'	FT	3.13	187.80
810	3	1 CPVC S80 90 HXH 806-010C	EA	4.14	12.42
820	2	1 CPVC S80 45 HXH 817-010C	EA	5.74	11.48
830	1	1 CPVC S80 TEE HXH 801-010C	EA	5.98	5.98
840	1	1" CPVC T/U BALL VALVE	EA	113.78	113.78
		VITON GASKETS			
		HYDROCHLORIC ACID			
870		-----			
890		6" VENT PIPE-CPVC			
900		FROM VACUUM BREATHER			
910		TO FUME SCRUBBER			
920		DWG D-201			
930	40	6 SCH80 CPVC PIPE SWB 20'	FT	42.07	1,682.80
940	3	6 CPVC S80 90 HXH 806-060C	EA	151.45	454.35
950	6	6 CPVC SCH80 SW FLG-VAN STONE 854-060C SOC	EA	111.41	668.46
960	6	6 316SS BOLT,NUT,WASHER KIT	EA	50.87	305.22
		WASHER BOTH SIDES			



Bid Proposal for OCOTILLO BRINE REDUCTION FACILITY HCL STORAGE

Bid #: 3111682

Seq#	Qty	Description	Units	Price	Ext Price
980	6	6X1/8 FULL FACE VITON	EA	60.53	363.18
990		-----			
1010		1" WATER FILL-PVC			
1020		FROM ext TO FUME SCRUBBER			
1030		DWG D-201			
1040	20	1 SCH80 CPVC PIPE SWB 20'	FT	3.13	62.60
1050	1	1 PVC S80 TEE HXH 801-010	EA	6.40	6.40
1060	7	1 PVC S80 90 HXH 806-010	EA	3.58	25.06
1070	2	1 PVC S80 MALE ADPT 836-010	EA	7.00	14.00
1080	1	1 PVC S80 BALL VALVE H X H	EA	19.42	19.42
		WATER			
1100	1	1 FLOW RESTRICTOR	EA	119.40	119.40
		WATER SERVICE			
		NEED MORE DETAILS			
		QUOTING 1" HAYWARD CPVC CV			
1140		-----			
1160		4" OVERFLOW-CPVC			
1170		FROM TANK TO PIT			
1180		DWG D-201			
1190	40	4 SCH80 CPVC PIPE SWB 20'	FT	21.61	864.40
1200	3	4 CPVC S80 90 HXH 806-040C	EA	75.37	226.11
1210	1	4X2 CPVC S80 TEE HXH 801-420C	EA	102.91	102.91
1220	3	4 CPVC SCH80 SW FLG-VAN STONE 854-040C SOC	EA	65.38	196.14
1230	1	4 FLG EXP JOINT	EA	905.97	905.97
		HYDROCHLORIC ACID			
		PROCO PTFE 3 ARCH EXP JOINT			
1260	1	4 FLG DUCKBILL CHECK VALVE	EA	1,103.32	1,103.32
		HYDROCHLORIC ACID			
		PROCO STYLE 710 VITON CHK VLV			
1290	4	4 316SS BOLT,NUT,WASHER KIT	EA	36.83	147.32
		WASHER BOTH SIDES			
1310	4	4" FF VITON GASKET	EA	40.51	162.04
1320		-----			
1340		3" DRAIN			
1350		FROM TANK TO OVERFLOW			
1360		DWG D-201			
1370	20	3 SCH80 CPVC PIPE SWB 20'	FT	14.79	295.80
1380	1	3" CPVC T/U BALL VALVE	EA	669.83	669.83
		VITON GASKETS			
		HYDROCHLORIC ACID			
1410	1	3 CPVC S80 90 HXH 806-030C	EA	41.85	41.85
1420	1	3 CPVC SCH80 SW FLG-VAN STONE 854-030C SOC	EA	48.42	48.42
1430	1	3 316SS BOLT,NUT,WASHER KIT	EA	18.42	18.42
		WASHER BOTH SIDES			
1450	1	3"X1/8" VITON FF GASKET	EA	28.12	28.12
1460		-----			



Bid Proposal for OCOTILLO BRINE REDUCTION FACILITY HCL STORAGE

Bid #: 3111682

Seq#	Qty	Description	Units	Price	Ext Price
1480		3" HCL PUMP SUCTION-CPVC			
1490		FROM TANK TO TRANSFER PUMPS			
1500		DWG D-201			
1510	40	3 SCH80 CPVC PIPE SWB 20'	FT	14.79	591.60
1520	20	1 SCH80 CPVC PIPE SWB 20'	FT	3.13	62.60
1530	8	3 CPVC S80 90 HXH 806-030C	EA	41.85	334.80
1540	2	3 CPVC SCH80 TEE HXH 801-030C	EA	54.42	108.84
1550	1	3X2 CPVC S80 BUSH MXF 837-338C	EA	37.82	37.82
1560	1	2 CPVC S80 MALE ADPT 836-020C	EA	20.61	20.61
1570	5	3 CPVC SCH80 SW FLG-VAN STONE 854-030C SOC	EA	48.42	242.10
1580	1	3X1 CPVC SCH80 TEE HXH 801-335C	EA	81.42	81.42
1590	1	1 CPVC S80 TEE HXH 801-010C	EA	5.98	5.98
1600	1	3 CPVC TU BALL VALVE PNU OP	EA	1,922.79	1,922.79
		VITON GASKETS			
		HYDROCHLORIC ACID			
		W/ LIMIT SWITCH AND BRACKET			
1640	3	3" CPVC T/U BALL VALVE	EA	669.83	2,009.49
		VITON GASKETS			
		HYDOCHLORIC ACID			
1670	1	3 CPVC S80 WYE STRAINER	EA	1,171.48	1,171.48
		HYDROCHLORIC ACID			
1690	5	3 CPVC SCH80 SW FLG-VAN STONE 854-030C SOC	EA	48.42	242.10
1700	1	3 CPVC TU BALL VALVE PNU OP	EA	1,922.79	1,922.79
		VITON GASKETS			
		HYDROCHLORIC ACID			
		W/ LIMIT SWITCH AND BRACKET			
1740	3	3 316SS BOLT,NUT,WASHER KIT	EA	18.42	55.26
		WASHER BOTH SIDES			
1760	5	3"X1/8" VITON FF GASKET	EA	28.12	140.60
1770		ARV			
1780	1	2 ARI COMBINATION ARV THRD	EA	3,854.31	3,854.31
		D025TSS02 - 316SS, MIPT			
1800	20	1/2 SCH80 CPVC PIPE SWB 20'	FT	1.82	36.40
1810	20	2 SCH80 CPVC PIPE PE 20'	FT	7.24	144.80
1820	2	1/2 CPVC S80 90 HXH 806-005C	EA	2.04	4.08
1830	1	1/2 CPVC S80 MALE ADP 836-005C	EA	2.79	2.79
1840	1	2 CPVC TU BALL VALVE OP	EA	264.34	264.34
		VITON GASKETS			
		HYDROCHLORIC ACID			
1870		-----			
1890		2" HCL PUMP DISCHARGE-CPVC			
1900		FROM PUMPS TO PFA TUBING			
1910		DWG D-201			
1920	20	2-1/2 SCH80 CPVC PIPE PE 20'	FT	11.04	220.80
1930	40	2 SCH80 CPVC PIPE SWB 20'	FT	7.24	289.60
1940	2	2-1/2X2 CPVC S80 BUSH SXH 837-292C	EA	22.44	44.88
1950	5	2 CPVC S80 90 HXH 806-020C	EA	12.07	60.35
1960	6	2 CPVC S80 MALE ADPT 836-020C	EA	20.61	123.66
1970	2	2-1/2 CPVC S80 SW FLG-VAN STON 854-025C SOC	EA	46.24	92.48
1980	2	2 CPVC S80 TU CHECK VALVE	EA	313.85	627.70
		VITON GASKETS			
		HYDOCHLORIC ACID			



Bid Proposal for OCOTILLO BRINE REDUCTION FACILITY HCL STORAGE

Bid #: 3111682

Seq#	Qty	Description	Units	Price	Ext Price
2010	4	2" CPVC T/U BALL VALVE	EA	264.34	1,057.36
		VITON GASKETS			
		HYDROCHLORIC ACID			
2040	1	2 THRD FLOW SWITCH	EA	PTF	PTF
		SPEC 40 71 00 2.2			
		HYDROCHLORIC ACID			
2070	2	2 THRD PRESSURE RELIEF VALVE	EA	1,718.76	3,437.52
		NO SPEC			
		HYDROCHLORIC ACID			
		QUOTING HAYWARD RV2200T			
2110	2	2-1/2 316SS BOLT,NUT,WASHER	EA	18.42	36.84
		WASHER BOTH SIDES			
2130	2	2-1/2"X1/8" VITON FF GASKET	EA	24.52	49.04
2140		-----			
2150		-----			
2160		SUPPORTS LIST			
2180	8	4" 316SS CLEVIS HANGER W/ 36"	EA	98.02	784.16
		ATR, W/ (1) 60" LG STRUT			
		CHANNEL W/ 2 1/2"X6'LG ATR W/			
		2 HEX NUTS/FLAT WASHERS EA			
2220	2	DOUBLE STRUT BRACKET W/ STRAP	EA	227.82	455.64
		FOR 3" PIPE,316SS,34" C/L WITH			
		1 DBL STRT BRKT,			
		1 2-HOLE PIPE STRAP,			
		2 CHANNEL NUTS, 2 BOLTS			
2270	2	DOUBLE STRUT BRACKET W/ STRAP	EA	178.81	357.62
		FOR 6" PIPE,316SS,12" C/L WITH			
		1 DBL STRT BRKT,			
		1 2-HOLE PIPE STRAP,			
		2 CHANNEL NUTS, 2 BOLTS			
2320	2	DOUBLE STRUT BRACKET W/ STRAP	EA	145.70	291.40
		FOR 3" PIPE,316SS, 9" C/L WITH			
		1 DBL STRT BRKT,			
		1 2-HOLE PIPE STRAP,			
		2 CHANNEL NUTS, 2 BOLTS			
2370	15	FLUSH MOUNT SUPPORT, FRP	EA	96.03	1,440.45
		FOR 4" PIPE, TO INCLUDE			
		1 DBLE STRUT BRACKET			
		1 2-HOLE PIPE STRAP			
		2 CHANNEL NUTS, 2 BOLTS			
2420	6	FLUSH MOUNT SUPPORT, FRP	EA	108.61	651.66
		FOR 6" PIPE, TO INCLUDE			
		1 DBLE STRUT BRACKET			
		1 2-HOLE PIPE STRAP			
		2 CHANNEL NUTS, 2 BOLTS			
2470	9	FLUSH MOUNT SUPPORT,316SS	EA	56.96	512.64
		FOR 2" PIPE, TO INCLUDE			
		1 DBLE STRUT BRACKET			
		1 2-HOLE PIPE STRAP			
		2 CHANNEL NUTS, 2 BOLTS			



Bid Proposal for OCOTILLO BRINE REDUCTION FACILITY HCL STORAGE

Bid #: 3111682

Seq#	Qty	Description	Units	Price	Ext Price
2520	5	FLUSH MOUNT SUPPORT,316SS FOR 3" PIPE, TO INCLUDE 1 DBLE STRUT BRACKET 1 2-HOLE PIPE STRAP 2 CHANNEL NUTS, 2 BOLTS	EA	59.61	298.05
2570	2	ADJ PIPE SUPPORT, 316SS FOR 3" PIPE, 52" C/L OFFERING #53AU/51TBS W/ CLAMP TOP	EA	649.01	1,298.02
2610	3	ADJ PIPE SUPPORT, 316SS FOR 6" PIPE, 62" C/L OFFERING #53AU/51TBS W/ CLAMP TOP	EA	1,184.11	3,552.33
2650	2	ADJ PIPE SUPPORT, 316SS FOR 4" PIPE, 62" C/L OFFERING #53AU/51TBS W/ CLAMP TOP	EA	1,092.72	2,185.44
2690	3	NON-ADJ PIPE SUPPORT, 316SS FOR 6" PIPE, 14" C/L OFFERING #53AU/51TBS W/ CLAMP TOP	EA	821.20	2,463.60
2740	1	THIRD PARTY ENGINEERING FEE *OPTIONAL*	EA	2,800.00	2,800.00
				SUBTOTAL	62,823.56
				Sub Total	62,823.56
				Tax	0.00
				Total	62,823.56

UNLESS OTHERWISE SPECIFIED HEREIN, PRICES QUOTED ARE VALID IF ACCEPTED BY CUSTOMER AND PRODUCTS ARE RELEASED BY CUSTOMER FOR MANUFACTURE WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THIS QUOTATION. CORE & MAIN LP RESERVES THE RIGHT TO INCREASE PRICES TO ADDRESS FACTORS, INCLUDING BUT NOT LIMITED TO, GOVERNMENT REGULATIONS, TARIFFS, TRANSPORTATION, FUEL AND RAW MATERIAL COSTS. DELIVERY WILL COMMENCE BASED UPON MANUFACTURER LEAD TIMES. ANY MATERIAL DELIVERIES DELAYED BEYOND MANUFACTURER LEAD TIMES MAY BE SUBJECT TO PRICE INCREASES AND/OR APPLICABLE STORAGE FEES. THIS BID PROPOSAL IS CONTINGENT UPON BUYER'S ACCEPTANCE OF SELLER'S TERMS AND CONDITIONS OF SALE, AS MODIFIED FROM TIME TO TIME, WHICH CAN BE FOUND AT: <https://coreandmain.com/TandC/>

Ferguson Pricing						
Quantity	Unit	Description	UNIT COST		EXTENDED COST	
200	LF	2" Hydrochloric Acid ABS Plastic Pipe	\$2.23	LF	\$446.80	
1	Each	2" ABS Plastic Pipe 90 elbow	\$4.92		\$4.92	
2	Each	2" ABS Plastic Pipe 45 elbows	\$4.52		\$9.04	
240	LF	2" Hydrochloric Acid ABS Plastic Pipe with 4" CPVC conta	\$30.63	LF	\$7,350.00	
12	Each	2" Hydrochloric Acid ABS Plastic Pipe with 4" CPVC conta	\$77.80		\$933.60	
1	Each	2"x4" CPVC 80 B- TERM SOCXSOC	\$118.14		\$118.14	NEEDED FOR DUAL CONTAINMENT ENDS
1	Each	2"x4" CPVC 80 B- TERM w/ Tap SOCXSOC	\$140.44		\$140.44	NEEDED FOR DUAL CONTAINMENT ENDS
3	Each	Link seal for 4" CPVC	\$34	PER LINK	\$1,020	30 LINKS
80	LF	1" SCH 80 CPVC	\$3.16	LF	\$252.83	
3	Each	1" SCH 80 CPVC Ball Valve	\$168.00		\$168.00	
1	Each	1" SCH 80 CPVC Flowmeter, Max 10 GPM	NO QUOTE		NO QUOTE	
10	Each	1" SCH 80 CPVC 90 elbow	\$6.67		\$66.70	
2	Each	1" SCH 80 CPVC 45 elbow	\$8.76		\$17.52	
3	Each	1" SCH 80 CPVC Tee	\$9.60		\$28.80	
1	Each	1" Vacuum Breaker	\$612.97		\$612.97	
1	Each	1" x 1/2" CPVC Reducer	\$8.07		\$8.07	
2	Each	1" Pressure Regulator	\$1,492.00		\$2,984.00	
2	Each	1" Pressure Gauge	\$1,915		\$3,830.00	snubber, HCI safe diaphragm seal and pigtail included
2	Each	2" x 1" CPVC Reducer	\$21.12		\$42.24	
40	LF	2" CPVC Pipe	\$8.14	LF	\$325.80	
5	Each	2" CPVC 90 elbow	\$19.36		\$96.80	
3	Each	2" CPVC 90 tee	\$25.80		\$77.40	
1	Each	2" CPVC Flex Coupling	\$498.00		\$498.00	Quoted PTFE liner
2	Each	2" CPVC Ball Check Valve	\$394.00		\$788.00	
4	Each	2" CPVC Vented Ball Valve	\$390.00		\$1,560.00	
1	Each	2" Pressure Relief Valve	\$2,687		\$2,687	
1	Each	2" CPVC Ball Valve	\$390.00		\$390.00	
1	Each	Pulsation Dampener	NO QUOTE		NO QUOTE	
1	Each	2" Back Pressure Valve	NO QUOTE		NO QUOTE	
1	Each	2" Flow Switch	NO QUOTE		NO QUOTE	
2	Each	3" x 2.5" CPVC Reducing Flange	\$65.25		\$130	
2	Each	2.5" x 2" CPVC Reducer	\$25.46		\$50.92	
2	Each	2.5" CPVC Vanstone Flange	\$78.46		\$156.93	
10	LF	2.5" CPVC Pipe	\$10.53	LF	\$210.67	QUOTED AS 20' SECTION
140	LF	3" CPVC	\$13.05	LF	\$1,827.83	
4	Each	3" CPVC Flex Coupling	\$694.00		\$2,776.00	Quoted PTFE liner
4	Each	3" CPVC Vanstone Flange	\$82.14		\$328.57	
22	Each	3" CPVC 90 elbow	\$48.52		\$1,067.44	
1	Each	3" CPVC Ball Check Valve	\$1,074.00		\$1,074.00	
7	Each	3" CPVC Vented Ball Valve	\$990		\$6,930.00	
1	Each	3" Camlock Fitting	\$79.79		\$79.79	
1	Each	3" Pnuematic Operated Valve	\$1,947.89		\$1,947.89	
1	Each	3" CPVC True Union	\$272.25		\$272.25	
1	Each	3" CPVC Y-Strainer	\$1,125		\$1,125	
1	Each	Calibration Column	NO QUOTE		NO QUOTE	
1	Each	3" x 1" CPVC Tee	\$76.38		\$76.38	
1	Each	3" CPVC Tee	\$61.74		\$61.74	
1	Each	4" CPVC Vanstone Flange	\$110.96		\$110.96	
1	Each	4" x 2" CPVC Reducer	\$42.90		\$42.90	
60	LF	6" SCH 80 CPVC	\$36.60	LF	\$2,196.49	
8	Each	6" SCH 80 CPVC 90 elbow	\$171.82		\$1,374.56	
3	Each	6" CPVC Flex Coupling	\$1,271.00		\$3,813.00	Quoted PTFE liner
1	Each	6" Vacuum and Pressure Breather Vent Valve	NO QUOTE		NO QUOTE	
2	Each	6" CPVC Vanstone Flange	\$189.05		\$378.11	
1	Each	6" x 3" CPVC Tee	\$373.10		\$373.10	
1	Each	6" CPVC Ball Check Valve	\$3,503.00		\$3,503.00	



QUOTATION

Billing Inquiries: (800) 848-1141

Sell To:

Garney Construction J
Attn: Barbara Ficken
1700 Swift St
Suite 200,
North Kansas City, MO 6411

Page: 1 of 3

Quote Number: 7167981

Quote Date: 09/19/2023

Entered By: Dustin Park - 002

Description: DLP/OCOTILLO BRINE RED FAC/LYNN

Account Number: 014284

Contact Name:

Contact Phone: (602) 470-0001

Ship To:

Garney Construction J
1850 North 95th Avenue
Ste #-192

Phoenix, AZ 85037

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All sales are subject to the Ryan Herco Flow Solutions Terms and Conditions of Sales and Warranty available at <https://www.rhfs.com/terms-conditions.html>

Note: The following does not include Shipping & Handling, Tax, or other applicable charges.

Product #	Description/Notes	Uom	Qty	Price	Total
	NO QUOTE ABS PIPE				
3670.040	CPVC PIPE N80 4"	EA	240	20.3000	4,872.00
3606S040	CPVC 90 EL N80 4" S SPEARS	EA	12	51.5100	618.12
3670.010	CPVC PIPE N80 1"	EA	80	3.3720	269.76
5098A010	CPVC/VIT TU B VLV 1" SXT ASAHI TYPE-21 230PSI	EA	3	69.4741	208.42
5801.314	ACR RTMTR 10 GPM 127MM SC PVC W/BUNA-N 1" FNPT	EA	1	158.5700	158.57
3606S010	CPVC 90 EL N80 1" S SPEARS	EA	10	3.7600	37.60
3617S010	CPVC 45 EL N80 1" S SPEARS	EA	2	5.2200	10.44
3601S010	CPVC TEE N80 1" S SPEARS	EA	3	5.4300	16.29
630.201500	PTFE/VIT VAC BRKR 1" T VBM100V-PP	EA	1	546.3436	546.34
3637S130	CPVC BUSH N80 1X1/2" SPGXS SPEAR	EA	1	3.2600	3.26
5398.510	CPVC/VIT PRESS REG 1"	EA	2	1,364.6768	2,729.35
	PRESSURE GAUGE NOT ME				
3637S249	CPVC BUSH N80 2X1" SPGXS SPEARS	EA	2	12.6000	25.20
3670.020	CPVC PIPE N80 2"	EA	40	7.3920	295.68
3606S020	CPVC 90 EL N80 2" S SPEARS	EA	5	10.9700	54.85
3601S020	CPVC TEE N80 2" S SPEARS FLEX COUPLING	EA	3	14.6100	43.83
5106A020	CPVC/VIT TU B CK VLV 2" SXT	EA	2	179.0366	358.07
5098A020V	CPVC/VIT TU B VLV 2" SXT VENTED TYPE-21 230PSI ASAHI	EA	4	217.0484	868.19
55425.420	PVDF/EPDM PRESS REL VLV 2"	EA	1	3,420.0913	3,420.09
5098A020	CPVC/VIT TU B VLV 2" SXT ASAHI TYPE-21 230PSI	EA	1	157.2506	157.25
112.393013	PULS DMPNR 370 CU IN PVDF/PTFE PVDF/PVDF/PTFE FNPT BACK PRESSURE VALVE GRIFFCO	EA	1	5,298.4668	5,298.47
	FLOW SWITCH NOT ME				
	**NO REDUCING FLANGES				
3637S292	CPVC BUSH N80 2.5X2" SPGXS SPEAR	EA	2	15.3400	30.68
3655S025	CPVC VAN STONE FLG N80 2.5" SPEA	EA	2	31.6000	63.20
3670.025	CPVC PIPE N80 2.5"	EA	20	11.1944	223.89
3670.030	CPVC PIPE N80 3"	EA	140	13.8936	1,945.10



QUOTATION

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Page: 2 of 3

Quote Number: 7167981

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Description: DLP/OCOTILLO BRINE RED FAC/LYNN

Account Number: 014284

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Contact Phone: (602) 470-0001

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1850 North 95th Avenue
Ste #-192

Phoenix, AZ 85037

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Product #	Description/Notes	Uom	Qty	Price	Total
	FLEX COUPLING				
3655S030	CPVC VAN STONE FLG N80 3" SPEARS	EA	4	33.0900	132.36
3606S030	CPVC 90 EL N80 3" S SPEARS	EA	22	28.6000	629.20
5106A030	CPVC/VIT SU B CK VLV 3" S ASAHI	EA	1	454.9254	454.93
5098A030V	CPVC/VIT TU B VLV 3" SXT VENTED	EA	7	286.6513	2,006.56
	TYPE-21 230PSI ASAHI				
	**NEED INFO ON CAMLOCK				
5098A030	CPVC/VIT TU B VLV 3" S ASAHI	EA	1	452.4357	452.44
	TYPE-21 230PSI				
/07102790414	D79PASW11A W/MT 3 T21/23	EA	1	1,927.1384	1,927.14
	**3" PNEUMATIC VALVE ASAHI				
5098A030	CPVC/VIT TU B VLV 3" S ASAHI	EA	1	452.4357	452.44
	TYPE-21 230PSI				
780.124423	3 CPVC T/U Y STRAINER SOC FKM C1	EA	1	1,261.8892	1,261.89
/11302790306	CALIBRATION COLUMN	EA	1	547.9452	547.95
	CLASS/PVDF 100ML 1/2" NPT				
	PN: CG-PVDF100				
3601S335	CPVC TEE N80 3" X 3" X 1"S SPEAR	EA	1	55.6400	55.64
3601S030	CPVC TEE N80 3" S SPEARS	EA	1	37.1900	37.19
3655S040	CPVC VAN STONE FLG N80 4" SPEARS	EA	1	44.6800	44.68
3637S420	CPVC BUSH N80 4X2" SPGX5 SPEARS	EA	1	25.8400	25.84
3670.060	CPVC PIPE N80 6"	EA	60	38.9928	2,339.57
3606S060	CPVC 90 EL N80 6" S SPEARS	EA	8	103.5000	828.00
	FLEX COUPLINGS				
	VACUUM AND PRESSURE BREATHER NA				
3655S060	CPVC VAN STONE FLG N80 6" SPEARS	EA	2	76.1300	152.26
3601S530	CPVC TEE N80 6" X 3"S SPEARS	EA	1	224.7500	224.75
	6" CHECK VALVE NA				
	NCNR				
	Q: 257080				
	F.O.B.: SHIPPING POINT				
	FREIGHT PAID BY CUSTOMER				
	EST LEAD TIME:ARO 2 WEEKS TO COMPLETE				
	THANK YOU FOR THE OPPORTUNITY				



QUOTATION

Billing Inquiries: (800) 848-1141

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Page: 3 of 3

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Note: The following does not include Shipping & Handling, Tax, or other applicable charges.

Product #	Description/Notes	Uom	Qty	Price	Total
	TO QUOTE ON YOUR REQUIREMENT.				
	PRICE BASED UPON FULL QTY				
	STANDARD LEAD TIME QUOTED ITEM MAY BE ABLE TO BE EXPEDITED.				
	TO IMPROVE QUALITY & ACCURACY REFERENCE THIS QUOTE NUMBER WHEN ORDERING.				
	THANK YOU. DUSTIN PARK				
	---- Package Subtotal: 33,827.49				

Subtotal: 33,827.49



1036 Industrial Park Dr., Victoria, Texas 77905
Phone: (361) 572-4040 • Fax: (361) 573-0451
www.diamondfiberglass.com

Quotation No. 38096

Customer: James Cooke & Hobson

Project Name: Ocotillo Brine Reduction Facility Improvements

Project Location: Chandler, AZ.

Specification Section: 43 41 45



Diamond Fiberglass

ASME RTP-1 certified facility providing composite storage tanks and process vessels.
www.diamondfiberglass.com

Fibrex Piping Services

Fabrication of Spooled FRP piping featuring the proprietary Integra-Joint™ connection system.
www.fibrex.com

Diamond Services

Field services providing on-site, turnkey non-metallic solutions
www.diamondservices.com



September 20, 2023

JAMES COOKE & HOBSON

Attn: Ed Martin

Email: ed.martin@jchinc.com

Reference: Ocotillo Brine Reduction Facility Improvements

Subject: FRP Equipment Proposal **38096**

Dear Ed:

In response to the above referenced inquiry, the following FRP Equipment Proposal is provided for your purchase consideration:

Item 1: One (1) 10,000 Gallon Fiberglass 35% Hydrochloric Acid Storage Tank, 11'-0" diameter by 15'-0" sidewall height, flat bottom, domed top. Tank will be fabricated with Derakane 470 vinyl ester resin and a double ply Nexus synthetic veil for the 200-mil inner corrosion liner and Derakane 510A vinyl ester resin in the outer structural overwrap. In addition, tank will receive a light gray (or white) exterior gelcoat with UV inhibitors and will be fit with the following nozzles and accessories:

• One (1)	Diamond Fiberglass standard nameplate
• LOT	Vessel design calculations stamped by a PE registered in the state of Arizona
• LOT	Anchor bolt calculations stamped by a PE registered in the state of Arizona
• One (1)	Shop atmospheric hydrostatic leak test (2-hour hold time)
• One (1)	Shop hot-air post cure treatment (4 hours at 180°F)
• Three (3)	3" Flanged and gusseted nozzles (1 w/ internal diptube)
• One (1)	4" Flanged and gusseted nozzles
• One (1)	6" Flanged and gusseted nozzles
• One (1)	6" FRP vent with mesh screen
• One (1)	24" Top flanged manway with 316SS bolting and EPDM gasket
• One (1)	30" Side flanged manway with 316SS bolting and EPDM gasket
• One (1)	15'-0" Tall fiberglass caged ladder assembly w/ safety system
• One (1)	Fiberglass top mounted handrail with safety gate
• One (1)	Non-slip surface added to tank top
• Four (4)	316SS OSHA safety tie off clips
• Four (4)	316SS tiedown lugs (design and supply of anchor bolts by others)
• Two (2)	316SS lifting lugs

**PRICE PER TANK, EX-WORKS DIAMOND FIBERGLASS,
VICTORIA, TEXAS FACILITY.....\$126,517.00**

Item 2: One (1) 5,000 Gallon Fiberglass 35% Hydrochloric Acid Storage Tank, 8'-0" diameter by 15'-0" sidewall height, flat bottom, domed top. Tank will be fabricated with Derakane 470 vinyl ester resin and a double ply Nexus synthetic veil for the 200-mil inner corrosion liner and Derakane 510A vinyl ester resin in the outer structural overwrap. In addition, tank will receive a light gray (or white) exterior gelcoat with UV inhibitors and will be fit with the following nozzles and accessories:

• One (1)	Diamond Fiberglass standard nameplate
• LOT	Vessel design calculations stamped by a PE registered in the state of Arizona
• LOT	Anchor bolt calculations stamped by a PE registered in the state of Arizona
• One (1)	Shop atmospheric hydrostatic leak test (2-hour hold time)
• One (1)	Shop hot-air post cure treatment (4 hours at 180°F)
• Three (3)	3" Flanged and gusseted nozzles (1 w/ internal diptube)
• One (1)	4" Flanged and gusseted nozzles
• One (1)	6" Flanged and gusseted nozzles
• One (1)	6" FRP vent with mesh screen
• One (1)	24" Top flanged manway with 316SS bolting and EPDM gasket
• One (1)	30" Side flanged manway with 316SS bolting and EPDM gasket
• One (1)	15'-0" Tall fiberglass caged ladder assembly w/ safety system
• One (1)	Fiberglass top mounted handrail with safety gate
• One (1)	Non-slip surface added to tank top
• Four (4)	316SS OSHA safety tie off clips
• Four (4)	316SS tiedown lugs (design and supply of anchor bolts by others)
• Two (2)	316SS lifting lugs

**PRICE PER TANK, EX-WORKS DIAMOND FIBERGLASS,
VICTORIA, TEXAS FACILITY.....\$113,905.00**

**TOTAL PRICE FOR ALL VESSELS, EX-WORKS DIAMOND FIBERGLASS,
VICTORIA, TEXAS FACILITY.....\$240,422.00**

**See Quotation Validity statement below.*

FREIGHT: The above equipment is quoted EX-WORKS, Diamond Fiberglass, Victoria, Texas with freight options available upon request.

APPROVAL DRAWINGS: General arrangement drawings for customer approval can be provided 2-3 weeks after receipt of purchase order and clarification of details. Completed shop drawings with design values will be provided after approval of the GA drawings.

PE STAMPED CALCULATIONS *(if included above):*

If required by project and included in the above tank details, stamped calculations packages will be submitted 2-3 weeks after approval of the general arrangement drawings and clarification of details.

FABRICATION SCHEDULE:

Based on the shop load as of the date on this proposal, the ESTIMATED fabrication lead time will be 24 weeks after receipt of approved drawings and confirmation of all details. Please confirm with Diamond Fiberglass prior to placement of purchase order on anticipated schedule.

IF THIS SCHEDULE DOES NOT MEET YOUR SCHEDULE REQUIREMENTS, PLEASE LET US KNOW WHAT YOU NEED FOR YOUR PROJECT. WE WILL WORK WITH OUR PRODUCTION SCHEDULER TO MORE ACCURATELY DETERMINE IF YOUR EQUIPMENT FABRICATION NEEDS CAN BE MET WITH OUR CURRENT SHOP LOAD.

DESIGN STANDARDS AND DETAILS

- 1) Vessel to be designed and fabricated per ASME RTP-1, Part 3 (3A or 3B as applicable). Vessel major components, shell joints (secondary bond overlays), flanged nozzles, manways, reinforcement of cutouts and installation of nozzles shall be Type I, Type II, or Type X fabrications as determined by Diamond Fiberglass to meet the vessel design requirements. Corrosion liner thickness is excluded from the structural calculations. All other reinforced thermoset plastic accessories designed and

fabricated to ASTM 3299, ASTM 4097, and NBS PS-15-69, as applicable. QA procedures per Diamond Fiberglass' non-RTP-1 standard process. This vessel is not certified to comply fully with RTP-1. Full compliance to RTP-1 is available by purchasing the stamp for an additional fee.

- 2) Vessel to be designed for seismic per ASCE 7-10 for Chandler, AZ. jobsite class D, a 1.16 specific gravity, a 108-mph wind load, atmospheric pressure, and 140° temperature.

GENERAL EXCEPTIONS & CLARIFICATIONS

- 1) Unless otherwise noted in this proposal, design and supply of anchor bolts is by others. Location and details of anchor lugs will be included on the drawings. Diamond Fiberglass designs utilizing the most efficient style and quantity of anchor lugs required based on the information provided. Any addition to quantity or change in style due to limitations of the foundation or anchor bolts, will result in additional cost.
- 2) All flanged connections will be flat-faced fiberglass flanges unless otherwise stated. Raised faced flanges are not available in fiberglass and are not recommended for use with fiberglass tanks.
- 3) Diamond Fiberglass' scope of work is to provide the above listed vessels and accessory equipment. All other items (including but not limited to instrumentation, plumbing, valves, installation, and field-testing services) are not included in this quotation and are by others.
- 4) The vessel's exterior U.V. inhibited gelcoat will be light gray or white unless a premium color is requested. A premium color will impact pricing.

FIELD SERVICES

Unless detailed above, this quotation does not include field support services. Diamond can provide field services such as installation, inspections, certifications, testing, training, start-ups, etc. for an additional fee.

SPECIFICATION SECTION 43 41 45 EXCEPTIONS & CLARIFICATIONS

- 1) 2.2.1: Per the inquiry response from Garney on this project, Derakane 470 has been quoted in the corrosion liner of this tank and Derakane 510A has been quoted in the structural layer to improve temperature rating of the tank.
- 2) 2.3.A.1: The loads mentioned in this section are not achievable for FRP nozzles and have not been included in this proposal. Diamond Fiberglass recommends that all nozzles be self-supported independently from the tank.
- 3) 2.3.B: Garney had stated that the tanks will not see and pressure or vacuum and this is how the tanks have been quoted.
- 4) 2.4.C.5: 35% HCL is only good to temperatures of 140 degrees with the resin quoted. 200 degree service cannot be provided with any resin. Max temperature achievable is 140 degrees and is how these tanks are quoted.

NOTE: Unless governed by previously agreed standard terms, this offer is exclusively and solely governed by [Diamond Fiberglass' Standard Terms and Conditions of Sale](#), which is to be considered a part of this proposal.

PAYMENT TERMS: Quoted pricing is based on terms of Net 30 Days, payment in full thirty (30) days from the invoice date. **New customers and large value projects are subject to progress payment terms.**

PROGRESS PAYMENT SCHEDULE: Quoted pricing is based on terms of Net 30 Days, payment in full thirty (30) days from the invoice date.

- 25% due at drawing submittal
- 25% due at release for fabrication
- 50% due at shop completion / factory acceptance testing
- Freight upon delivery

WARRANTY: Unless otherwise agreed upon, Diamond Fiberglass standard warranty applies. This warrants the vessel free of defects in material and workmanship for a period of 12 months from initial operation or 18

months from delivery. Further information can be found in [Diamond Fiberglass' Standard Terms and Conditions of Sale](#).

VALIDITY PERIOD: Pricing is firm for 30 days from the date of this proposal. Due to volatility in the raw material markets, Diamond Fiberglass reserves the right to update vessel pricing at any time during quoting and execution of this order. Validity of the quotation shall be confirmed with Diamond Fiberglass prior to execution of purchase order.

STORAGE FEES: Diamond will store the finished vessel at our facility for up to two weeks after the vessel has been completed at no charge to the customer. After that two-week period, a storage fee will be charged of 1.5% per month of the purchase order vessel price, prorated by day to recover carrying costs. For long term storage, shrink wrapping and additional protection is available upon request for an additional price.

TAXES: Quoted pricing does not include taxes of any type.

PURCHASE ORDER PLACEMENT: To permit proper processing and coordination of details, a purchase order resulting from this proposal should be issued to:

Diamond Fiberglass
1036 Industrial Park Drive
Victoria, Texas 77905

We look forward to answering any questions you may have after reviewing this submittal and would welcome the opportunity to schedule the production of the quoted equipment at your direction. Should you have any questions or require any additional information, please contact me at (361) 572-4040.

Sincerely,



David Rogers
Project Manager



Your business is appreciated!

If you are interested in placing an order with Diamond Fiberglass, please complete the information below, sign and return this document along with a copy of your purchase order.

The undersigned is authorized to purchase products on behalf of the company they represent.

Please check one:

- ☐ Yes, I would like to place an order per this quotation.
- ☐ Yes, I would like to place an order per this quotation with additional comments and/or requirements.

Printed Name: _____

Signature: _____

Date: _____

Why Choose Diamond Fiberglass?

**01***We are
RESPONSIVE.*

- Always respond to customers in a prompt manner.
- When a response cannot be provided quickly, communicate when it will be provided.

02*We MANAGE
projects better.*

- Utilize a proprietary project management system developed specifically for custom FRP equipment.
- Communicate openly.
- Focus on planning and meeting milestones.
- Commit necessary resources at the right time to be successful.

03*We offer a COMPLETE
solution for custom
FRP tank and
pipe equipment.*

- Design.
- Fabrication.
- Installation.
- Maintenance.

Diamond Fiberglass Standard Terms and Conditions of Sale

ARTICLE 1. DEFINITIONS

1.1 The words, "we", "our", "ours", and "us" mean the Seller. The words "you", "your" and "yours" mean the Purchaser to whom this Proposal is made. The word "Agreement" means this Proposal and your acceptance of this Proposal, and includes all documents expressly incorporated by references.

1.2 "Equipment" means an individual piece or component of the supply of the Agreement. For example, Equipment may be an individual tank or it may be a joint of pipe.

ARTICLE 2. DURATION OF PROPOSAL-EFFECT

2.1 We may withdraw this Proposal at any time until we receive your written acceptance. If we do not receive your written acceptance within 60 days of the date of this Proposal, the Proposal will expire and be void. Any changes which you wish to make to this Proposal must be expressly accepted by us in writing; otherwise those changes will be void.

ARTICLE 3. SHIPMENT AND DELIVERY

3.1 Our proposed shipping schedule depends on the date on which you accept this Proposal. If you do not provide us promptly with all drawings, information, and approvals, then you will be responsible if we fail to meet our proposed shipping schedule. We will deliver the Equipment F.O.B. Points of Shipment. This will be the only delivery which we are required to make to you. Title and risk of loss will pass to you when we make this delivery.

3.2 We agree to store the Equipment after the agreed date of completion for two weeks at no charge to you. After that two-week period, if you refuse to accept the Equipment for delivery, you agree that we may assess storage fees on the purchase in the amount of 1.5% per month x the value of the Equipment to be stored. Further you agree that we may invoice for payment of the Equipment per Section 8 below.

ARTICLE 4. TERMINATION

4.1 Once you have accepted this Proposal, you may not terminate or cancel the Agreement except by giving us written notice. If you terminate or cancel, you must pay us for our costs of labor, material, engineering, administration, and overhead incurred up to the date we received termination or cancellation charges from our vendors. If you request, we will provide you with documentation in support of these costs.

ARTICLE 5. DELAY

5.1 We will not be liable to you for loss or damage which results from delay or failure to deliver any or all of the Equipment, if this delay or failure is caused by one or more circumstances beyond our reasonable control "Force Majeure". Force Majeure includes, without limitation, acts of God, war, acts of the public enemy, civil disorder, riot, sabotage, governmental action or law or regulation, strikes or labor shortage or other labor problems, fire flood, earthquake, severe weather, health and safety considerations, embargoes, transportation shortage or delays, fuel or material shortages, failure of performance by a vendor or subcontractor, and your failure to give timely approval and comment to documents.

5.2 Our time of performance will be extended by the length of any delay caused by Force Majeure plus a reasonable time to resume our normal operations. If we were ready to ship, but shipment is delayed through no fault of ours, then the date on which we are ready to ship will be regarded as the date of shipment and delivery for all purposes, including payment. You will be responsible for the cost and risks of storage and handling.

ARTICLE 6. WARRANTY

6.1 We warrant to you that the Equipment will be delivered free from defects in material and workmanship. If you find a defect in material or workmanship during the Warranty Period (defined below), you must give us written notice within 10 days. We will either deliver to you a replacement part, F.O.B. Point of Shipment, or repair the defect in place, at our option. For international orders or orders where we are prohibited from performing the repair ourselves, we may offer, at our exclusive option, the value of our cost of repair at the Point of Shipment as remedy for the repair at the actual jobsite. The Warranty Period will expire at the earlier of the twelve (12) months from initial operation or eighteen (18) months from shipment date.

6.2 We will have no obligation to you under Section 6.1 if:

- The Equipment is not paid for in full; or,
- You fail to operate or maintain the Equipment in accordance with generally approved industry practice; or
- You fail to operate or maintain the Equipment in accordance with instructions from us; or
- You fail to give us written notice within 10 days of your discovery of a defect; or
- The Equipment has been altered or repaired by someone other than us

6.3 This warranty excludes the following:

- Service calls to correct the installation of the Equipment or to explain the usage of the Equipment to You; or
 - The cost removal and replacement of a defective part from the overall system, if necessary.
- c) Any loss or damage which you sustain after the expiration of the Warranty Period.

6.4 We warrant to you that at delivery, the Equipment will be free of any liens or encumbrances. If there are any such liens or encumbrances, we will cause them to be discharged promptly after you have notified us of their existence. The express warranties we make to you in this Article 6 are the only warranties we will make. There are no statutory, oral, or implied warranties. In particular, there are no implied warranties or merchantability or fitness for a particular purpose. There are no statutory, oral, or implied conditions.

ARTICLE 7. LIMITATION OF LIABILITY

7.1 For the purposes of this Article 7, the words, "we", "our", "ours", and "us" mean the Seller and its employees, agents and subcontractors. Our liability to you under this Agreement or under any cause of action relating to this Agreement, whether based on contract, warranty, tort (including negligence), strict liability or otherwise, will not exceed the price of the Equipment in question. We will not be liable to you for loss of profits or revenue or business opportunity, loss by reason of shutdown of your facilities or inability to operate your facilities at full capacity, cost of obtaining other means for performing the function of the Equipment, or incidental or consequential damages of any nature.

7.2 You will have waived your right to sue us at law or in equity unless you commence your suit within one year from the date on which you sustain the loss or damage which is the subject of your suit. The provisions of this Article 7 shall prevail over any inconsistent provisions elsewhere in this Agreement.

7.3 Liquidated or performance damages are not permitted without agreement by Seller in writing and adjustment to purchase price and / or delivery estimates.

ARTICLE 8. PAYMENT

8.1 You shall receive an invoice for each purchase made, such invoice shall include the price of the item(s) purchased, date of purchase and the amount due for such purchase. You shall pay in full on or before the due date as reflected on such invoice.

8.2 Unless otherwise noted and upon credit review, the due date for each purchase shall be thirty (30) days from the invoice date. Periodically, fabrication is completed on a purchase and you are not ready for the vessel. The vessel is placed in our delivery hold stock and the invoice is processed for payment. The delivery charge is due thirty (30) days from actual delivery date.

8.3 Special payment terms could be required before order acceptance to cover C.O.D. shipments, pre-payment prior to shipment, and defined process payments for completion of engineering and drawing submittal, receipt of "buy-out" components, and certified percent of completion billing.

8.4 Late payments are subject to a 1 ½% per month fee, pro-rated daily.

8.5 All invoices are payable to Diamond Fiberglass, PO Box 65, Victoria, TX 77902.

ARTICLE 9. TAXES

9.1 You will pay all sales, use, value added, excise, and other taxes which may be levied or assessed on the transfer to the Equipment to you, or on the Agreement, or on our performance under this Agreement. Our price to you does not include taxes of any sort. You will hold us harmless and indemnify us for any taxes due and associated costs of collection that are not paid by you but determined at any point to be taxable.

ARTICLE 10. CHANGES

10.1 We will not make changes in the Equipment unless you and we have executed a written Change Order for such change. The Change Order will include the price adjustment for any added costs of the change plus a reasonable profit. If the change impairs our ability to satisfy our obligations to you, including meeting delivery schedules and performance guarantees, the Change Order will include appropriate modifications to the Agreement. If after the date of this Proposal, new or revised governmental or code requirements shall require a change in the Equipment, the change will be subject to this Article 10.

ARTICLE 11. CONFIDENTIALITY - USE OF DRAWINGS

11.1 You acknowledge that the information which we submit to you in connection with this Proposal includes our confidential and proprietary information, both of a technical and commercial nature. You will not disclose our confidential and proprietary information to third parties without our prior written consent. You will not permit any third party to fabricate components of the Equipment from our designs or drawings. You will indemnify us and hold us harmless and defend us from any claim, suit, or liability based on personal injury (including death) or property damage related to any component of the Equipment which is fabricated by a third party without our written consent.

ARTICLE 13. SECURITY INTEREST

Until all installment payments, and all other amounts due under this Agreement, have been paid, we shall retain a security interest in the Equipment and, if you sell or otherwise disposes of the Equipment in the proceeds of such sale or disposition.

ARTICLE 13. ENTIRE AGREEMENT

12.1 The Agreement contains the entire understanding between you and us, and supersedes any prior oral and written understandings between you and us concerning the Equipment, including any document which is not expressly incorporated by reference to this Agreement.

ARTICLE 14. INVALIDITY

13.1 If a final decision of a court of competent jurisdiction holds invalid a portion any sentence of this Agreement, or a sentence of any section of this Agreement, or any Article of this Agreement, the remainder of such sentence or section of this Agreement, as the case may be, shall be valid.

ARTICLE 15. GOVERNING LAW

14.1 The Agreement will be governed by and construed according to the laws of the state or province within which Seller maintains its principal office.

Lynne Stocker

From: Jack Moser <jmoser@danielmechanical.com>
Sent: Monday, September 18, 2023 11:00 AM
To: Lynne Stocker
Cc: Sasha Larionova; Dillan Truong
Subject: Re: [EXTERNAL] FW: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tank and Fume Scrubber

Hi Lynne,

Really appreciate the follow up on this. We ended up passing on this one. Good luck to you and your team!

Jack Moser
Daniel Company
909-527-6779

From: Lynne Stocker <lynne.stocker@garney.com>
Date: Monday, September 18, 2023 at 10:46 AM
To: Jack Moser <jmoser@danielmechanical.com>
Cc: Sasha Larionova <slarionova@danielmechanical.com>, Dillan Truong <dtruong@danielmechanical.com>
Subject: RE: [EXTERNAL] FW: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tank and Fume Scrubber

Good morning,

I wanted to follow up on the status of this quote and if you can have it finalized and sent to me today as we are past the requested due date. Please note that this quote is due to the City by COB today.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: Jack Moser <jmoser@danielmechanical.com>
Sent: Tuesday, September 5, 2023 10:30 AM
To: Lynne Stocker <lynne.stocker@garney.com>
Cc: Sasha Larionova <slarionova@danielmechanical.com>; Dillan Truong <dtruong@danielmechanical.com>
Subject: Re: [EXTERNAL] FW: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tank and Fume Scrubber

Much appreciated!

From: Lynne Stocker <lynne.stocker@garney.com>
Date: Tuesday, September 5, 2023 at 10:25 AM
To: Jack Moser <jmoser@danielmechanical.com>
Cc: Sasha Larionova <slarionova@danielmechanical.com>, Dillan Truong <dtruong@danielmechanical.com>
Subject: RE: [EXTERNAL] FW: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tank and Fume Scrubber

Jack,

See attached for the plans on this project, and if the 11th is too tight we can possibly push back the quote date to the 14th.

Please let me know if you have any questions.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: Jack Moser <jmoser@danielmechanical.com>
Sent: Tuesday, September 5, 2023 10:14 AM
To: Lynne Stocker <lynne.stocker@garney.com>
Cc: Sasha Larionova <slarionova@danielmechanical.com>; Dillan Truong <dtruong@danielmechanical.com>
Subject: [EXTERNAL] FW: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tank and Fume Scrubber
Importance: High

External Message - Please be cautious when opening links or attachments in email

Hi Lynne,

Thank you for reaching out. Sept 11th will be kind of tight for us to put a quote together. Would it be possible to also share the plans?

Sasha,

See below and attached. Please start working on sending our RFQs. Thanks.

Regards,

Jack Moser

Daniel Mechanical

1939 W 11th Street, Suite E

Upland, CA 91786

Phone: 909-527-6779

Email: jmoser@danielmechanical.com

From: DanMech <danmech@sbcglobal.net>

Date: Tuesday, September 5, 2023 at 9:44 AM

To: Jack Moser <jmoser@danielmechanical.com>

Subject: Fwd: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tank and Fume Scrubber

Jack Moser

Begin forwarded message:

From: Lynne Stocker <lynne.stocker@garney.com>

Date: September 1, 2023 at 4:13:57 PM PDT

To: danmech@sbcglobal.net

Subject: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tank and Fume Scrubber

Dan,

See the attached plans and specifications for the Ocotillo Brine Reduction Facility – HCL Storage and Weak Acid Containment Mixing Improvements project.

Please provide a quote for the following items on the project:

1. 5,000 gallon and 10,000 gallon fiberglass tanks per spec 43_41_45
2. FRP tank ladder
3. SAF-T Climb Fall Protection
4. Pipe supports on side of tank
5. Guard railing on top of tank
6. Fume Scrubber per spec 44_33_11

Let me know if you have any questions and confirm if the quote can be sent by 9/11/2023.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

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BID DAY QUOTATION

Project Title

Chandler Ocotillo Brine Reduction Facility

Bid Date	Bid Time	Quotation #
9/11/23		LMW181Q

Dear Lynne:

We are pleased to submit our bid to supply the items as described below:

Spec Section	Title and Description
43 41 45	5,000 gallon fiberglass tank for 35% Hydrochloric Acid, 8'0"ID x 15'0"SWH, flat bottom, dome top, single wall with 30" side manway (Viton/316 SS), 24" top manway (Viton/316SS), 6" vacuum nozzle, 6" breather nozzle, 4" overflow nozzle, 3" drain nozzle, 3" outlet nozzle, 3" inlet nozzle, 1.5" level nozzle (sensor not included), 316 SS lifting & hold down lugs, FRP ladder, FRP top perimeter handrail with kickplate, fall prevention system (harness not included), 316 SS ladder and handrail fasteners, FRP pipe supports (for vacuum, breather, fill & overflow piping- pipe not included), nameplate, NFPA hazard sign, exterior UV inhibited gelcoat and submittal with AZ PE stamp. Tank insulation not included, but quoted as an option below (spec is unclear if this is required)
43 41 45	10,000 gallon fiberglass tank for 35% Hydrochloric Acid, 11'0"ID x 15'0"SWH, flat bottom, flat top, single wall with 30" side manway (Viton/316 SS), 24" top manway (Viton/316SS), 6" vent nozzle, 6" level nozzle (sensor not included) 6" overflow nozzle, 4" transfer fill nozzle, 3" fill nozzle, 3" drain nozzle, 3" outlet nozzle, 316 SS lifting & hold down lugs, FRP ladder, FRP top perimeter handrail with kickplate, fall prevention system (harness not included), 316 SS ladder and handrail fasteners, FRP pipe supports (for fill & overflow piping- pipe not included), nameplate, NFPA hazard sign, exterior UV inhibited gelcoat and submittal with AZ PE stamp. Tank insulation not included, but quoted as an option below (spec is unclear if this is required)

Pricing

Total Delivered Price for Equipment Listed Above	\$155,000
Option to add 2" thick polyurethane foam insulation with expansion joint and FRP exterior skin to both tanks.	\$35,000
Please note that there is NO SALES TAX included in our quotation	

Notes & Exceptions

Spec Section	Comment
Standard Exclusions	Gaskets (outside what is listed above), fasteners (outside what is listed above), instrumentation, electronics, safety harness, anchor bolts, connecting piping, expansion joints at nozzles, installation, site verification of dimensions, manufacturer site services, sales tax.

43 41 45 – 1.1-A	Insulation is quoted as an option
43 41 45 – 2.1-A	Tanks quoted are manufactured by Midwestern Fabricators
43 41 45 – 2.2-B & D	These two subsections contradict each other on the type of corrosion liner that is required. The specified resin for this application requires a 200 mil thick corrosion barrier with double c-veil. Our quote is based on this.
43 41 45 – 2.3-A.1	Bussets will be blade type for maximum strength
43 41 45 – 2.4-C.5	The max stable temperature is 125°F for the resins specified in 2.2-A.1 & 3. 200°F will reduce service life
43 41 45 – 2.4-G.1 & 2	The physical properties used in our design calculations will be actual laminate test results
43 41 45 – 3.1	Installation is not included and is by others
Submittal Lead-Time	4-6 weeks include PE Stamp
Fabrication Lead-Time	20-22 weeks after drawing approval
Quote Validity	30 days
Standard Terms	30% with order / balance 70% N20 after shipment
Sales Tax	Sales tax will be billed at the rate in effect at the time of shipment
Disclosure	Items not specifically identified within proposal are not included

Thank you for your consideration and good luck.

Sincerely,

Matt Licknosky

Matt Licknosky, Sales Engineer

Core-Rosion Products

mattl@core-rosion.com, Office: 480-391-9298, Cell: **480-847-1515**



American Fiberglass

2533 W Cypress
Phoenix, AZ 85009
602-278-4505 fax 602-278-1112
jbdonaldsonco@gmail.com

September 11, 2023

Carl Rodgers
Garney Construction
913.302.7724
840 E McKellips Road
Unit 110
Mesa, AZ 85203

Carl,

We appreciate the opportunity to bid this project. The following Quotation is based on the provided drawings and specifications. American Fiberglass will manufacture and warrant the following tank to meet or exceed the design specifications referenced in project spec section 43 41 45.

Quotation

TNK-154-1-50 35% Hydrochloric Acid Tank

Tank Type: Vertical Straight Side with Dome Top
Capacity: 10,000 Nominal Gallons
Service: Hydrochloric Acid 35%
Max Temp: 125 degrees F
Pressure: Atmospheric
Diameter: 11'
Height: 15' Straight Shell
Corrosion
Barrier: Double Synthetic Nexus Veil, Premium Corrosion-Resistant Derakane 411-350 Vinyl Ester Resin, minimum 200mil backup with BPO-DMA cure
Structural: Derakane 510A-40
Color: White UV Resistant exterior top coat
Attachments:
1 - 6" diameter fiberglass #150 Flanged Nozzle, Vent

1 - 3" diameter fiberglass #150 Flanged Nozzle, Vent
 1 - 6" diameter fiberglass #150 Flanged Nozzle, Level Sensor
 1 - 24" diameter fiberglass Top Manway with SS Bolt Set and Lid
 1 - 30" diameter fiberglass Side Manway with Gasket, SS Bolt Set and Lid
 1 - 6" diameter fiberglass #150 Flanged Nozzle, Overflow
 1 - 3" diameter fiberglass #150 Flanged Nozzle, Drain
 1 - 3" diameter fiberglass #150 Flanged Nozzle, Outlet
 1 - 4" diameter fiberglass #150 Flanged Nozzle, Transfer Fill
 Coated Steel Tie Downs, Quantity per Engineering
 3 - Coated Steel Lifting Lugs
 Fiberglass Guardrail with Self-Closing Gate
 Fiberglass Ladder, Approx. 25' Tall
 -Safety Cage
 -Fall protection includes OSHA-approved cable safety system and full-body harness, 300lb minimum.
 Tank Supports for ladder, etc., Quantity as Required
 NFPA Hazard Placard
 American Fiberglass data plate: Provides tank ID, specifications and usage
 Hydrostatic Test
 Post-cure
 Stamped Structural Engineering Report

Price: \$87,500.00 per Tank

TNK-154-1-80 35% Hydrochloric Acid Tank

Tank Type: Vertical Straight Side with Dome Top
Capacity: 5,000 Nominal Gallons
Service: Hydrochloric Acid 35%
Max Temp: 125 degrees F
Pressure: Atmospheric
Diameter: 8'
Height: 15' Straight Shell
Corrosion
Barrier: Double Synthetic Nexus Veil, Premium Corrosion-Resistant Derakane 411-350 Vinyl Ester Resin, minimum 200mil backup with BPO-DMA cure
Structural: Derakane 510A-40
Color: White UV Resistant exterior top coat
Attachments:
 1 - 6" diameter fiberglass #150 Flanged Nozzle, Vent
 1 - 3" diameter fiberglass #150 Flanged Nozzle, Inlet

1 – 1 1/2” diameter fiberglass #150 Flanged Nozzle, Level Transmitter
1 - 24” diameter fiberglass Top Manway with SS Bolt Set and Lid
1 - 30” diameter fiberglass Side Manway with Gasket, SS Bolt Set and Lid
1 - 4” diameter fiberglass #150 Flanged Nozzle, Overflow
1 - 3” diameter fiberglass #150 Flanged Nozzle, Drain
1 – 3” diameter fiberglass #150 Flanged Nozzle
Coated Steel Tie Downs, Quantity per Engineering
3 – Coated Steel Lifting Lugs
Fiberglass Guardrail with Self-Closing Gate
Fiberglass Ladder, Approx. 25’ Tall
 -Safety Cage
 -Fall protection includes OSHA-approved cable safety system and full-body harness, 300lb minimum.
Tank Supports for ladder, etc., Quantity as Required
NFPA Hazard Placard
American Fiberglass data plate: Provides tank ID, specifications and usage
Hydrostatic Test
Post-cure
Stamped Structural Engineering Report

Price: \$76,225.00 per Tank

Warranty

American Fiberglass will warrant this product to free from defects in materials and workmanship, under normal use and service, for a period **Two Years** from date of inspection and acceptance of assembled tank on-site.

Shipping

American Fiberglass to provide loading on truck at our facility, delivery to destination site, offloading, and installation to be provided by others

Terms

- 25% - Due upon receipt of purchase order, prior to fabrication
- 25% - Due upon 25% completion of fabrication,
- 25% - Due upon 75% completion of fabrication
- 100% - Due upon 100% completion of fabrication, prior to release for deliver

Availability

Approximately 6 weeks per tank from receipt of purchase order, approved shop drawings, and first 25% payment. As shop load changes, lead times may vary.

This quotation is good for 30 days from above date.

Thank you,
Walker Donaldson
American Fiberglass

Lynne Stocker

From: Mike Thompson <mike@induscoenviro.com>
Sent: Monday, September 18, 2023 4:00 PM
To: Carl Rodgers
Cc: Lynne Stocker
Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

PS. I just read through the 100% Spec. There are few changes that increase the Scope and Size of the system so I would err to the higher side of the ROM range below.

And the few exceptions that we would take are:

- Installation and Anchor bolts by Garney (we will provide recommendation for anchor bolt size with our PE calcs... but embedment depth is by others)
- We can performance test but would take exception to HCl dosing (augmentation)

Let me know if you have any questions or need anything else at this time.

Best regards,

Mike



P.O. Box 790
Daphne, AL 36526

Office: 251-621-2338

Cell: 770-298-7039

mike@induscoenviro.com

www.InduscoEnviro.com

From: Mike Thompson
Sent: Monday, September 18, 2023 5:40 PM
To: 'Carl Rodgers' <crodders@garney.com>
Cc: Lynne Stocker <lynne.stocker@garney.com>
Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

Carl,

Yes, that is correct. We would need the actual HCl loadings and process details / strategy to design a sufficient system. But I'm confident that we can do that with the Garney and HDR teams.

I would be comfortable giving a ROM range of \$80k - \$100k for a system that does not have a fan or pump requirement. Adders for these (if required) would be about \$10k each.

Lead time would be 6 weeks for Submittals and 12 - 14 weeks for system shipment after drawing approval. Freight would be Pre-Pay and Add from Spanish Fort, AL.

Let me know if you need anything else in the meantime.

Best regards,

Mike



P.O. Box 790
Daphne, AL 36526

Office: 251-621-2338

Cell: 770-298-7039

mike@induscoenviro.com

www.InduscoEnviro.com

From: Carl Rodgers <croders@garney.com>

Sent: Monday, September 18, 2023 4:13 PM

To: Mike Thompson <mike@induscoenviro.com>

Cc: Lynne Stocker <lynne.stocker@garney.com>

Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

Mike,

I just wanted to follow up on the below email correspondence for the Ocotillo project.

I understand there may be some additional questions with regards to the specifications, but I would appreciate you providing us a rough order of magnitude number if nothing else.

The City of Chandler has given us this project as an emergency and this is the reason some of the specifications need clarification.

If you could provide a ROM number, we could work on the back end to answer all your questions and get you under contract with a number you find adequate.

Please advise if you can send over something today.

Thank you

Carl Rodgers

Employee-Owner Since 2015

GARNEY CONSTRUCTION *Advancing Water*

CELL: 913.302.7724

ADDRESS: 840 E McKellips Road, Unit 110, Mesa AZ 85203 GARNEY.COM

From: Lynne Stocker <lynne.stocker@garney.com>

Sent: Monday, September 18, 2023 1:32 PM

To: Carl Rodgers <croders@garney.com>

Subject: FW: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: Mike Thompson <mike@induscoenviro.com>

Sent: Monday, September 18, 2023 11:36 AM

To: Lynne Stocker <lynne.stocker@garney.com>

Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

Hi Lynne,

Sorry... I was needing some feedback to a couple of questions. Do you have some guidance on the following:

1. The Spec does not list an inlet HCl loading... do you have this?
2. What is the pump references in the Spec in Section 2.3.D? This is not clear from the P&ID and also the "once-through basis" scrubbing comment (2.2.13.a.)

If you do not have this information readily available and we would need to RFI at this stage then I will need to "no quote" on this one at this time. Note that we would be taking exception to the testing requirements (3.3.B.5.)... as this is an atypical request for us to complete for HCl scrubbers (especially loading augmentation).

Please give me a call if best to discuss.

Thanks,

Mike



P.O. Box 790

Daphne, AL 36526

Office: 251-621-2338

Cell: 770-298-7039

mike@induscoenviro.com

www.IndusCOEnviro.com

From: Lynne Stocker <lynne.stocker@garney.com>

Sent: Monday, September 18, 2023 1:06 PM

To: Mike Thompson <mike@induscoenviro.com>

Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

Importance: High

Good morning Mike,

I wanted to follow up on the status of this quote and if you can have it finalized and sent to me today as we are past the requested due date. Please note that this quote is due to the City by COB today.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: Lynne Stocker

Sent: Tuesday, September 5, 2023 7:50 AM

To: Mike Thompson <mike@induscoenviro.com>

Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

Mike,

I am needing a firm quote for this as we will be starting this project by the middle of October.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: Mike Thompson <mike@induscoenviro.com>

Sent: Monday, September 4, 2023 3:31 PM

To: Lynne Stocker <lynne.stocker@garney.com>

Subject: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

External Message - Please be cautious when opening links or attachments in email

Hi Lynne,

Thanks for reaching out to INDUSCO... and for forwarding the Chandler Fume Scrubber specs and drawings. We will review these and let you know if we have any questions.

Are you needing a budget or firm quote at this time?

Thanks,

Mike

INDUSCO
ENVIRONMENTAL

P.O. Box 790

Daphne, AL 36526

Office: 251-621-2338

Cell: 770-298-7039

mike@induscoenviro.com

www.InduscoEnviro.com

From: Lynne Stocker <lynne.stocker@garney.com>

Sent: Friday, September 1, 2023 6:22 PM

To: Sales <Sales@induscoenviro.com>

Subject: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Fume Scrubber

Good afternoon,

See the attached plans and specifications for the Ocotillo Brine Reduction Facility – HCL Storage and Weak Acid Containment Mixing Improvements project.

Please provide a quote for the Fume Scrubber per spec 44_33_11.

Let me know if you have any questions and confirm if the quote can be sent by 9/11/2023.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

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Lynne Stocker

From: Ed Martin <Ed.Martin@jchinc.com>
Sent: Monday, September 18, 2023 2:10 PM
To: Lynne Stocker
Subject: Re: [EXTERNAL] Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tanks
Attachments: PastedGraphic-1.tiff

Lynne

QTY

1 FLYGT MODEL 4640 SUBMERSIBLE MIXER WITH ALL 316 STAINLESS STEEL CONSTRUCTION, 4HP, 460V-3PH MOTOR WITH 50 FEET OF POWER CABLE, CLEANSE VERTICALLY MOUNTED 316SS MIXER STAND WITH FLOW DISPERSAL CONE, LIFTING BALE, +/-35 FEET OF 316SS LIFTING CHAIN AND SACRIFICIAL ZINC ANODES.

THE TOTAL NET ESTIMATED COST F.O.B. FACTORY WITH FREIGHT ALLOWED TO THE JOB SITE....\$39,163.00

Regards
Ed Martin
Sales Engineer



O 602.243.0585 X3020
M 602.359.6424
3501 E. BROADWAY RD
PHOENIX, AZ. 85040

On Sep 13, 2023, at 3:09 PM, Lynne Stocker <lynne.stocker@garney.com> wrote:

David,

See the attached pdf for HDR's response to our Request for Clarification.

Please let me know if this answers everything or if we will need further clarification.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: Lynne Stocker

Sent: Wednesday, September 13, 2023 8:03 AM

To: David Rogers <drogers@diamondfiberglass.com>

Cc: Ed Martin <ed.martin@jchinc.com>; Eric Loring <eric.loring@jchinc.com>

Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tanks

Good morning David,

I submitted a request for clarifications last week to Chandler and HDR and have not heard back yet with their answers. I have requested they respond by end of day today as we are past the estimate submittal date.

Once I receive the responses I will send them to you right away, and please let me know if there are any additional questions you have.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: David Rogers <drogers@diamondfiberglass.com>

Sent: Tuesday, September 12, 2023 12:46 PM

To: Lynne Stocker <lynne.stocker@garney.com>

Cc: Ed Martin <ed.martin@jchinc.com>; Eric Loring <eric.loring@jchinc.com>

Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tanks

Hy Lynne,

I just wanted to check in on this.

This bid was due back to the customer yesterday, but I cannot complete until I have answers on the below.

Did you have a chance to look into the below yet?

David Rogers
Project Manager
<image001.png>
1036 Industrial Park Dr.
Victoria, TX 77905
361-572-4040 x103
diamondfiberglass.com

From: David Rogers
Sent: Thursday, September 7, 2023 9:22 AM
To: Lynne Stocker <lynne.stocker@garney.com>
Cc: Ed Martin <Ed.Martin@jchinc.com>; Eric Loring <Eric.Loring@jchinc.com>
Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tanks

Lynne,

As mentioned, there are a few things in the spec that I wanted clarification on.

I have listed them by the section number in the specification 43 41 45.

Please let me know on these items as soon as possible as this is scheduled to bid on 7-11-23.

2.2.A:

Please advise if BPO/DMA is required for this? This is generally only seen in tanks for bleach service. Is 510A really required for the structural layer? This is very doable but is an odd request so I wanted to confirm what is required.

2.3.A.1:

The 1,500 pounds of bending and 2,000 ft pounds of torque are not possible for FRP. What is driving this requirement?

2.3.B:

The spec says that the pressure is atmospheric but if the vent is connecting to a scrubber then there is likely going to be pressure and / or vacuum. Please advise on this.

2.4.C.5:

35% HCL is only good to 120 degrees with Derakane 411 vinyl ester resin. Is this acceptable? The only other alternative is to construct the tank out of Derakane 470 but even with that, it is only good up to 140 degrees.

Please advise.

Thanks,

David Rogers
Project Manager
<image001.png>
1036 Industrial Park Dr.
Victoria, TX 77905
361-572-4040 x103
diamondfiberglass.com

From: Lynne Stocker <lynne.stocker@garney.com>
Sent: Wednesday, September 6, 2023 2:52 PM
To: David Rogers <drogers@diamondfiberglass.com>
Subject: RE: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tanks

David,

I am free this afternoon for a call to talk through things, but I may not be able to provide any clarification right now as I may have to request the information from HDR depending on what questions you have.

However, if you sent me your questions I can get them to Chandler and request the information be provided right away.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

From: David Rogers <drogers@diamondfiberglass.com>
Sent: Wednesday, September 6, 2023 8:19 AM
To: Lynne Stocker <lynne.stocker@garney.com>
Subject: [EXTERNAL] RE: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tanks

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Lynne,

Thank you for your interest in Diamond.

We have also received this request from our Rep in Arizona (James Cooke & Hobson) and will be routing the proposal through them.

I did review the specification and there are several things that I have seen in there that are cause for concern and are things that would prevent us from quoting this.

If you have time, I would like to get on a phone call or a Teams call and take a quick look with you.

Let me know if you are interested and what your availability may be to do so.

Regards,

David Rogers

Project Manager

<image001.png>

1036 Industrial Park Dr.

Victoria, TX 77905

From: Lynne Stocker <lynne.stocker@garney.com>
Sent: Friday, September 1, 2023 6:20 PM
To: Paul Cohen <pcohen@diamondfiberglass.com>
Subject: Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - FRP Tanks

You don't often get email from lynne.stocker@garney.com. [Learn why this is important](#)

Good afternoon,

See the attached plans and specifications for the Ocotillo Brine Reduction Facility – HCL Storage and Weak Acid Containment Mixing Improvements project.

Please provide a quote for the following items on the project:

1. 5,000 gallon and 10,000 gallon fiberglass tanks per spec 43_41_45
2. FRP tank ladder
3. SAF-T Climb Fall Protection
4. Pipe supports on side of tank
5. Guard railing on top of tank

Let me know if you have any questions and confirm if the quote can be sent by 9/11/2023.

Thank you,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

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Lynne Stocker

From: Nia Johnson <njohnson@phoenixpumps.com>
Sent: Tuesday, September 19, 2023 3:43 PM
To: Lynne Stocker
Cc: Projects
Subject: [EXTERNAL] RE: Chandler Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Chemical Feed

External Message - Please be cautious when opening links or attachments in email

Hi Lynne,

Your cost for Section 46 33 11 Chemical Feed – Liquid Systems is \$85,000.
That includes the pump, motor, and gearbox on a baseplate, controls, spare parts, lubricant, freight, O&Ms, submittals, and startup.

I will have a written proposal for you tomorrow along with some data. I will also add in some pump accessories in a separate line.

Thank you for the opportunity and for your patience as I got pricing together!
Talk soon,

Nia Johnson
Projects

Phoenix Pumps, Inc.
www.phoenixpumps.com
E: njohnson@phoenixpumps.com | D: 602-491-0960 | O: 602-232-2994

[» Customer Satisfaction Survey](#)



RELIABILITY SOLUTIONS

Learn how Phoenix Pumps can help reduce your operating costs with a pump reliability solution today!

From: Nia Johnson <njohnson@phoenixpumps.com>
Sent: Monday, September 18, 2023 3:48 PM
To: Lynne Stocker <lynne.stocker@garney.com>
Cc: Projects <projects@phoenixpumps.com>
Subject: RE: Chandler Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Chemical Feed

Hi Lynne,

Thank you for your time on the phone earlier.

Unfortunately, I do not have a plug number for you today (I don't want to make something up and give you a ridiculous price whether it be high or low) but I will work on having that for you tomorrow! It is #1 on my list.

Best Regards,

Nia Johnson
Projects

Phoenix Pumps, Inc.

www.phoenixpumps.com

E: njohnson@phoenixpumps.com | D: 602-491-0960 | O: 602-232-2994

[» Customer Satisfaction Survey](#)



RELIABILITY SOLUTIONS

Learn how Phoenix Pumps can help reduce your operating costs with a pump reliability solution today!

From: Lynne Stocker <lynne.stocker@garney.com>

Sent: Monday, September 18, 2023 11:00 AM

To: Projects <projects@phoenixpumps.com>

Subject: Chandler Ocotillo Brine Reduction Facility - HCL Storage & Weak Acid Containment Improvements - Chemical Feed

Importance: High

Good morning,

See the attached plans and specifications for the Ocotillo Brine Reduction Facility – HCL Storage and Weak Acid Containment Mixing Improvements project.

Please review the plans and specs and provide a quote for the chemical feed pump per spec 46_33_11.

Let me know if you have any questions and as stated on the phone I would need this pricing today (9/18) if possible.

Thank you very much,

Lynne Stocker

Employee-Owner Since 2023

GARNEY CONSTRUCTION *Advancing Water*

Cell: 480.261.6137

ADDRESS: 840 E McKellips Road, Unit 110, Mesa Az 85203 GARNEY.COM

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City of Chandler
Project No. WW2001.403
Ocotillo Brine Reduction Facility
Preliminary Schedule

Garney Project Number: TBD
Schedule Start Date: 10/2/2023

ACTIVITY DESCRIPTION	SUBCONTRACTOR / SUPPLIER	WEEKS	START	END	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
					2-Oct-23	9-Oct-23	16-Oct-23	23-Oct-23	30-Oct-23	6-Nov-23	13-Nov-23	20-Nov-23	27-Nov-23	4-Dec-23	11-Dec-23	18-Dec-23	25-Dec-23	1-Jan-24	8-Jan-24	15-Jan-24	22-Jan-24	29-Jan-24	5-Feb-24	12-Feb-24	19-Feb-24	26-Feb-24	4-Mar-24	11-Mar-24	18-Mar-24	25-Mar-24	1-Apr-24	8-Apr-24	15-Apr-24	22-Apr-24	29-Apr-24	6-May-24	13-May-24	
Pre-Construction Activities																																						
Notice To Proceed	City of Chandler	1	10/2/23	10/2/23	SF																																	
Material Submittals	Material Suppliers	6	10/2/23	11/13/23	S						F																											
Material Lead Times	Material Suppliers	14	11/13/23	2/19/24							S															F												
Greenfield WRP Pump Replacements																																						
Demolition of Existing	Garney & Ludvik	3	1/8/23	1/26/23															S				F															
Installation of HCL Tanks and Piping	Garney	11	1/29/23	4/12/23																																		
Startup and Testing	Garney	1	4/15/23	4/19/23																																		
General Cleanup Items and Closeout	Garney	2	4/22/23	5/3/23																																		
S - Start SU - Suspend Activity RE - Resume Activity F - Finish MTG - Meeting H - Holiday FR - Form / Reinforce ST - Strip P - Pour PP - Point / Patch INSP - Inspection TEST - Pressure Testing																																						

GENERAL NOTES

CIVIL ENGINEERING NOTES (CITY OF CHANDLER)

1. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH THE MOST CURRENT MAG SPECIFICATIONS AND STANDARD DETAILS AND AS SUPPLEMENTED BY THE CITY OF CHANDLER.
2. THE CONTRACTOR MUST OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
3. THE DEVELOPMENT ENGINEERING OFFICE SHALL BE NOTIFIED 24 HOURS PRIOR TO STARTING EACH PHASE OF CONSTRUCTION (480-782-3300).
4. PROJECT ELEVATIONS ARE BASED UPON NAVD 88 DATUM. THE FOLLOWING BENCHMARK WAS UTILIZED:

BENCHMARK NUMBER	NOV 29 ELEVATION	DESCRIPTION	EQUATION	NAVD 88 ELEVATION
N/A	N/A	N/A	N/A	N/A

5. PRIOR TO ANY CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR/DEVELOPER MUST NOTIFY THE LANDSCAPE MAINTENANCE AND DESIGN COORDINATOR AT 480-782-3428. ANY CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY MUST BE RESTORED TO ORIGINAL CONDITIONS USING THE FOLLOWING REQUIREMENTS:
 - A. ALL LANDSCAPE IMPACTED BY CONSTRUCTION MUST BE REPLACED IN KIND AND SIZE, OR AS DETERMINED BY THE CITY;
 - B. ALL IRRIGATION SYSTEMS MUST BE RESTORED TO FULLY FUNCTIONING STATUS. ANY IRRIGATION LOCATED BENEATH ASPHALT OR CONCRETE MUST BE SLEEVED WITH SCHEDULE 40 PVC TWO NOMINAL SIZES LARGER;
 - C. THE AREA OF CONSTRUCTION MUST BE TREATED WITH PRE-EMERGENT HERBICIDE (I.E. SURFLAN);
 - D. GRANITE OF A SIZE AND COLOR TO MATCH EXISTING AND SPREAD A MINIMUM OF TWO INCHES THICK;
 - E. THE STREETS DIVISION MUST BE CONTACTED TO INSPECT ALL WORK BEFORE A CONDITIONAL ACCEPTANCE IS ISSUED;
 - F. THE CONTRACTOR/DEVELOPER MUST MAINTAIN THE AREA FOR NINETY DAYS AFTER CONDITIONAL ACCEPTANCE. AFTER 90 DAYS THE CITY MUST BE CONTACTED FOR FINAL ACCEPTANCE AND ASSUMPTION OF MAINTENANCE.
6. WORK PERFORMED BY THE CONTRACTOR:
 - A. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE CITY ENGINEER AND/OR ALL WORK AND MATERIAL NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
 - B. WHENEVER THE INSPECTOR FINDS ANY WORK BEING PERFORMED IN A DANGEROUS OR UNSAFE MANNER, OR CONTRARY TO THE PLANS OR SPECIFICATIONS, OR NOT MEETING THE INTENT OF THE PLANS OR SPECIFICATIONS, THE INSPECTOR WILL ISSUE A STOP WORK ORDER. UPON ISSUANCE OF A STOP WORK ORDER, THE CITED WORK MUST IMMEDIATELY CEASE. THE STOP WORK ORDER WILL STATE THE REASON FOR THE ORDER, AND THE CONDITIONS WHICH CITED WORK IS AUTHORIZED TO RESUME UPON WRITTEN ORDER TO RESUME WORK. WHERE AN EMERGENCY EXISTS, THE INSPECTOR WILL NOT BE REQUIRED TO GIVE A WRITTEN NOTICE PRIOR TO STOPPING THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS AND DELAYS FOR THE WORK RELATED TO THE STOP WORK ORDER.
7. THE CONTRACTOR MUST UNCOVER ALL EXISTING CITY UTILITY LINES BEING TIED INTO TO VERIFY THEIR TYPE, CONDITION, LOCATION, INVERT, SLOPE, AND ANY OTHER INFORMATION NEEDED TO DETERMINE THAT THE UTILITY CONNECTION WILL FUNCTION AS DESIGNED. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY REPAIRS NECESSARY TO THE LATERAL OR MAIN LINES OF THE CITY WATER, RECLAIMED WATER, SANITARY SEWER, AND/OR STORM DRAIN SYSTEM NECESSARY FOR THE CONNECTION TO FUNCTION AS DESIGNED. THE CONTRACTOR MUST LOCATE OR HAVE LOCATED ALL EXISTING UNDERGROUND PRIVATE UTILITIES (ELECTRIC, TELEPHONE, PIPELINES, ETC.) AND STRUCTURES IN ADVANCE OF CONSTRUCTION AND ELIMINATE ALL CONFLICTS PRIOR TO START OF CONSTRUCTION. BLUE STAKE TELEPHONE (602) 263-1100.
8. THE CITY OF CHANDLER IS NOT RESPONSIBLE FOR LIABILITY INCURRED DUE TO DELAYS AND/OR DAMAGES TO UTILITIES IN CONJUNCTION WITH THIS CONSTRUCTION. THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR UTILITY RELOCATION.
9. NO FINAL ACCEPTANCE WILL BE ISSUED UNTIL 4 ML PHOTO MYLAR REPRODUCIBLE "AS-BUILT" PLANS CERTIFIED AND SEALED BY A REGISTERED CIVIL ENGINEER, HAVE BEEN SUBMITTED AND ACCEPTED BY THE CITY ENGINEER.
10. APPLICATIONS FOR STREET CLOSURE PERMITS MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO APPROVAL OF IMPROVEMENT PLANS. ALL PAVEMENT REPLACEMENT MUST BE IN ACCORDANCE WITH SECTION 336 AND AS MODIFIED BY CITY SUPPLEMENTS.
11. BACKFILLING MUST NOT BE STARTED UNTIL LINES ARE APPROVED BY THE CITY ENGINEER. ALL BACKFILL MUST BE HALF-SACK OLDM UNLESS OTHERWISE APPROVED ON THE PLANS. ABC OR NATIVE MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH MAG SECTION 601, TYPE I. BACKFILL PLACEMENT AND SURFACE REPLACEMENT MUST BE IN ACCORDANCE WITH MAG STD DTL 200 T-TOP.
12. CONSTRUCTION OF CONCRETE OR PAVING ITEMS MUST NOT COMMENCE UNTIL ALL UNDERGROUND WORK HAS BEEN INSPECTED AND TESTED.
13. DISPOSAL OF AND STOCKPILING OF EXCESS MATERIAL WITHIN THE CHANDLER CITY LIMITS OR PLANNING AREA MUST BE DONE IN SUCH A WAY THAT WILL NOT CREATE A NUISANCE. THE PLACING OF MATERIAL ON PRIVATE PROPERTY OF ANOTHER REQUIRES WRITTEN AUTHORIZATION. EARTHWORK STOCKPILES ARE NOT TO EXCEED 6 FEET IN HEIGHT. SLOPES ON ALL SIDES OF THE STOCKPILE MUST NOT EXCEED A 1 TO 2 RATIO OF HEIGHT TO LENGTH. ANY EARTHWORK STOCKPILE, EVEN LESS THAN 6 FEET, MUST BE REMOVED WITHIN 7 DAYS OF CITY NOTIFICATION IF DUST SUPPRESSION EFFORTS FAIL TO MAINTAIN SATISFACTORY AIRBORNE CONTAMINANT CONTROL.
14. TRAFFIC CONTROL MUST BE MAINTAINED IN ACCORDANCE WITH CHANDLER TRAFFIC BARRICADE DESIGN REQUIREMENTS AND APPROVED TRAFFIC SEQUENCING PLANS AND/OR NOTES.
15. THE CONTRACTOR MUST PROVIDE ADEQUATE MEANS FOR CLEANING TRUCKS AND/OR OTHER EQUIPMENT OF MUD PRIOR TO ENTERING PUBLIC STREETS, AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN STREETS, ALLEY DUST, AND TAKE WHATEVER MEASURES ARE NECESSARY TO INSURE THAT ALL ROADS ARE MAINTAINED IN A CLEAN, MUD AND DUST-FREE CONDITION AT ALL TIMES. THE CONTRACTOR MUST UTILIZE A MUD-CERTIFIED STREET CLEANER FOR STREET CLEANING.
16. AN APPROVED SET OF PLANS MUST BE MAINTAINED ON THE JOB SITE AT ALL TIMES THAT WORK IS IN PROGRESS. DEVIATION FROM THE PLANS WILL NOT BE ALLOWED WITHOUT AN APPROVED PLAN REVISION.
17. A MINIMUM HORIZONTAL SEPARATION OF SIX (6) FEET IS REQUIRED BETWEEN SEWER SERVICES AND WATER OR FIRELINE SERVICES. A MINIMUM HORIZONTAL SEPARATION OF SIX (6) FEET IS REQUIRED BETWEEN RECLAIMED WATER SERVICES AND SEWER, WATER, OR FIRELINE SERVICES.
18. SETBACKS FOR UTILITY POLES, STRUCTURES, AND OTHER SIMILAR FACILITIES (NOT INCLUDING LANDSCAPING) GREATER THAN 16 INCHES IN HEIGHT IS 5.5 FEET FROM THE BACK OF CURB UNLESS APPROVED IN WRITING BY THE CITY ENGINEER. IN CASES WHERE THE FACILITIES ARE ADJACENT TO A DECELERATION LANE, BUS BAY, OR MEDIAN CURB, THE SETBACK CAN BE REDUCED TO 2.5 FEET FROM THE BACK OF CURB.
19. SCREEN WALLS OVER 7' AND RETAINING WALLS OVER 4' MUST HAVE A BUILDING PERMIT AND BE IN CONFORMANCE WITH CHANDLER BUILDING CODE.
20. ALL UNDERGROUND FACILITIES INSTALLED IN ANY REAL PROPERTY OUTSIDE THE CITY'S RIGHT-OF-WAY MUST COMPLY WITH THE FOLLOWING MARKING STANDARDS IN ACCORDANCE WITH HOUSE BILL 2296: A YELLOW INSULATED COPPER WIRE OR OTHER APPROVED CONDUCTOR MUST BE INSTALLED ADJACENT TO UNDERGROUND UTILITIES FOR FIRE LINE PIPING, POTABLE WATER DISTRIBUTION PIPING, SANITARY SEWER LINES, STORMSEWER PIPING, RECLAIMED WATER PIPING, GRAVITY FLOOR PIPING, AND PRESSURIZED IRRIGATION PIPING LARGER THAN TWO (2) INCHES IN DIAMETER UNLESS THESE FACILITIES CAN BE DETECTED FROM ABOVE GROUND WITH AN ELECTRONIC LOCATING DEVICE. ACCESS MUST BE PROVIDED TO THE TRACER WIRE OR THE TRACER WIRE MUST TERMINATE ABOVE GROUND AT EACH END OF THE PIPING. THE TRACER WIRE MUST NOT BE LESS THAN 18 AWG AND SUITABLE INSULATION TYPE FOR DIRECT BURIAL.
21. ANY CONSTRUCTION DETOURS WILL REQUIRE AN ALL-WEATHER SURFACE PER MARICOPA COUNTY AIR QUALITY REQUIREMENTS.
22. THE CONTRACTOR MUST SUPPLY CITY INSPECTOR CONSTRUCTION MATERIAL TESTING DOCUMENTATION THROUGHOUT THE PROJECT.
23. ALL SITE IMPROVEMENTS, INCLUDING LANDSCAPE AND SITE CLEANUP, MUST BE COMPLETE PRIOR TO CERTIFICATE OF OCCUPANCY FOR ANY BUILDING WITHIN A PHASE.
24. A UTILITY COORDINATION BLOCK MUST BE SHOWN ON THE COVER SHEET LISTING THE UTILITY COMPANIES IDENTIFIED BY BLUE STAKE WHICH HAVE FACILITIES WITHIN THE WORK VICINITY OF THE PROJECT. THE COORDINATION BLOCK MUST INCLUDE THE UTILITY NAME, CONTACT NAME, AND MOST RECENT DATE THE PROJECT PLANS WERE SUBMITTED.
25. ALL EXISTING SYSTEM LAYOUT, PIPING, CONFIGURATION AND OPERATION INFORMATION WAS PROVIDED BY THE CITY. CONTRACTOR SHALL VERIFY ALL LOCATIONS AND EQUIPMENT CONFIGURATION PRIOR TO STARTING CONSTRUCTION.



EXISTING FACILITIES PLAN
SCALE: 1" = 40'

NOTE:
ALL EXISTING SYSTEM LAYOUT, PIPING, CONFIGURATION AND OPERATION INFORMATION WAS PROVIDED BY THE CITY. CONTRACTOR SHALL VERIFY ALL LOCATIONS AND EQUIPMENT CONFIGURATION PRIOR TO STARTING CONSTRUCTION.



			PROJECT MANAGER	F. SHARF
			CHECKED BY	F. SHARF
			DESIGNED BY	C. TROTTER
			DRAWN BY	Z. SHARF
			PROJECT NUMBER	10264763
100%	06/29/2023	DESIGN SUBMITTAL		
ISSUE	DATE	DESCRIPTION		



OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

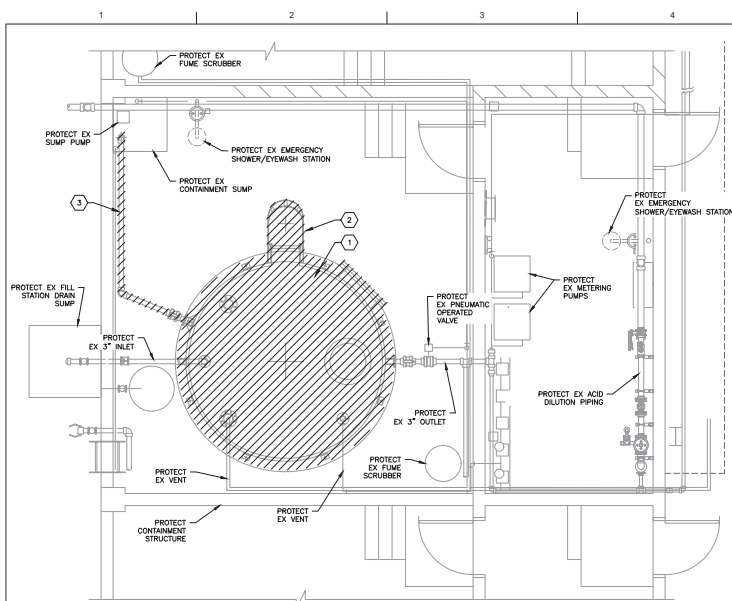
GENERAL NOTES AND
EXISTING FACILITIES PLAN



C.O.C LOG NO. 00000000000000000000

DRAWING
G-002

SHEET
2 of 22



HYDROCHLORIC ACID TANK DEMOLITION PLAN
SCALE: 3/8" = 1'-0"

GENERAL NOTES

KEYED NOTES

LEGEND

DEMOLITION



PROJECT MANAGER	F. SHARIF
CHECKED BY	F. SHARIF
DESIGNED BY	C. TROTTER
DRAWN BY	Z. SHARP
PROJECT NUMBER	10364783



HYDROCHLORIC ACID TANK DEMOLITION PLAN

◎◎◎◎◎

DRAWING

X-102

SHEET

5 of 22

Drawn: 30 July 2023, by: R4/17mm, User: 23040000, Layout: 5-001
Drawing Name: 5-001.dwg

GENERAL STRUCTURAL NOTES (GSN)

GENERAL:

- G1. SCOPE:
THE NOTES ON THIS SHEET AND THE STANDARD STRUCTURAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT WHETHER SPECIFICALLY CALLED OUT OR NOT, EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY ON STRUCTURAL SHEETS. IF THERE ARE QUESTIONS, THEY SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND ANSWERED IN WRITING PRIOR TO CONSTRUCTION.
- G2. CONTRACT DOCUMENTS:
CONTRACT DOCUMENTS SHOW THE FINISHED PRODUCT. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS, VISITS TO THE JOB SITE BY THE ENGINEER TO OBSERVE THE CONSTRUCTION DO NOT IN ANY WAY MEAN THAT THE ENGINEER IS RESPONSIBLE FOR CONTRACTOR'S WORK, NOR RESPONSIBLE FOR THE COMPREHENSIVE OR SPECIAL INSPECTIONS, COORDINATION, SUPERVISION, OR SAFETY AT THE JOB SITE.
- G3. APPLICABLE SPECIFICATIONS AND CODES:
A. INTERNATIONAL BUILDING CODE (IBC 2021) WITH APPLICABLE EDITIONS OF THE CODE REFERENCED STANDARDS AND WITH CITY OF CHANDLER AMENDMENTS.
B. ACI 318-19 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
C. AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
- G4. DESIGN CRITERIA (APPLIES TO ALL STRUCTURES UNO):
A. DEAD LOAD: ACTUAL TRIBUTARY STRUCTURE WEIGHT
B. ROOF LIVE LOAD: 20 PSF (NON-REDUCIBLE)
C. WIND:
1. RISK CATEGORY = IV
2. BASIC WIND SPEED = 113 MPH
3. ALLOWABLE STRESS WIND SPEED = 88 MPH
4. EXPOSURE = C
D. SEISMIC:
1. ALL STRUCTURES: = IV
a. RISK CATEGORY = 1.50
b. IMPORTANCE FACTOR = D
c. SITE CLASS = 0
d. SPECTRAL RESPONSE ACCELERATION, S_S = 0.173
e. SPECTRAL RESPONSE ACCELERATION, S_1 = 0.064
f. SPECTRAL RESPONSE COEFFICIENT, SDS = 0.185
g. SPECTRAL RESPONSE COEFFICIENT, SDI = 0.102
h. SEISMIC DESIGN CATEGORY = C
- G5. GEOTECHNICAL:
A. GEOTECHNICAL REPORT WAS NOT DEVELOPED FOR THIS PROJECT. THEREFORE, THE FOLLOWING SOIL PROPERTIES WERE ASSUMED BASED ON PRESUMPTIVE VALUES OF THE 2021 IBC PER TABLE 1806.2 FOR CLASS OF MATERIALS 4 AND ARE THE BASIS OF THIS STRUCTURAL DESIGN:
A. ALLOWABLE SOIL BEARING = 2,000 PSF
B. PASSIVE LATERAL EARTH PRESSURE = 150 PCF
C. COEFFICIENT OF FRICTION = .25
- G6. SAFETY:
SAFETY AND STRUCTURE STABILITY DURING CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LIVE LOADS ONLY AS A COMPLETED STRUCTURE.
- G7. SPECIAL INSPECTIONS:
SPECIAL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH CHAPTER 1 AND CHAPTER 17 OF THE IBC. PAYMENT FOR THESE INSPECTIONS IS NOT THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE FOR FULL ACCESS TO THE WORK BY THE SPECIAL INSPECTOR AND SHALL PROVIDE FOR THESE INSPECTIONS IN THE CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE SPECIFICATIONS. A STATEMENT OF CONTRACTOR RESPONSIBILITY SHALL BE SUBMITTED PRIOR TO ANY WORK THAT REQUIRES SPECIAL INSPECTION, AS REQUIRED BY SECTION 1704 OF THE IBC 2021. SPECIAL INSPECTIONS ARE REQUIRED FOR THE FOLLOWING WORK:
A. ANCHORS INSTALLED IN HARDENED CONCRETE.
- G8. CONFLICTS:
IN CASES WHERE CONFLICTS OCCUR BETWEEN THE DRAWINGS OR BETWEEN THE SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL CONTROL. FOR BID PURPOSES, SUBMIT QUESTIONS IN WRITING TO ENGINEER FOR CLARIFICATION PRIOR TO CONSTRUCTION.

STEEL

- S1. DESIGN STRENGTHS:
WIDE FLANGE AND TEES: $F_y=50$ KSI
PIPE: $F_y=35$ KSI
STAINLESS STEEL: $F_y=33$ KSI
HSS SECTIONS: $F_y=46$ KSI
ALL OTHER PLATES AND SHAPES: $F_y=36$ KSI
- S2. DIMENSIONS:
TO CENTERLINES OF COLUMNS AND BEAMS, TOP SURFACES OF BEAMS AND TUBES AND BACKS OF CHANNELS AND ANGLES UNO.
- S3. ELEVATIONS:
TOP OF STEEL REFERS TO TOP SURFACE OF MEMBER OR FLANGE UNO.
- S4. WHEN FILLET WELD SIZE IS NOT INDICATED, PROVIDE MAXIMUM WELD SIZE BASED ON MATERIAL THICKNESS IN ACCORDANCE WITH AISC SPECIFICATIONS.
- S5. ALL BOLTED STRUCTURAL CONNECTIONS ARE BEARING TYPE CONNECTIONS, UNO. BOLTED CONNECTIONS SHALL BE MADE USING ASTM F3125 GALVANIZED BOLTS, UNO.
- S6. ALL STEEL SHALL CONFORM TO AISC 360, STEEL CONSTRUCTION MANUAL.
- S7. ALL STEEL, BOLTS, PLATES, SHAPES, AND CONNECTION ASSEMBLIES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH THE SPECIFICATIONS. NO FIELD WELDING ALLOWED UNLESS EXPLICITLY NOTED ON DRAWINGS OR APPROVED BY THE ENGINEER.

POST-INSTALLED ANCHORS

- PA1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONTRACT DRAWINGS OR WHERE APPROVED IN WRITING BY THE ENGINEER. ALL ANCHOR INSTALLATIONS, INCLUDING CAST-IN-PLACE ANCHORS REQUIRE SPECIAL INSPECTION PER THE 2021 IBC AND PER THIS PROJECT'S REQUIREMENTS.
- PA2. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REINFORCING. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPI) AND ICC REPORTS.
- PA3. SPECIAL INSPECTION SHALL BE PROVIDED BY THE OWNER OR HIS DESIGNATED REPRESENTATIVE FOR ALL CAST-IN-PLACE, ADHESIVE AND MECHANICAL ANCHOR INSTALLATIONS AS REQUIRED BY THE BUILDING CODE AND ICC REPORTS. INDEPENDENT ON-SITE PROOF LOAD TESTING, PAID FOR BY THE CONTRACTOR, SHALL BE PERFORMED IN THE PRESENCE OF THE SPECIAL INSPECTOR FOR ALL ANCHORS INSTALLED WITHOUT SPECIAL INSPECTION.
- PA4. SUBSTITUTION REQUESTS, FOR PRODUCTS OTHER THAN THOSE SPECIFIED, SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER ALONG WITH CALCULATIONS THAT ARE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARIZONA. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES (MINIMUM) OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE BUILDING CODE. PRODUCT ICC-ES REPORTS SHALL BE INCLUDED WITH THE SUBMITTAL PACKAGE.
- PA5. UNLESS NOTED OTHERWISE ON PLANS, ACCEPTABLE POST-INSTALLED CONCRETE ANCHOR PRODUCTS SHALL BE ADHESIVE ANCHORS FOR USE IN CRACKED CONCRETE AND SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308. SEE SPECIFICATION SECTION 03 15 19 FOR A LIST OF APPROVED ADHESIVE ANCHORS.

DEFERRED SUBMITTALS

- DS1. DEFERRED SUBMITTALS ARE THOSE PORTIONS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF PERMIT APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE PERMITTING AGENCY FOR ACCEPTANCE PRIOR TO INSTALLATION OF THAT PORTION OF THE WORK.
- DS2. THE FOLLOWING IS A LIST OF DEFERRED SUBMITTALS PER IBC SECTION 107.3.4.1 THAT ARE EXPECTED TO CONTAIN STRUCTURAL CALCULATIONS OR SAFETY RELATED SYSTEM INFORMATION FOR REVIEW TO MEET BUILDING PERMITTING REQUIREMENTS FOR DESIGNED SYSTEMS, PRIOR TO INSTALLATION OF THE INDICATED STRUCTURAL ELEMENT, EQUIPMENT, DISTRIBUTION SYSTEM, OR COMPONENT OR ITS ANCHORAGE. THE CONTRACTOR SHALL SUBMIT THE REQUIRED CALCULATIONS AND SUPPORTING DATA AND DRAWINGS FOR REVIEW AND ACCEPTANCE BY THE ENGINEER. ADDITIONALLY, ACCEPTANCE INDICATED ON THE ENGINEER'S COMMENT FORM, ALONG WITH THE COMPLETED, FINAL SUBMITTAL, SHALL THEN BE FILED BY THE CONTRACTOR AND ACKNOWLEDGED AS ACCEPTED BY THE PERMITTING AGENCY PRIOR TO INSTALLATION OF THESE ITEMS.

DEFERRED SUBMITTALS	
SPECIFICATION SECTION	ITEM
05 50 00	METAL FABRICATIONS
06 82 00	FIBERGLASS REINFORCED PLASTIC FABRICATIONS
40 05 07	PIPE SUPPORT SYSTEMS
OTHER	ANY EQUIPMENT OR COMPONENT IN WHICH A TECHNICAL SPECIFICATION REQUIRES SUBMITTAL OF EQUIPMENT OR ANCHORAGE SYSTEM CALCULATIONS

ADHESIVE ANCHOR SCHEDULE				
REINFORCING BARS		ANCHOR BOLTS/RODS		
BAR SIZE	EMBED LENGTH (L)	DIA (IN)	EMBED LENGTH (L)	
#3	4"	3/8"	5"	
#4	5"	1/2"	6"	
#5	6"	5/8"	7"	
#6	7"	3/4"	8"	
#7	8"	7/8"	9"	
#8	9"	1"	10"	

NOTES:

- ADHESIVE TYPE IS SUBJECT TO APPROVAL OF THE ENGINEER OF RECORD.
- EMBEDMENT LENGTHS SHOWN ARE MINIMUM. PROVIDE MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.
- SEE SPECIFICATION 03 15 19 FOR ADDITIONAL INFORMATION.

1 ADHESIVE ANCHOR SCHEDULE
NOT TO SCALE



PROJECT MANAGER: F. SHARP		
CHECKED BY: CY		
DESIGNED BY: RIV		
DRAWN BY: RIV		
100% 06/29/2023	DESIGN SUBMITTAL	
ISSUE	DATE	DESCRIPTION
PROJECT NUMBER: 10264763		

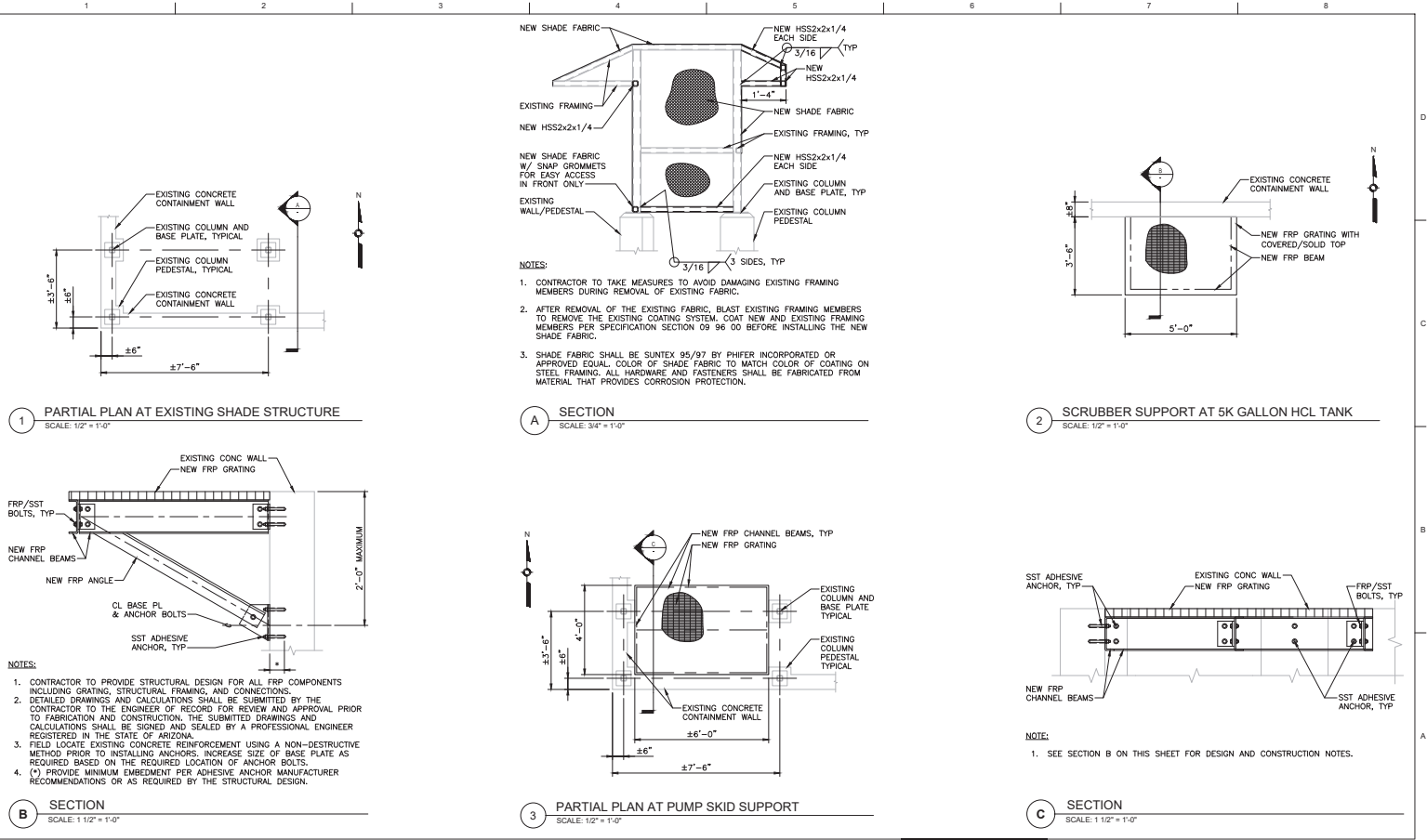


OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

GENERAL STRUCTURAL NOTES AND STANDARD DETAILS

DRAWING: S-001		SHEET: 7 of 22	
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Drawing Name: S-501.dwg



100% 08/29/2023 DESIGN SUBMITTAL
ISSUE DATE DESCRIPTION

PROJECT MANAGER P. SHARIF
CHECKED BY CY
DESIGNED BY REV
DRAWN BY REV
PROJECT NUMBER 10264763



OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

STRUCTURAL PLANS, SECTIONS, AND DETAILS

C.O.C LOG NO. 00000000000000000000

DRAWING
S-501

SHEET
8 of 22

Sheet: 30 July 2023, 11:40 AM, User: jzhang, Layout: D-001, Drawing Name: D-001.dwg

1	2	3	4	5	6	7	8
SYMBOLS AND ABBREVIATIONS		SYMBOLS AND ABBREVIATIONS		PIPE AND FITTING SYMBOLS		NOTES	
OR FLOW ARROW FLOW METER (FM) PRESSURE SENSING ELEMENT (PE) PRESSURE INDICATOR (PI) HIGH LEVEL PRESSURE SWITCH (PS) PRESSURE ALARM SENSOR (Z) TEMPERATURE SENSING ELEMENT (TE) PLUG VALVE (PV) BUTTERFLY VALVE (BFV) CHECK VALVE, GENERAL SYMBOL (CKV) BALL CHECK VALVE (BCV) BALL VALVE (BV) DOUBLE DOOR CHECK VALVE (DDCV) GATE VALVE (GV) SOLENOID VALVE (SV) MOTOR OPERATED VALVE (MOV) 3-WAY SOLENOID VALVE (SV3) 4-WAY SOLENOID VALVE (SV4) ANGLE VALVE (AV) QUICK CONNECT COUPLING (QCC) SLUICE GATE (SLG) BULKHEAD GATE (BHG) SLIDE GATE (SG) WEIR SLIDE GATE (WVG) STOP PLATE GUIDES (SPG) FLAP VALVE (FLV) SHEAR GATE (SHG) MUD VALVE (MV) PRESSURE RELIEF VALVE (PRV) DIFFERENTIAL PRESSURE REDUCING REGULATOR WITH INTERNAL AND EXTERNAL PRESSURE TAPS (PDCV)		CONTROL VALVE (CV) FLOW CONTROL VALVE (FCV) BACK PRESSURE REGULATOR SELF CONTAINED (PCV) BACK PRESSURE REGULATOR WITH EXTERNAL PRESSURE TAP (PCV) PRESSURE REDUCING REGULATOR WITH INTEGRAL OUTLET PRESSURE RELIEF VALVE (PCV) PRESSURE RELIEF OR SAFETY VALVE, STRAIGHT-THROUGH PATTERN, SPRING OR WEIGHT-LOADED, OR WITH INTEGRAL PILOT (PSV) PRESSURE RELIEF OR SAFETY VALVE, GENERAL SYMBOL (PSV) VACUUM RELIEF VALVE, GENERAL SYMBOL (VRV) PRESSURE AND VACUUM RELIEF VALVE, SPRING OR WEIGHT-LOADED, OR WITH INTEGRAL PILOT (PSV) RUPTURE DISK OR SAFETY HEAD FOR PRESSURE RELIEF (PSE) RUPTURE DISK OR SAFETY HEAD FOR VACUUM RELIEF (PSE) KNIFE GATE VALVE (KGV) SLIDE PLATE (SP) MANUAL VOLUME DAMPER (MVD) BACKDRAFT DAMPER (BKD) FOOT VALVE (FV) VALVE ACTUATORS DIAPHRAGM, PNEUMATIC DIAPHRAGM, PRESSURE-BALANCED ROTARY MOTOR, (SHOWN TYPICALLY WITH ELECTRIC SIGNAL, MAY BE HYDRAULIC OR PNEUMATIC) SOLENOID CYLINDER, SINGLE-ACTING, SPRING OPPOSED WITHOUT POSITIONER OR PILOT CYLINDER, DOUBLE ACTING, WITHOUT POSITIONER OR PILOT EXAMPLE OF CYLINDER WITH POSITIONER ANY CYLINDER THAT IS ASSEMBLED WITH A PILOT SO THAT ASSEMBLY IS ACTUATED BY ONE CONTROLLED INPUT. PILOT MAY BE POSITIONER, SOLENOID VALVE, SIGNAL CONVERTER, etc. FLOAT ACTUATOR FLOAT ACTUATOR WITH PILOT VALVE		DOUBLE LINE PIPING SINGLE LINE PIPING PROCESS PIPING: EXISTING PROCESS PIPING/ UNDERGROUND PROCESS PIPING (IN PLAN) FUTURE PROCESS PIPING WELDED JOINT FLANGED JOINT VICTAULIC COUPLING MECHANICAL JOINT PUSH ON JOINT OR CAULKED BELL & SPIGOT JOINT FLANGE x FLAN END PIPE COUPLING (FLANGE ADAPTOR) PIPE COUPLING (SLEEVE-TYPE) FLEX COUPLING OR EXPANSION JOINT SINGLE OR DOUBLE SPHERE FLANGE GUARD FLANGED CHECK VALVE FLANGED BUTTERFLY VALVE FLANGED PLUG VALVE FLANGED BALL VALVE FLANGED GATE VALVE FLANGED KNIFE GATE VALVE CYCLIC AIR VALVE PIPE AND FITTING SYMBOLS NOTES: 1. GENERIC JOINT SYMBOL IS USED FOR ALL SINGLE LINE PIPING SHOWN ON THE INTERIOR AND EXTERIOR PIPING DRAWINGS. 2. BOTH DETAILED AND SIMPLIFIED FLANGE REPRESENTATION SYMBOLS MAY BE SHOWN ON THE DRAWINGS. 3. UNLESS MODIFIED BY THE GENERAL PROJECT NOTES OR DETAILED ON THE LAYOUT AND SCHEMATIC DRAWINGS, PIPE AND FITTING JOINT REQUIREMENTS FOR THE VARIOUS PIPE MATERIALS ARE DEFINED IN THE SPECIFICATIONS AND ARE INDICATED ON THE PROCESS PIPE SCHEDULES. PIPE TAGGING: PW-3/4"-PVC WAS-4"-PVC WAS-4"-PVC PROCESS FLOW STREAM SEE ABBREVIATIONS PIPE MATERIAL SEE ABBREVIATIONS PIPE DIAMETER		1. PIPE SUPPORTS AND ANCHORS HAVE NOT ALL BEEN SHOWN; SEE SHT D-501 FOR DETAILS. EQUIPMENT ANCHORS AND SUPPORTS SHALL BE IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURERS RECOMMENDATIONS AND ARE INCIDENTAL TO THE CONTRACT. CONTRACTOR SHALL PROVIDE ANCHORS AND SUPPORTS FOR ALL INSTALLED EQUIPMENT. 2. PVC PIPE EXPOSED TO SUNLIGHT SHALL BE PAINTED PER SECTION 09 96 00. 3. P&ID'S SHOW ADDITIONAL VALVES AND PIPING. 4. SEE SHEET D-003 FOR ABBREVIATIONS. 5. FOR PVC PRESSURE PIPE 12" DIAMETER AND GREATER, USE AWWA C900; FOR PIPE 12" AND LESS, USE SCHEDULE 80. 6. KEYED NOTES FOLLOWED BY "TYP" INDICATE THAT ITEM PERTAINS TO ALL SIMILAR INSTALLATIONS. 7. ALL EXPOSED PIPING SHALL BE APPROPRIATELY LABELED WITH CONTENTS, DIRECTION OF FLOW, AND COLOR IN ACCORDANCE WITH ANSI/ASME A13.1. 8. ALL SUBGRADE PIPING SHALL BE APPROPRIATELY IDENTIFIED WITH FOL MARKING TAPE LABELING CONTENTS AND DIRECTION OF FLOW, AND PLACED 1 FT ABOVE PIPE BEING IDENTIFIED.	



100% 06/29/2023 DESIGN SUBMITTAL
ISSUE DATE DESCRIPTION

PROJECT MANAGER F. SHARIF
CHECKED BY F. SHARIF
DESIGNED BY C. TROTTER
DRAWN BY Z. SHARIF
PROJECT NUMBER 10264763



CHANDLER
arizona

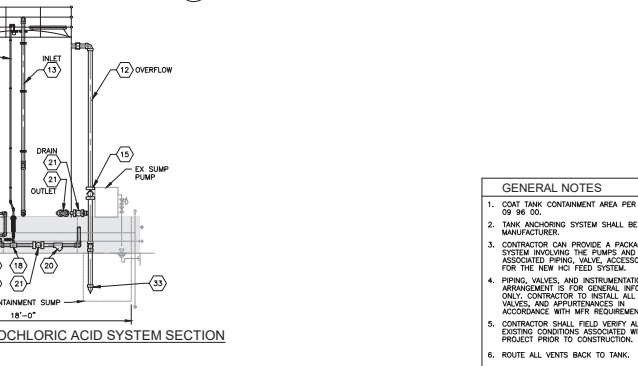
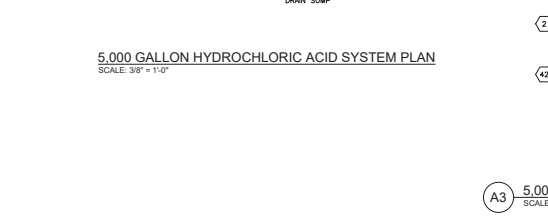
OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

PROCESS NOTES, LEGEND, AND SYMBOLS

0 10 20
C.O.C LOG NO. 00000000000000000000

DRAWING
D-001

SHEET
9 of 22

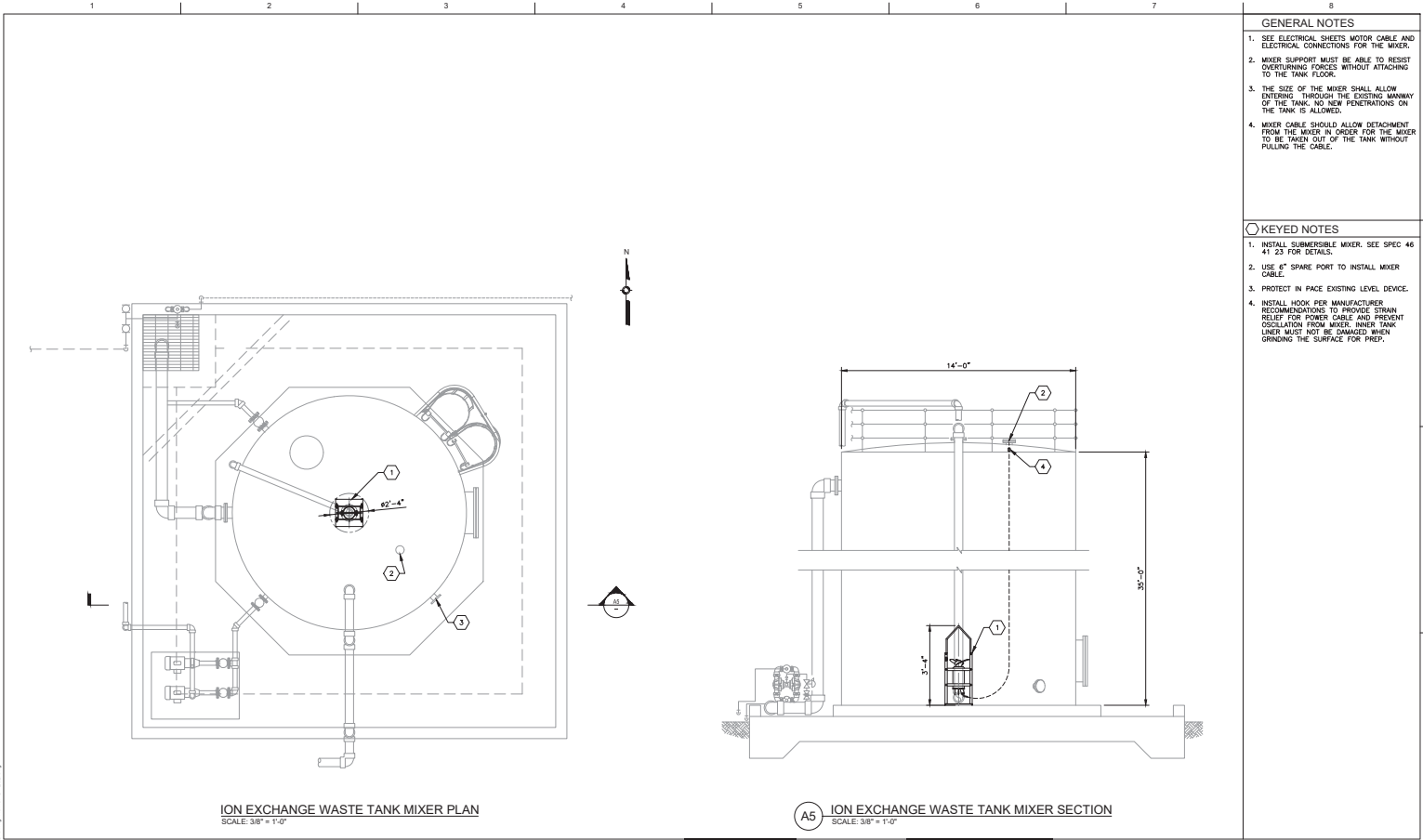


- ### KEY NOTES
1. INSTALL 5,000 GAL. FIBR TANK TO STORE HOUL. SEE SPEC. 43 41 45 FOR DETAILS.
 2. HOL-TANK TRANSFER PIPING, SEE SPEC. SECTION 46 43 11 FOR CONNECTIONS.
 3. INSTALL FUME SCRUBBER, SEE SPEC. 44 11 1 FOR DETAILS.
 4. 6" SCH 80 CPVC VENT PIPE.
 5. 1" SCH 80 CPVC WATER FILL PIPE.
 6. 1" CPVC BALL VALVE.
 7. 1" FLOWMETER AT MAX. 10 GPM FLOW.
 8. 1" CPVC COINTEGR. DRAIN AND OVERFLOW PIPE, SLOPED TO DRAIN.
 9. 1/2" CPVC BALL VALVE.
 10. FUME SCRUBBER SUPPORT, SEE DETL. 2 SHEET S-501.
 11. 3" SCH 80 CPVC OVERFLOW PIPE.
 12. 3" SCH 80 CPVC.
 13. 1" VENT RELIEF LINE.
 14. 3" CPVC CPVC CHECK VALVE.
 15. INSTALL 1.5" LEVEL TRANSMITTER, SEE SPEC. 46 43 72 00 FOR DETAILS.
 16. 1" PRESSURE REGULATOR AND GAUGE.
 17. CALIBRATION COLUMN, SIZOMATOR OR 1/2" SCH 80 VENT TO TANK.
 18. 2" PRESSURE RELIEF VALVE, SIZOMATOR OR APPROVED EQUAL VENT TO TANK.
 19. 3" V-1 STAINER.
 20. 3" CPVC VENTED BALL VALVE.
 21. 3" SCH 80 CPVC PIPING.
 22. PULSATION DAMPER (COTI APPROVED).
 23. PRESSURE GAUGE AND TRANSMITTER, SEE SPEC. 46 43 72 00 FOR DETAILS.
 24. 2" CPVC BALL CHECK VALVE.
 25. 2" BACK PRESSURE VALVE, SIZOMATOR OR APPROVED EQUAL.
 26. 3"x2.5" SCH 80 CPVC REDUCING FLANGE.
 28. 2.5"x2.5" SCH 80 CPVC REDUCER.
 29. 3" SCH 80 CPVC PIPING.
 30. CPVC FLEX COUPLING.
 31. 3" CAMLOCK FITTING.
 32. PNEUMATIC OPERATED VALVE.
 41. 4" DUCKBILL CHECK VALVE.
 42. HORIZONTAL FLANGE MOUNT PIPE SUPPORT, SEE DETL. A-1 DETL. S-501.
 43. FLOOR PIPE SUPPORT, SEE DETL. A-7 DETL. S-501.
 44. WALL MOUNT PIPE SUPPORT, SEE DETL. 06 DETL. S-501.
 45. PRESSURE AND PRESSURE BREAKER, VENT PIPE, SEE SPEC. 43 41 45 FOR DETAILS.
 46. ATTACH MAN. PLATE TO EXTERIOR SURFACE OF STORAGE TANK.
 47. ATTACH 1/2" PLUGS SIDE TO EXTERIOR SURFACE OF STORAGE TANK.
 48. PROVIDE SAF-T-CLOMB FALL PREVENTION SYSTEM BY MANUFACTURER'S INSTRUCTIONS, OR EQUAL, AT LADDER.
 49. PROVIDE SAF-T-CLOMB FALL PREVENTION SYSTEM BY MANUFACTURER'S INSTRUCTIONS, OR EQUAL, AT LADDER.
 50. PROVIDE SAF-T-CLOMB FALL PREVENTION SYSTEM BY MANUFACTURER'S INSTRUCTIONS, OR EQUAL, AT LADDER.
 51. 3" CPVC VENTED BALL VALVE.
 52. 2" FLOW SWITCH, ENDRESS + HAUSER OR P-501.
 53. 3" SCH 80 CPVC, SEE DETL. 3 SHEET S-501.
 54. 1/2" FLOW BREAKER.
 55. NEW LEVEL INDICATING TRANSMITTER PANEL, INSTALL IN EXISTING ENCLOSURE.
 57. 3" TRUE UNION.

1. COAT TANK CONTAINMENT AREA PER SPEC. OR 99 00.	2. 2" FLOW SWITCH, DISCONNECT + HAUSER OR 99 00.
2. TANK ANCHORING SYSTEM SHALL BE PER MANUFACTURER.	4. PUMP; SINK SUPPORT, SEE DET. 3 SHEET 5-501.
3. CONTRACTOR CAN PROVIDE A PACKAGED SYSTEM INCLUDING TANK AND ASSOCIATED PIPING, VALVE, ACCESSORIES FOR THE NEW HO FIED SYSTEM.	1. VACUUM BREAKER.
	6. NEW LEVEL INDICATING TRANSMITTER PANEL INSTALLED IN EXISTING ENCLOSURE.
	7. 3" TRUE UNION.
5. CONTRACTOR SHALL PROVIDE AN INFORMATION ARRANGEMENT IS FOR GENERAL INFORMATION ONLY. CONTRACTOR TO INSTALL ALL PIPING, VALVES, AND APPURTENANCES IN ACCORDANCE WITH MFR REQUIREMENTS.	
6. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS ASSOCIATED WITH THIS PROJECT PRIOR TO CONSTRUCTION.	
8. ROUTE ALL VENTS BACK TO TANK.	



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Drawing Name: D-202.dwg



- GENERAL NOTES**
1. SEE ELECTRICAL SHEETS MOTOR CABLE AND ELECTRICAL CONNECTIONS FOR THE MIXER.
 2. MIXER SUPPORT MUST BE ABLE TO RESIST OVERTURNING FORCES WITHOUT ATTACHING TO THE TANK FLOOR.
 3. THE SIZE OF THE MIXER SHALL ALLOW ENTERING THROUGH THE EXISTING MANWAY OF THE TANK. NO NEW PENETRATIONS ON THE TANK IS ALLOWED.
 4. MIXER CABLE SHOULD ALLOW DETACHMENT FROM THE MIXER IN ORDER FOR THE MIXER TO BE TAKEN OUT OF THE TANK WITHOUT PULLING THE CABLE.
- KEYED NOTES**
1. INSTALL SUBMERSIBLE MIXER. SEE SPEC 46 41 23 FOR DETAILS.
 2. USE 6" SPARE PORT TO INSTALL MIXER CABLE.
 3. PROTECT IN PLACE EXISTING LEVEL DEVICE.
 4. INSTALL HOOK PER MANUFACTURER RECOMMENDATIONS TO PROVIDE STRAIN RELIEF FOR POWER CABLE AND PREVENT OSCILLATION FROM MIXER. INNER TANK LINER MUST NOT BE DAMAGED WHEN GRINDING THE SURFACE FOR PREP.



100%	08/28/2023	DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	F. SHARIF
CHECKED BY	F. SHARIF
DESIGNED BY	C. TROTTER
DRAWN BY	Z. SHARIF
PROJECT NUMBER	10264763



OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

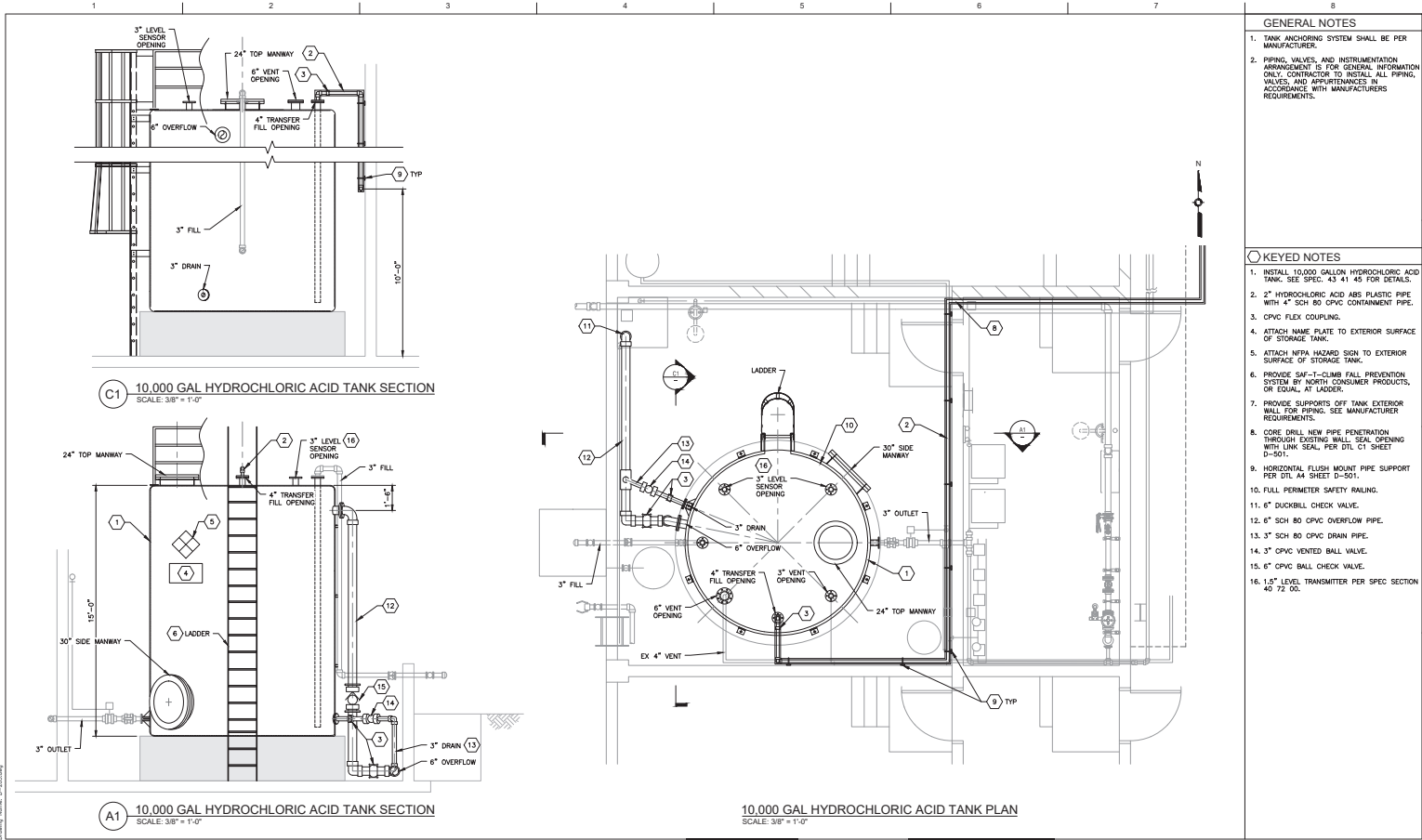
ION EXCHANGE WASTE TANK MIXER
PLAN AND SECTION

C.O.C LOG NO. 00000000000000000000

DRAWING
D-202

SHEET
11 of 22

Sheet: 30 Aug 2023, 11:45 AM, User: jzhang, Layout: D-203-01
Drawing Name: D-203-01



- GENERAL NOTES**
1. TANK ANCHORING SYSTEM SHALL BE PER MANUFACTURER.
 2. PIPING, VALVES, AND INSTRUMENTATION ARRANGEMENT IS FOR GENERAL INFORMATION ONLY. CONTRACTOR TO INSTALL ALL PIPING, VALVES, AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.

- KEYED NOTES**
1. INSTALL 10,000 GALLON HYDROCHLORIC ACID TANK. SEE SPEC 43 41 45 FOR DETAILS.
 2. HYDROCHLORIC ACID ABS PLASTIC PIPE WITH 4" SCH 80 CPVC CONTAINMENT PIPE.
 3. CPVC FLEX COUPLING.
 4. ATTACH NAME PLATE TO EXTERIOR SURFACE OF STORAGE TANK.
 5. ATTACH NFPA HAZARD SIGN TO EXTERIOR SURFACE OF STORAGE TANK.
 6. PROVIDE SAF-T-CRIMP FALL PREVENTION SYSTEM BY NORTH CONSUMER PRODUCTS, OR EQUAL, AT LADDER.
 7. PROVIDE SUPPORTS OFF TANK EXTERIOR WALL FOR PIPING. SEE MANUFACTURER REQUIREMENTS.
 8. CORE DRILL NEW PIPE PENETRATION THROUGH EXISTING WALL. SEAL OPENING WITH LINK SEAL. PER DTL C1 SHEET D-501.
 9. HORIZONTAL FLUSH MOUNT PIPE SUPPORT PER DTL A4 SHEET D-501.
 10. FULL PERIMETER SAFETY RAILING.
 11. 6" DUCKBILL CHECK VALVE.
 12. 6" SCH 80 CPVC OVERFLOW PIPE.
 13. 3" SCH 80 CPVC DRAIN PIPE.
 14. 3" CPVC VENTED BALL VALVE.
 15. 6" CPVC BALL CHECK VALVE.
 16. 1.5" LEVEL TRANSMITTER PER SPEC SECTION 40 72 00.



100%	08/29/2023	DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	F. SHARIF
CHECKED BY	F. SHARIF
DESIGNED BY	C. TROTTER
DRAWN BY	Z. SHARIF
PROJECT NUMBER	10264703



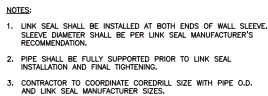
OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

10,000 GALLON HYDROCHLORIC ACID
SYSTEM PLAN AND SECTION

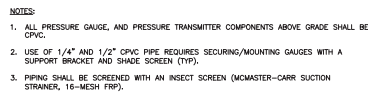
C.O.C LOG NO. 00000000000000000000

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D-203

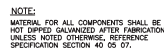
SHEET
12 of 22



PIPE INSTALLATION THROUGH
WALL AND FLOOR SLABS



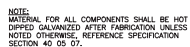
C3 PRESSURE TRANSMITTER AND GAUGE DETAIL
NOT TO SCALE



C5 WALL MOUNT PIPE SUPPORT DETAIL
NOT TO SCALE 40 05 07-05



C7 EQUIPMENT RACK
SCALE: NTS



A1 MODULAR TRAPEZE HANGER
NOT TO SCALE



1. FOR INSULATED PIPES, USE GRINNELL FIG 167 OR ELCEN FIG 219 INSULATION PROTECTION SHIELD.
2. TOTAL LOADING ON EACH CONC. INSERT OR OTHER TYPE HANGER ROD ANCHOR SHALL NOT EXCEED MFR'S RECOMMENDED LOADINGS.
3. MATERIAL FOR ALL COMPONENTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE, REFERENCE SPECIFICATION SECTION 40 05 07.

A2 PIPE HANGER DETAIL
NOT TO SCALE



A4 HORIZONTAL FLUSH MOUNT PIPE SUPPORT
NOT TO SCALE



MODIFIED PLATE

NOTE:
MATERIAL FOR ALL COMPONENTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE, REFERENCE SPECIFICATION SECTION 40 05 07.

FLOOR PIPE SUPPORT SCHEDULE DIMENSIONS IN INCHES							
PIPE SIZE	"A"	"B"	"C"	"D"		ANCHORS	
				MINIMUM	MAXIMUM	DIA.	EMBED
5/8 2 1/2	2 1/2	1 1/2	9	8	13	5/8	5
3 2 1/2	2 1/2	1 1/2	9	8 1/2	13 1/2	5/8	5
3 1/2	2 1/2	1 1/2	9	8 1/2	13 1/2	5/8	5
4 3	2 1/2	1 1/2	9	9 1/2	14	5/8	5
6 3	2 1/2	1 1/2	10	10 1/2	14 1/2	5/8	5
8 3	2 1/2	1 1/2	9	11 1/2	16	5/8	5

A7 FLOOR PIPE SUPPORT
NOT TO SCALE

DATE: 30 July 2023, 1:10 PM, USER: jzhang, LEGEND: E-001
DRAWING NUMBER: E-001

1 LOW - VOLTAGE CIRCUIT BREAKER (CB), RATINGS AND NO. OF POLES AS SHOWN. WHEN SPECIFIC TYPE IS REQUIRED, X INDICATES TYPE. TYPES: MCB - MOLDED CASE ICB - INSULATED CASE LVP - LOW - VOLTAGE PICKUP MCP - MOTOR CIRCUIT PROTECTOR - GROUND FAULT PICKUP (RATING PER CONNECTED LOAD) SEPARATELY MOUNTED CIRCUIT BREAKERS: SEE ELECTRICAL ONE - LINE DIAGRAM OR SCHEDULE FOR DESCRIPTION GROUND FAULT PROTECTION MEDIUM - VOLTAGE CIRCUIT BREAKER FUSE, SIZE, AND NUMBER OF FUSES AS NOTED FUSED CUTOFF, CURRENT RATING, FUSE SIZE, AND NUMBER OF POLES AS NOTED FUSIBLE SWITCH, CURRENT RATING, FUSE SIZE, AND QUANTITY AS NOTED NON-FUSED SWITCH, CURRENT RATING, AND NUMBER OF POLES AS NOTED DISCONNECT OR DRAWOUT CONNECTION MAGNETIC MOTOR STARTER AND SEPARATELY MOUNTED COMBINATION MAGNETIC MOTOR STARTER MAGNETIC MOTOR STARTER: "F" INDICATED NEMA SIZE. THERMAL OVERLOAD ELEMENT THERMAL OVERLOAD RELAY CONTACT DISCONNECT OR SAFETY SWITCH, 30A, 3P, NON-FUSED UNLESS OTHERWISE NOTED MOTOR WITH DESIGN HORSEPOWER (WHEN INDICATED) GENERATOR TRANSFER SWITCH, CURRENT RATING, AND NUMBER OF POLES AS NOTED ATS - AUTOMATIC MTS - MANUAL TRANSFORMER Δ 3-PHASE, 3-WIRE DELTA CONNECTION Y 3-PHASE, 4-WIRE GROUNDING WYE CONNECTION SWITCHBOARD OR PANELBOARD, NAME, VOLTAGE, PHASE, NUMBER OF WIRES WHEN INDICATED LP100 208/120V 3W, 4W	2 100 KVA CPT CONTROL POWER TRANSFORMER (CPT) VOLTAGE TRANSFORMER (VT OR PT) CURRENT TRANSFORMER (CT) DIGITAL METERING PACKAGE RUN TIME METER GROUND LIGHTNING ARRESTER LOW VOLTAGE SURGE PROTECTIVE DEVICE ELECTRICAL CONNECTION NO ELECTRICAL CONNECTION SOLENOID VALVE CONTROL/RELAY COIL; X INDICATES TYPE, Y INDICATES LOOP NO. WHEN USED TYPES: CR - CONTROL RELAY DP - DEFERRABLE PURPOSE RELAY LC - LIGHTING CONTACTOR M - MOTOR STARTER PC - PHOTO CELL TC - TIME CLOCK TD - TIME DELAY RELAY TR - TRIP RELAY NORMALLY OPEN TIME DELAY RELAY CONTACT WITH TIME DELAY ON CLOSING AFTER COIL IS ENERGIZED NORMALLY CLOSED TIME DELAY RELAY CONTACT WITH TIME DELAY ON OPENING AFTER COIL IS DE-ENERGIZED NORMALLY CLOSED TIME DELAY RELAY CONTACT WITH TIME DELAY ON CLOSING AFTER COIL IS DE-ENERGIZED NORMALLY OPEN TEMPERATURE SWITCH; CLOSE ON RISING TEMPERATURE NORMALLY CLOSED TEMPERATURE SWITCH; CLOSE ON RISING TEMPERATURE NORMALLY OPEN FLOW SWITCH; CLOSE ON INCREASING FLOW NORMALLY CLOSED FLOW SWITCH; OPEN ON INCREASING FLOW NORMALLY OPEN LEVEL SWITCH; CLOSE ON RISING LEVEL NORMALLY CLOSED LEVEL SWITCH; OPEN ON RISING LEVEL NORMALLY OPEN PRESSURE SWITCH; CLOSE ON INCREASING PRESSURE NORMALLY CLOSED PRESSURE SWITCH; OPEN ON INCREASING PRESSURE NORMALLY OPEN LIMIT SWITCH; CLOSE ON REACHING LIMIT NORMALLY CLOSED LIMIT SWITCH; OPEN ON REACHING LIMIT SPACE HEATER	3 NON-MOTOR LOAD WITH DESIGN KVA, KW, OR AMP CONTROL POWER TRANSFORMER (CPT) VOLTAGE TRANSFORMER (VT OR PT) CURRENT TRANSFORMER (CT) DIGITAL METERING PACKAGE RUN TIME METER GROUND LIGHTNING ARRESTER LOW VOLTAGE SURGE PROTECTIVE DEVICE ELECTRICAL CONNECTION NO ELECTRICAL CONNECTION SOLENOID VALVE CONTROL/RELAY COIL; X INDICATES TYPE, Y INDICATES LOOP NO. 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NORMALLY CLOSED CONTACT (N.C.) FIELD WIRING EXTERNAL TO CONTROL PANEL INTERLOCK; X INDICATES TYPE TYPES: E - ELECTRICAL M - MECHANICAL K - KEY 3 POSITION SELECTOR SWITCH, MAINTAINED CONTACTS; UNLESS OTHERWISE NOTED, 2-POSITION SIMILAR NORMALLY OPEN PUSHBUTTON, MOMENTARY CONTACT UNLESS OTHERWISE NOTED NORMALLY CLOSED PUSHBUTTON, MOMENTARY CONTACT UNLESS OTHERWISE NOTED INDICATING LIGHT, X INDICATES LENS COLOR PUSH TO TEST INDICATING LIGHT, X INDICATES LENS COLOR LENS COLORS: R - RED G - GREEN B - BLUE Y - YELLOW W - WHITE A - AMBER ELECTRICAL MONITORING DEVICE TYPES: WHM - UTILITY WATT-HOUR METER PER UTILITY REQUIREMENTS AS - CURRENT SENSOR AM - AMP METER WM - WATT METER VS - VOLT SENSOR VM - VOLT METER CONTROL PANEL INTEGRAL OR PROVIDED WITH ASSOCIATED EQUIPMENT CONTROL PANEL WITH DISCONNECT SWITCH INTEGRAL OR PROVIDED WITH ASSOCIATED EQUIPMENT JUNCTION OR PULL BOX PANELBOARD (250V TO 600V) PANELBOARD (LESS THAN 250V) ELECTRICAL EQUIPMENT ENCLOSURE: SWITCHBOARD, MOTOR CONTROL CENTER, CONTROL PANEL, OR OTHER EQUIPMENT AS INDICATED CEILING/PENDANT-MOUNTED LED LUMINAIRE WALL-MOUNTED LED LUMINAIRE CEILING/PENDANT-MOUNTED LED FIXTURE WALL-MOUNTED LED FIXTURE CEILING/PENDANT-MOUNTED LED FIXTURE NORMAL/EMERGENCY WALL-MOUNTED LED FIXTURE NORMAL/EMERGENCY DOUBLE-FACED CEILING OR WALL-MOUNTED EXIT LIGHT; DIRECTIONAL ARROWS (IF REQUIRED) AS INDICATED ON PLANS SINGLE-FACED CEILING OR WALL-MOUNTED EXIT LIGHT; DIRECTIONAL ARROWS (IF REQUIRED) AS INDICATED ON PLANS AREA OR ROADWAY LIGHT - POLE-MOUNTED LIGHTING FIXTURE SUBSCRIPTS: X - INDICATES FIXTURE TYPE PER LIGHTING FIXTURE SCHEDULE Y - INDICATES CIRCUIT NUMBER FROM PANELBOARD Z - INDICATES CONTROLLING SWITCH (IF REQUIRED) EMERGENCY LIGHT FIXTURE, 2 ATTACHED HEADS AS SHOWN EMERGENCY LIGHT, REMOTE MOUNTED HEAD	5 PHOTOCELL TOGGLE SWITCH SUBSCRIPTS: X - INDICATES TYPE NONE - SINGLE POLE 3 - THREE-WAY 4 - FOUR-WAY HP - TOGGLE SWITCH, HORSEPOWER RATED K - KEY SWITCH TE - MANUAL MOTOR STARTER W/ THERMAL ELEMENT P - PILOT LIGHT L - LIGHTED HANDLE - INDICATES CIRCUIT TRANSFORMER CONTROL STATION HAND SWITCH SELECTOR SWITCH PUSHBUTTON INSTRUMENTATION/CONTROL DEVICE NETWORK SWITCH NETWORK SWITCH/DIMMER NETWORK SWITCH/OCCUPANCY SENSOR CEILING MOUNTED NETWORK OCCUPANCY SENSOR CEILING MOUNTED NETWORK DIMMING PHOTOCELL EMERGENCY STOP (E-STOP) SPECIAL-PURPOSE RECEPTACLE AS DEFINED ON PLANS PLUG-IN RECEPTACLE STRIP, QUANTITY AND SPACING OF RECEPTACLES AS NOTED OR SPECIFIED TELECOMMUNICATIONS OUTLET JUNCTION BOX, NUMBER OF PORTS SHOWN, RUN EQUAL NUMBER OF CAT 6 CABLES TO COMMUNICATIONS BACKBOARD FLOOR MOUNTED TELECOMMUNICATIONS OUTLET JUNCTION BOX QUAD-DUPLEX RECEPTACLE, TWO NEMA 5-20R UNDER COMMON COVER PLATE DUPLEX RECEPTACLE, NEMA 5-20R SIMPLEX RECEPTACLE, NEMA 5-20R SUBSCRIPTS: X - INDICATES TYPE GFCI - GROUND FAULT CIRCUIT INTERRUPTER WP - WEATHERPROOF COVER Y - INDICATES PANELBOARD AND CIRCUIT NUMBER CIRCUIT STUBBED OUT AND CAPPED CIRCUIT TURNING UP CIRCUIT TURNING DOWN HOME RUN TO PANEL, 2 #12, 1 #120 IN 3/4" UNLESS OTHERWISE NOTED CIRCUIT RUN BETWEEN DEVICES EXPOSED IN NON-ARCHITECTURALLY FINISHED AREAS, CONCEALED IN ARCHITECTURALLY FINISHED AREAS, CONDUIT AND CONDUCTOR SIZES SHALL BE THE SAME AS THE HOMERUN FOR THE CIRCUIT. CONDUIT RUN BETWEEN DEVICES CONCEALED IN NON-ARCHITECTURALLY FINISHED AREAS OR UNDER FLOOR SLAB, CONDUIT AND CONDUCTOR SIZES SHALL BE THE SAME AS THE HOMERUN FOR THE CIRCUIT. FLEX CONDUIT DUCTBANK 6 CIRCUIT CONTINUATION CONDUIT STUBBED OUT AND CAPPED CONDUIT TAG OR CIRCUIT NUMBER - WIRE AND CONDUIT SIZE AS SPECIFIED IN CABLE, CONDUIT AND CABLE TRAY SCHEDULE GROUND CABLE GROUND ROD EXOTHERMIC WELD GROUND CONNECTION THERMOSTAT FIRE ALARM CONTROL PANEL FIRE ALARM MANUAL PULL STATION FIRE ALARM CONTROL RELAY FIRE ALARM CONTACT, FLOW SWITCH FIRE ALARM CONTACT, TAMPER SWITCH FIRE ALARM CONTACT, PRESSURE SWITCH SMOKE AND DUCT DETECTOR SUBSCRIPTS: I - IONIZATION TYPE P - PHOTOELECTRIC TYPE HEAT DETECTOR R/C - RATE COMPENSATION R/F - COMBINATION RATE OF RISE AND FIXED TEMP R - RATE OF RISE F - FIXED ALARM BELL ALARM HORN ALARM FLASHING LIGHT ALARM BELL AND FLASHING LIGHT COMBINATION UNIT ALARM HORN AND FLASHING LIGHT COMBINATION UNIT SUBSCRIPTS: NONE - GENERAL ALARM DEVICE F - FIRE ALARM DEVICE CCTV CAMERA 7 8
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100% 08/20/2023 DESIGN SUBMITTAL
ISSUE DATE DESCRIPTION

PROJECT MANAGER F. SHARIF
CHECKED BY G. BONTA
DESIGNED BY A. NATHAN
DRAWN BY Z. CHASE-MONROE
PROJECT NUMBER 10264763



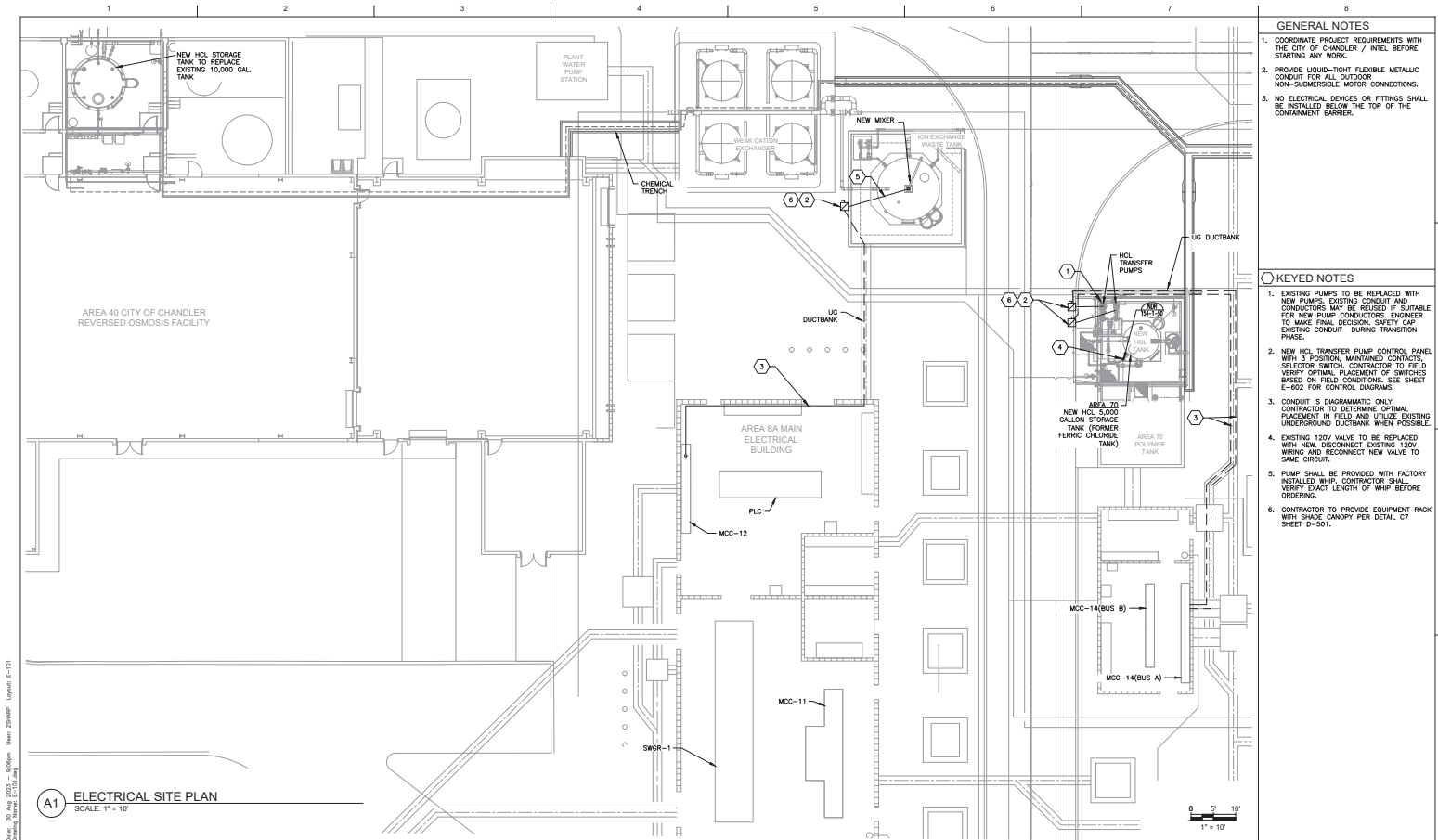
EXPIRES 05/31/2025



OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

ELECTRICAL NOTES, LEGEND, AND SYMBOLS

C.O.D. LOG NO. 000000000000
DRAWING E-001
SHEET 14 of 22



Drawn: 30 Aug 2023, 11:50am, User: 2294989, Legend: E-101
Drawing Name: E-101.dwg



100%	08/29/2023	DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	F. SHARIF
CHECKED BY	G. BONITA
DESIGNED BY	A. NATHAN
DRAWN BY	Z. CHASE-MONROIS
PROJECT NUMBER	10264763



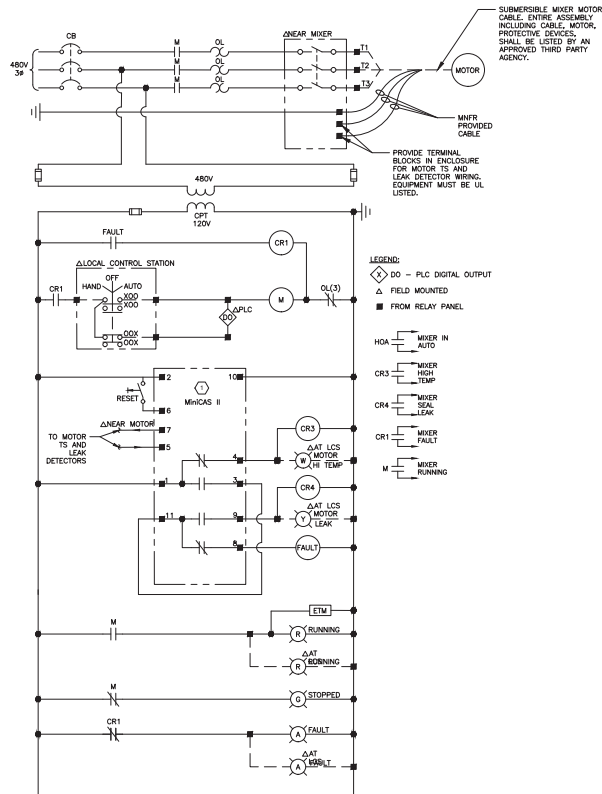
OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

POWER AND GROUNDING PLAN

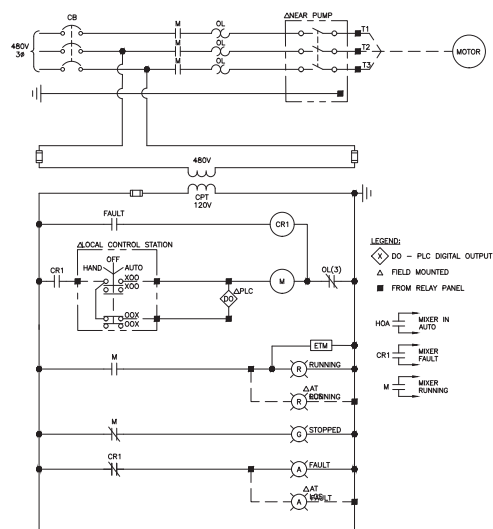
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DRAWING
E-101

SHEET
15 of 22



1 MIXER CONTROL SCHEMATIC
SCALE: NONE



2 HCL TRANSFER PUMPS NO.1 AND NO.2 CONTROL SCHEMATIC
SCALE: NONE

GENERAL NOTES

- COORDINATE PROJECT REQUIREMENTS WITH THE CITY OF CHANDLER / INTEL BEFORE STARTING ANY WORK.
- PROVIDE LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FOR ALL OUTDOOR NON-SUBMERSIBLE MOTOR CONNECTIONS.

KEYED NOTES

- SCHEMATIC SHOWN USING FLYCOT "Minicog II" MOTOR TEMPERATURE AND LEAK DETECTION SYSTEM. IF DIFFERENT SYSTEM SUPPLIED, CONTRACTOR SHALL COORDINATE WITH MCC SUPPLIER TO MODIFY SCHEMATIC AND WIRING AS REQUIRED.

LEGEND



100%	08/26/2023	DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	F. SHARIF
CHECKED BY	G. BOWEN
DESIGNED BY	A. NATHAN
DRAWN BY	Z. CHASE-MORRIS
PROJECT NUMBER	10264763



**OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS**

ELECTRICAL CONTROL SCHEMATIC DIAGRAMS

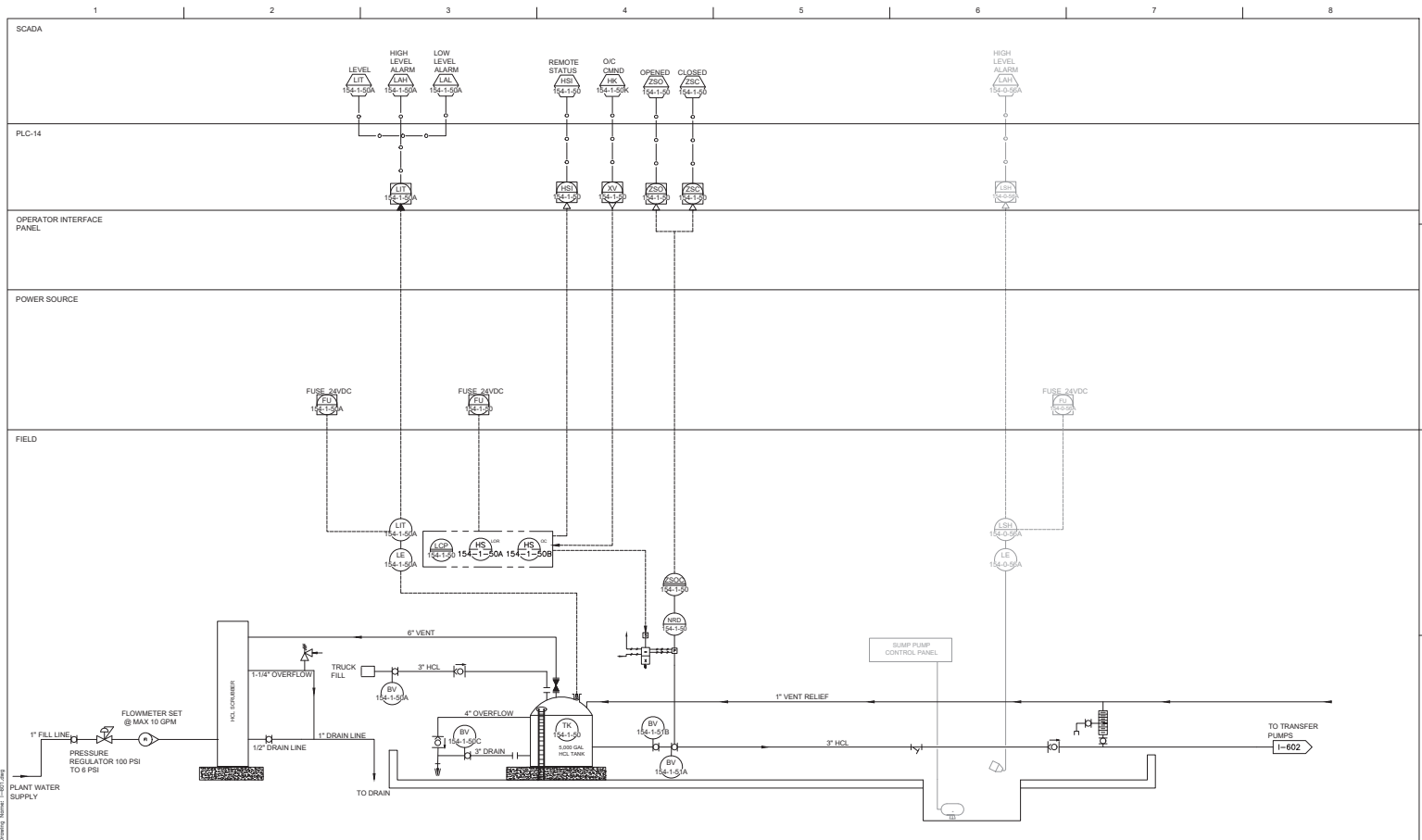
	DRAWING E-602	SHEET 17 of 22
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C.O.C LOG NO. #00000000000000000000

Sheet: 30 July 2023 - 10:00am User: jgallardo Legend: 1-001
Drawing Number: 1-001.dwg

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PRIMARY ELEMENT SYMBOLOGY	INSTRUMENT SYMBOLOGY	INSTRUMENT IDENTIFICATION LETTERS		CONTROL SWITCH NOTATION ABBREVIATIONS		MISCELLANEOUS SYMBOLOGY																																																																																																																																																																																																																					
 ORIFICE PLATE	 LOCALLY MOUNTED FIELD INSTRUMENTATION	<table><tr><th colspan="2">FIRST LETTER</th><th colspan="2">SUCCEEDING LETTERS</th></tr><tr><th>MEASURED OR INITIATING VARIABLE</th><th>MODIFIER</th><th>READOUT OR PASSIVE FUNCTION</th><th>OUTPUT FUNCTION</th><th>MODIFIER</th><th></th></tr><tr><td>A ANALYSIS</td><td></td><td>ALARM</td><td></td><td></td><td></td></tr><tr><td>B BURNER, COMBUSTION</td><td></td><td>USER'S CHOICE</td><td>USER'S CHOICE</td><td>USER'S CHOICE</td><td></td></tr><tr><td>C USER'S CHOICE</td><td></td><td>USER'S CHOICE</td><td>CONTROL</td><td>CLOSED</td><td></td></tr><tr><td>D USER'S CHOICE</td><td>DIFFERENTIAL</td><td></td><td></td><td></td><td></td></tr><tr><td>E VOLTAGE</td><td></td><td>SENSOR (PRIMARY ELEMENT)</td><td></td><td></td><td></td></tr><tr><td>F FLOW RATE</td><td>RATIO (FRACTION)</td><td></td><td></td><td></td><td></td></tr><tr><td>G USER'S CHOICE</td><td></td><td>GLASS, VIEWING DEVICE</td><td></td><td></td><td></td></tr><tr><td>H HAND</td><td></td><td></td><td></td><td>HIGH</td><td></td></tr><tr><td>I CURRENT (ELECTRICAL)</td><td></td><td>INDICATE</td><td></td><td></td><td></td></tr><tr><td>J POWER</td><td>SCAN</td><td></td><td></td><td></td><td></td></tr><tr><td>K TIME SCHEDULE</td><td>TIME, RATE OF CHANGE</td><td></td><td>CONTROL STATION</td><td></td><td></td></tr><tr><td>L LEVEL</td><td></td><td></td><td>LIGHT</td><td></td><td>LOW</td></tr><tr><td>M USER'S CHOICE</td><td>MOMENTARY</td><td></td><td></td><td>MIDDLE, INTERMEDIATE</td><td></td></tr><tr><td>N USER'S CHOICE</td><td></td><td>USER'S CHOICE</td><td>USER'S CHOICE</td><td>USER'S CHOICE</td><td></td></tr><tr><td>O USER'S CHOICE</td><td></td><td>ORIFICE, RESTRICTION</td><td></td><td></td><td></td></tr><tr><td>P PRESSURE, VACUUM</td><td></td><td>POINT (TEST) CONNECTION</td><td></td><td></td><td></td></tr><tr><td>Q QUANTITY</td><td>INTEGRATE, TOTALIZE</td><td></td><td></td><td></td><td></td></tr><tr><td>R RADIATION</td><td></td><td>RECORD</td><td></td><td></td><td></td></tr><tr><td>S SPEED, FREQUENCY</td><td>SAFETY</td><td></td><td>SWITCH</td><td></td><td></td></tr><tr><td>T TEMPERATURE</td><td></td><td></td><td>TRANSMIT</td><td></td><td></td></tr><tr><td>U UNCLASSIFIED</td><td></td><td>MULTIFUNCTION</td><td>MULTIFUNCTION</td><td></td><td></td></tr><tr><td>V VIBRATION, MECH. ANALYSIS</td><td></td><td>VALVE, DAMPER, LOUVER</td><td></td><td></td><td></td></tr><tr><td>W WEIGHT, FORCE</td><td></td><td>WELL</td><td></td><td></td><td></td></tr><tr><td>X UNCLASSIFIED</td><td>X AXIS</td><td>UNCLASSIFIED</td><td>UNCLASSIFIED</td><td>UNCLASSIFIED</td><td></td></tr><tr><td>Y EVENT, STATE OR PRESENCE</td><td>Y AXIS</td><td>RELAY, COMPUTE, CONVERT</td><td></td><td></td><td></td></tr><tr><td>Z POSITION, DIMENSION</td><td>Z AXIS</td><td>DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT</td><td></td><td></td><td></td></tr></table>		FIRST LETTER		SUCCEEDING LETTERS		MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER		A ANALYSIS		ALARM				B BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE		C USER'S CHOICE		USER'S CHOICE	CONTROL	CLOSED		D USER'S CHOICE	DIFFERENTIAL					E VOLTAGE		SENSOR (PRIMARY ELEMENT)				F FLOW RATE	RATIO (FRACTION)					G USER'S CHOICE		GLASS, VIEWING DEVICE				H HAND				HIGH		I CURRENT (ELECTRICAL)		INDICATE				J POWER	SCAN					K TIME SCHEDULE	TIME, RATE OF CHANGE		CONTROL STATION			L LEVEL			LIGHT		LOW	M USER'S CHOICE	MOMENTARY			MIDDLE, INTERMEDIATE		N USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE		O USER'S CHOICE		ORIFICE, RESTRICTION				P PRESSURE, VACUUM		POINT (TEST) CONNECTION				Q QUANTITY	INTEGRATE, TOTALIZE					R RADIATION		RECORD				S SPEED, FREQUENCY	SAFETY		SWITCH			T TEMPERATURE			TRANSMIT			U UNCLASSIFIED		MULTIFUNCTION	MULTIFUNCTION			V VIBRATION, MECH. 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100%	08/29/2023	DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	F. SHARIF
CHECKED BY	XX
DESIGNED BY	XX
DRAWN BY	XX
PROJECT NUMBER	10264703



OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

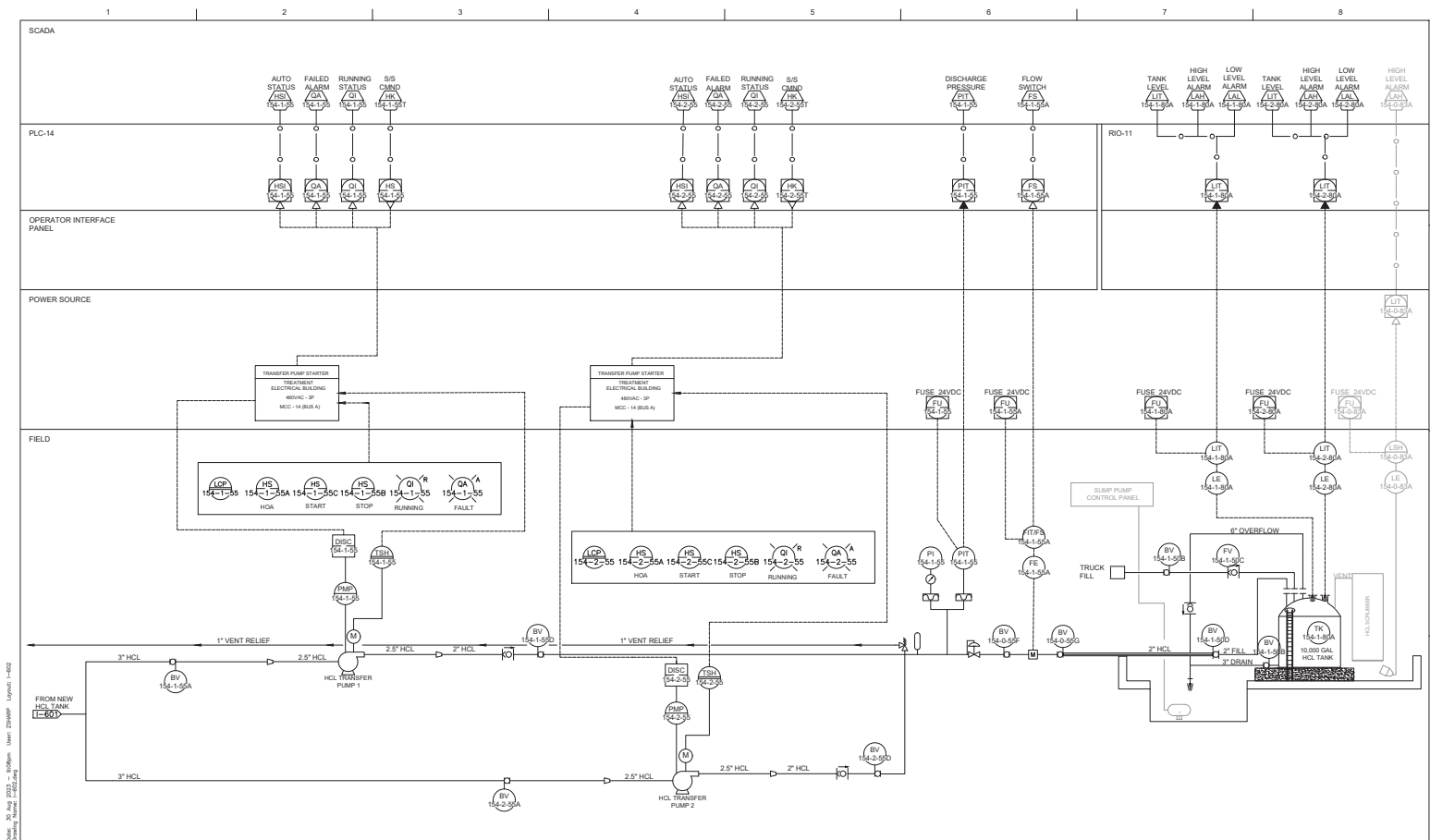
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19 of 22



100%	06/29/2023	DESIGN SUBMITTAL
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DESIGNED BY	XX
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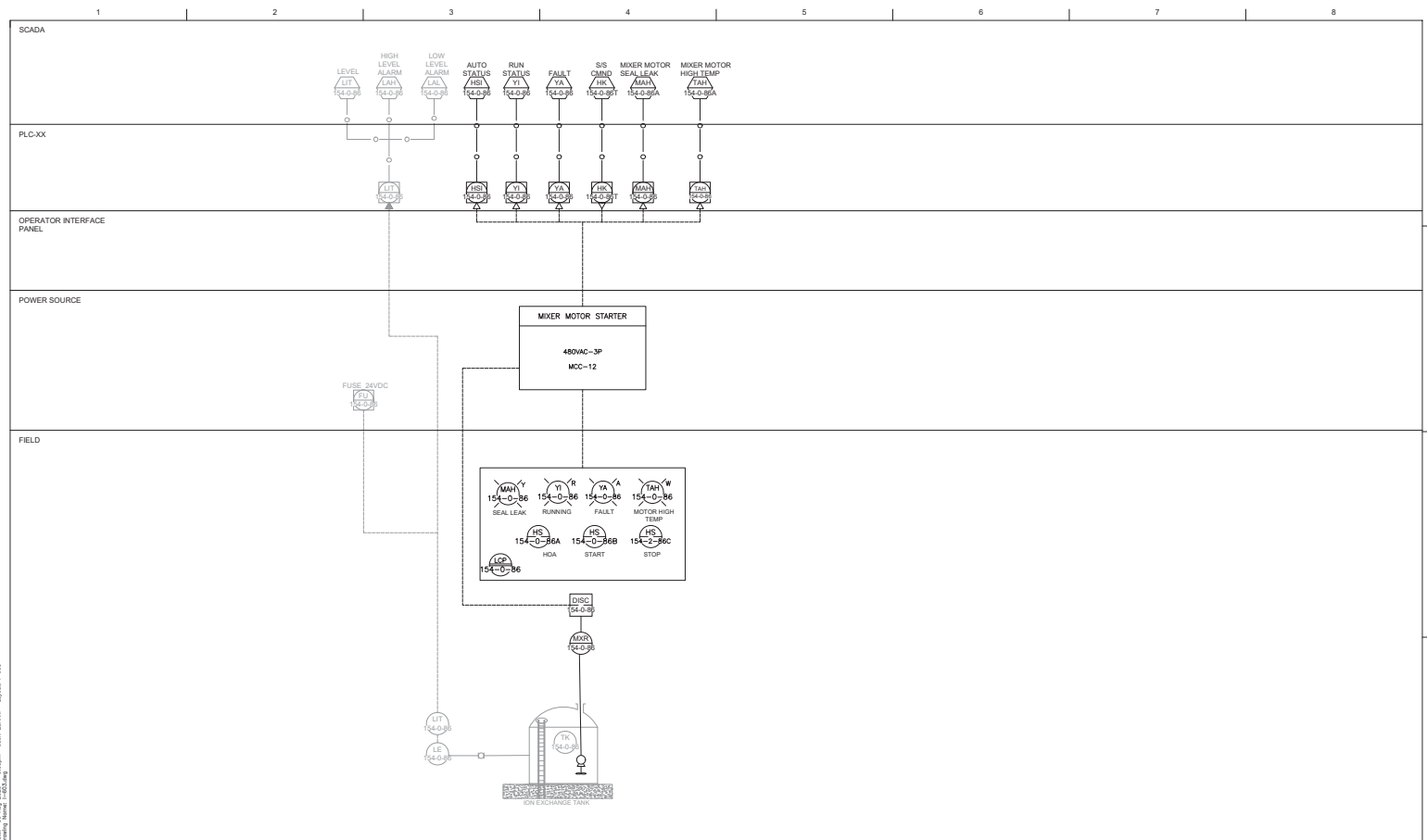
OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

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INSTRUMENTATION DIAGRAM

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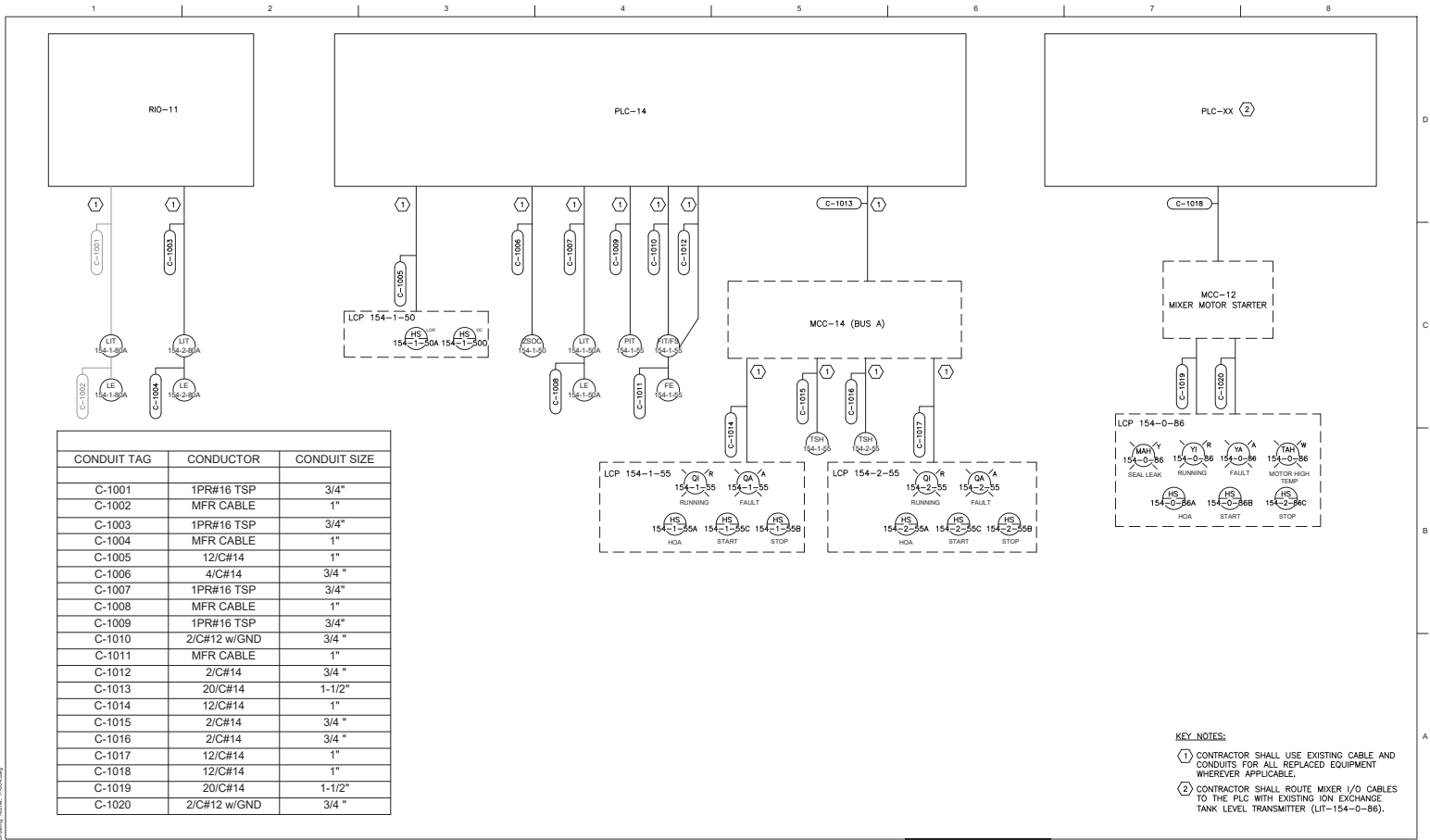
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PROJECT MANAGER	F. SHARIF
CHECKED BY	XX
DESIGNED BY	XX
DRAWN BY	XX
PROJECT NUMBER	10364783



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100%	08/26/2023	DESIGN SUBMITTAL
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	F. SHARIF
CHECKED BY	XX
DESIGNED BY	XX
DRAWN BY	XX
PROJECT NUMBER	10264703



OCOTILLO BRINE REDUCTION FACILITY
HCL STORAGE AND WEAK ACID CONTAINMENT
MIXING IMPROVEMENTS

I&C ONE LINE DIAGRAM



DRAWING
1-604

SHEET
22 of 22

EXHIBIT C

PERFORMANCE BOND

ARIZONA STATUTORY PERFORMANCE BOND
PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS THAT:

(hereinafter "Principal"), and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____ (hereinafter "Obligee") in the amount of _____ (Dollars) (\$_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20__ for construction of **OCOTILLO BRINE REDUCTION FACILITY HYDROCHLORIC ACID STORAGE AND WEAK ACID CONTAINMENT MIXING IMPROVEMENTS, WW2001.403** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all the undertakings, covenants, terms, conditions and agreements of the contract during the original term of the contract and any extension of the contract, with or without notice of the Surety, and during the life of any guaranty required under the contract, and also performs and fulfills all the undertakings, covenants, terms, conditions, and agreements of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Contract.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

AGENT OF RECORD

PRINCIPAL

SEAL

By _____

SURETY

SEAL

AGENT ADDRESS

C-1

EXHIBIT D

PAYMENT BOND

ARIZONA STATUTORY PAYMENT BOND
PURSUANT TO TITLES 28, 34, AND 41, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS THAT: _____

(hereinafter "Principal"), as Principal, and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____ (hereinafter "Obligee") in the amount of _____ (Dollars) (\$ _____), for the payment whereof, the Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20__ for construction of **OCOTILLO BRINE REDUCTION FACILITY HYDROCHLORIC ACID STORAGE AND WEAK ACID CONTAINMENT MIXING IMPROVEMENTS, WW2001.403** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all moneys due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in said contract, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Contract.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

AGENT OF RECORD

PRINCIPAL SEAL

By _____

SURETY SEAL

AGENT ADDRESS

EXHIBIT E

CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS

_____, Arizona

Date _____

Project Name: **OCOTILLO BRINE REDUCTION FACILITY HYDROCHLORIC ACID STORAGE AND WEAK ACID CONTAINMENT MIXING IMPROVEMENTS**

Project No.: **WW2001.403**

To the City of Chandler, Arizona

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the consideration of \$_____, as set out in the final pay estimate, as full and complete payment under the terms of the contract, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Chandler against any and all liens, claims or liens, suits, actions, damages, charges and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performances and materials furnished for the performance of said installation.

Signed and dated at _____, this _____ day of _____ 20_____.

CONTRACTOR

By _____

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

The foregoing instrument was subscribed and sworn to before me this _____ day of _____ 20 _____.

Notary Public

My Commission Expires

E-1

EXHIBIT F

CERTIFICATE OF COMPLETION

Project: **OCOTILLO BRINE REDUCTION FACILITY HYDROCHLORIC ACID STORAGE AND WEAK ACID CONTAINMENT MIXING IMPROVEMENTS**
Project No.: **WW2001.403**

(TO BE COMPLETED BY CONTRACTOR)

I HEREBY CERTIFY THAT ALL GOODS AND/OR SERVICES REQUIRED BY CITY OF CHANDLER PROJECT NO. **WW2001.403** HAVE BEEN DELIVERED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND BID SPECIFICATIONS AND ALL ACTIVITIES REQUIRED BY THE CONTRACTOR UNDER THE CONTRACT HAVE BEEN COMPLETED AS OF _____.

(Date)

FIRM NAME: _____

PRINCIPAL: _____

(Name)

(Signature)

(Title) DATE: _____

CERTIFIED BY ENGINEER/CONSULTANT (IF APPLICABLE):

(Signature) DATE: _____

(Firm Name)

PROJECT ACCEPTED BY USER DEPARTMENT

(Signature) DATE: _____

(Dept. /Div.)

Date of Final Walk-Through

Date As-Built Received

City As-Built Number