

Sponsored by: Garrett

**CITY OF MARATHON, FLORIDA
RESOLUTION 2025-24**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, AWARDED THE CONTRACT FOR THE AREA 4 CHEMICAL STORAGE TANK UPGRADE TO REYNOLDS CONSTRUCTION, LLC IN AN AMOUNT NOT TO EXCEED \$151,868.00; AUTHORIZING THE CITY MANAGER TO EXECUTE THE CONTRACT AND EXPENDING BUDGETED FUNDS ON BEHALF OF THE CITY; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City requires an upgrade to the chemical storage tanks at the Area 4 WWTP, and

WHEREAS, Reynolds Construction, LLC has a continuing services agreement with the City, and,

WHEREAS, staff recommends this contract for approval.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THAT:


Section 1. The above recitals are true and correct and incorporated herein.

Section 2. The City Council hereby authorizes the City Manager to enter into an agreement and expend budgeted funds on behalf of the City to Reynolds Construction, LLC in the amount not to exceed \$151,868.00. Work to be performed described in Exhibits A, B & C

Section 3. This resolution shall take effect immediately upon its adoption.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THIS 25th DAY OF MARCH 2025.

THE CITY OF MARATHON, FLORIDA



Mayor Lynn Landry

AYES: Still, Matlock, Del Gaizo, Smith, Landry
NOES: None
ABSENT: None
ABSTAIN: None

ATTEST:

Hilary Palmer
~~Diane Clavier, City Clerk~~ Deputy Clerk

(City Seal)

**APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE
AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:**

Steve Williams
Steve Williams, City Attorney

February 21, 2025

Mr. Dan Saus
Utilities Director
City of Marathon
9805 Overseas Hwy
Marathon, FL 33050

RE: WWTP 4 Chemical Tank Replacement

Dear Mr. Saus,

Reynolds Construction (RC) appreciates the opportunity to assemble a proposal to replace the existing chemical tanks for Area 4. The scope of work is detailed below.

Based on the scope of work provided by WEC, and input from Nearshore Electric and Integrated Controls, Reynolds proposes to complete the project for the value of \$151,868.00 (one hundred fifty-one thousand eight hundred sixty-eight dollars and zero cents).

Reynolds offers to perform the following scope of work inclusive of, but not limited to:

- Set up temporary chemical feed tanks to continue normal plant operations.
- Remove and dispose existing chemical tanks.
- Demolish existing tanks pads.
- Form, pour, and coat new 4-inch chemical tank pad.
- Provide all PVC piping and supports to connect chemical lines to temporary and new tanks.
- Install new poly processing tanks with level transmitters, hurricane tie downs, and necessary fittings.
- Install a gutter system on the east wall of the Area 4 office building.
- Electrical and integration.
- All necessary electrical wiring, conduit, and terminations to connect chemical tanks to the new control panels.

Time:

- The contract completion is expected to be approximately eight (8) weeks from the date of delivery of the Poly Processing Tanks.
- This quote is valid for thirty (30) days. Reynolds will accept an email of approval while awaiting a purchase order.

Reynolds appreciates the opportunity to propose on this project. Reynolds shall immediately proceed.

Sincerely,

Reynolds Construction, LLC,



Luke Johnson,
Project Engineer



Nearshore Electric, Inc.

State Certified Electrical Contractor

#EC13001186

Scope of Work

Job #250205

Confidential

Contractor: Reynolds Construction, LLC

Phone: (317) 832-5987 ~ **Email:** joshua.vondersaar@reynoldscon.com

Project: Area 4 Chemical Tank Replacement

Project Address: Area 4 Overseas Highway
Marathon, FL 33050

February 12, 2025

To all concerned,

We are pleased to offer you our proposal for the electrical work required at Area 4 WWTP in Marathon, Florida. All work performed by Nearshore Electric, Inc. shall conform to current codes, regulations, and project specifications. All work performed by Nearshore Electric, Inc. shall be warranted for a period of one year. The following breakdown describes the items and services that Nearshore Electric, Inc. shall provide as well as any exclusion from our scope of work.

INCLUDED IN BID:

- ◆ Provide and install conduit from existing chemical feed control panel to chemical tank pad
- ◆ Provide and install junction boxes at chemical storage tank pad
- ◆ Provide and install conduit from junction boxes to ultra-sonic level transmitters provided by others
- ◆ Provide and install analog cable from existing chemical feed control panel to 4 ultra-sonic level transmitters
- ◆ Terminate analog cables at existing chemical feed control panel and level transmitters
- ◆ Workers Comp/General Liability Insurance
- ◆ Taxes
- ◆ Warranty

EXCLUDED FROM BID:

- ◆ Permit fees
- ◆ Davis Bacon Wages/Buy American
- ◆ PLC programming/alterations/repairs
- ◆ SCADA programming/alterations
- ◆ Ultra-sonic level transmitters
- ◆ Sod restoration
- ◆ Asphalt restoration
- ◆ Concrete restoration
- ◆ Any Scope of work not clearly shown on drawings or within the bid documents and/or specifications is not included in this proposal.

We propose to furnish material and labor, complete in accordance with the above specifications, for the lump sum of:
Twenty-Two Thousand Eight Hundred Seventeen Dollars and No Cents \$22,817.00

Authorized Signature _____

Jeffery L. Kirk - President

Date 2/12/2025

Customer

Reynolds Construction LLC
Marathon FL 33050

ESTIMATE

Subject: Reynolds Construction - Marathon WTP
Quote Number: 939
Issue Date: Feb 11, 2025
Valid Until: Mar 13, 2025

Product Name

Description

Poly Processing Chemical Storage Tank

SODIUM HYPOCHLORITE

Tank System: 2000-Vert _ Sodium
Consisting of:
[Primary Tank] Qty: 1 2000 Vert 1.90 Spg Xlpe Nat / OR1000 Nat
[Lid/Manway] Qty: 1 Cvr Asmly 24" Safe-surge Pe
[Fill Line] Qty: 1 Drop Pipe 2" Ext Pvc
[Overflow] Qty: 1 Bhf Asmly 3" Sxt H'ward Pvc/epdm
[Clear Site Gauge] Qty: 1 Level Gage Sml Std Type Pvc W/2 Valve & Drain w/epdm
[Suction Line] Qty: 1 B.O.S.S. Fitting 1" Asmly Pe/pvc/titan/epdm
[Drain] Qty: 1 B.O.S.S. Fitting 2" Asmly Pe/pvc/titan/epdm
[Level Connection] Qty: 1 Ubd Ftg 2" Bhf Style Pvc/epdm
[Restraint System] Qty: 1 Rest Galv 2000 Vert Std Outdoor VA
[Vent Connection] Qty: 1 Bhf Asmly 4" Sxt H'ward Pvc/epdm

Poly Processing Chemical Storage Tank

SODIUM HYDROXIDE

Tank System: 805-Vert _
Consisting of:
[Primary Tank] Qty: 1 805 Vert 1.90 Spg Xlpe Nat
[Lid/Manway] Qty: 1 Cap 17" Buttress Thread Blk Pe
[Fill Line] Qty: 1 Drop Pipe 2" Ext Pvc
[Overflow] Qty: 1 Bhf Asmly 3" Sxt H'ward Pvc/epdm
[Clear Site Gauge] Qty: 1 Level Gage Sml Std Type Pvc W/2 Valve & Drain w/epdm
[Suction] Qty: 1 Bltd Flg Ftg 1" Thrd Pvc/ss/epdm
[Drain] Qty: 1 Bltd Flg Ftg 2" Thrd Pvc/ss/epdm
[Level Connection] Qty: 1 Ubd Ftg 2" Bhf Style Pvc/epdm
[Restraint System] Qty: 1 RESTRAINT MLU/WVA SEISMIC/GLV/At Grade/<130MPH/Outdoors
[Vent Connection] Qty: 1 Bhf Asmly 4" Sxt H'ward Pvc/epdm

Product Name	Description
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Poly Processing Chemical Storage Tank

GLYCEROL

Tank System: 805-Vert _

Consisting of:

[Primary Tank] Qty: 1 805 Vert 1.90 Spg Xlpe Nat

[Lid/Manway] Qty: 1 Cap 17" Buttress Thread Blk Pe

[Fill Line] Qty: 1 Drop Pipe 2" Ext Pvc

[Overflow] Qty: 1 Bhf Asmly 3" Sxt H'ward Pvc/epdm

[Suction] Qty: 1 Bltd Flg Ftg 1" Thrd Pvc/ss/epdm

[Drain] Qty: 1 Bltd Flg Ftg 2" Thrd Pvc/ss/epdm

[Level Connection] Qty: 1 Ubd Ftg 2" Bhf Style Pvc/epdm

[Vent Connection] Qty: 1 Bhf Asmly 4" Sxt H'ward Pvc/epdm

[Restraint System] Qty: 1 RESTRAINT MLU/WVA SEISMIC/GLV/At Grade/<130MPH/Outdoors

[Clear Site Gauge] Qty: 1 Level Gage Sml Std Type Pvc W/2 Valve & Drain w/epdm

Poly Processing Chemical Storage Tank

ALUM

Tank System: 805-Vert _

Consisting of:

[Primary Tank] Qty: 1 805 Vert 1.90 Spg Xlpe Nat

[Lid/Manway] Qty: 1 Cap 17" Buttress Thread Blk Pe

[Fill Line] Qty: 1 Drop Pipe 2" Ext Pvc

[Overflow Connection] Qty: 1 Bhf Asmly 3" Sxt H'ward Pvc/epdm

[Suction] Qty: 1 Bltd Flg Ftg 1" Thrd Pvc/ss/epdm

[Drain] Qty: 1 Bltd Flg Ftg 2" Thrd Pvc/ss/epdm

[Level Connection] Qty: 1 Ubd Ftg 2" Bhf Style Pvc/epdm

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[Vent Connection] Qty: 1 Bhf Asmly 4" Sxt H'ward Pvc/epdm

[Clear Site Gauge] Qty: 1 Level Gage Sml Std Type Pvc W/2 Valve & Drain w/epdm

Optiwave 1540

QNTY 4 - KROHNE Loop powered 80 gHZ Free space Blue tooth compatible radar level device.

Icon TVL Display

QNTY 4 - Controller + NEMA 4X Enclosure

Input : 4-20 mA

LED Display-Adjustable Light Intensity

5A Relay Output + 4-20mA Output

Power Supply Output: 24V DC to Sensor

Signal Peak Value Detection

3 Wire Cord Grips Included

Shipping and handling

Truckline delivery to jobsite.

Note:

Poly Processing Company offers reliable, robust tank systems for the safe storage of high performance chemicals in critical applications. Each storage system is designed specifically for the chemical it will contain. Our product offering of cross-linked polyethylene tanks offer a margin of safety that meets or exceeds ASTM standards.

I will be contacting you soon to discuss this project and answer any questions you may have. Please contact me for further assistance. Again, thank you for the opportunity.

Lead-time is 15 working days or less upon receipt of an approved PO and signed approval drawing.

Sales Tax

This quote is subject to applicable taxes.

Subtotal w/o Tax	\$ 46,297.86
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Proposal #02165-46-00

February 11, 2025

Luke Johnson
Reynolds Construction, LLC
via email: luke.johnson@reynoldscon.com

Re: Marathon, FL WWTP Service Area 4 – Chemical Tank Replacement

Luke:

This proposal is based on your email dated February 11, 2025, Area 4 Chemical Tank Replacement scope of work and plan sheets dated January 29, 2025. Our proposal is as follows:

SA 4 - Chemical Tanks Level Verification, Alarms, and Trending:

- Coordination with the Chemical Feed System Local Control Panel provider to verify proper scaling, reading, and display of the levels for the following chemical feed tanks:
 - Sodium Hypochlorite Tank
 - Sodium Hydroxide Tank
 - Glycerin Tank
 - Aluminum Sulfate Tank
- Update SCADA HMI screens to add low-level alarms and historical trending for each tank level.
- All SBR PLC programming and SCADA HMI modifications will be deployed remotely via a remote connection to the SCADA system PC.

By others:

Unless specifically called out as being supplied as a part of this proposal, the following items are specifically excluded:

- Chemical feed systems, including control panels, all associated instrumentation, motor starters, variable frequency drives, auxiliary contacts, local disconnect switches, junction boxes, etc.
- Incoming power, field wiring and termination of field wiring.
- Any kind of storage, installation, tubing, mounting bolts.
- Field communication cables/devices, signal converters or boosters, ground rods.

On-Site Services:

On-Site services are not included in our scope of supply but are available at additional cost considerations.

**15707 South Mahaffie Street
Olathe, Kansas 66062
(913)782-9600**

Delivery:

Please allow up to six (6) weeks for the development of the updated SCADA HMI screens. ICI remote access service will be coordinated with Reynolds Construction for the date and time of remote access support for verifying and testing the chemical tanks level signals.

Terms:

- Taxes of any kind, including sales tax and export duties are not included in this proposal.
- This proposal is subject to acceptance by you within thirty (30) days of this date.
- Delivery of updated PLC/HMI application and remote support services - 100%, net 30 days

Respectfully,

A handwritten signature in black ink that reads "David Cunningham". The signature is fluid and cursive, with the first name "David" being more prominent than the last name "Cunningham".

David Cunningham
dcunningham@icicontrols.com

From: Damini Ettam <dettam@weilerengineering.org>
Sent: Tuesday, February 18, 2025 2:29 PM
To: Luke Johnson <Luke.Johnson@reynoldscon.com>
Subject: Re: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

WARNING: This email originated outside of Reynolds Construction from dettam@weilerengineering.org. DO NOT CLICK LINKS OR ATTACHMENTS UNLESS YOU RECOGNIZE THE SENDER AND KNOW THE CONTENT IS SAFE.

Hello Luke, Please see the below responses to Questions.

Do you have a list of submittals you would like from Reynolds?

Response: All products as usual.

1. Piping & fittings
2. Level sensors
3. Clear view
4. Concrete
5. Hardware
6. Level Sensor integration
7. etc..

I'd imagine we'll need a construction plan submittal and the new tank submittals. Is there anything else you want to see?

Response: I am not sure exactly what you are referring to by "construction plan" do you mean a schedule? If so, then yes.

For the new tanks, the ones Reynolds installed at WWTP 3 & 7 had ladders with them. Do you want these tanks to have those ladders as well?

Response: No ladders needed

Also, will you need professional surveying and as-builts upon the completion of this project?

Response: No survey as built required. However, Reynolds will need to provide as-builts of work in CAD, a CAD file will be provided. Specifically which chemicals are in which tank and which chemical piping goes where etc..

Additional Clarification on Scope: The City wants clear view sight glass (a clear piece of pipe with on the side of the tanks to see level inside NOT the counterweight floats provided at Area 3, and 7. Additionally the City request that a clear view be installed on the tanks at area 3 and 7 as the counterweight level system is not very reliable. Please include in your price the cost of installing the clear view sight glasses at Areas 3 and 7 as well.

Also, I want to make sure that you do a clear view sight glasses instead of the counterweight levels.

Thank you.

Damini Ettam

Design Engineer

dettam@weilerengineering.org

6805 Overseas Hwy,

Marathon, FL 33050

WEILER ENGINEERING CORPORATION

WEC

An Apex Company

From: Damini Ettam <dettam@weilerengineering.org>

Sent: Tuesday, February 18, 2025 9:13 AM

To: Luke Johnson <Luke.Johnson@reynoldscon.com>

Subject: Re: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

Hello, Good morning, Luke. I will find out and let you know by the end of the day.

Thank you

Damini Ettam

Design Engineer

dettam@weilerengineering.org

6805 Overseas Hwy,
Marathon, FL 33050



From: Luke Johnson <Luke.Johnson@reynoldscon.com>
Sent: Tuesday, February 18, 2025 9:11 AM
To: Damini Ettam <dettam@weilerengineering.org>
Subject: RE: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

Good Morning Damini,

Do you have an update on the below? The sooner I can get some answers back the sooner I can wrap up the proposal.

Thank you,

LUKE JOHNSON

Project Engineer

Reynolds Construction, LLC

From: Luke Johnson
Sent: Thursday, February 13, 2025 2:07 PM
To: Damini Ettam <dettam@weilerengineering.org>
Subject: RE: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

Good afternoon Damini,

I'm almost done with RFQ. I do have a few questions for you.

Do you have a list of submittals you would like from Reynolds?

I'd imagine we'll need a construction plan submittal and the new tank submittals. Is there anything else you want to see?

For the new tanks, the ones Reynolds installed at WWTP 3 & 7 had ladders with them. Do you want these tanks to have those ladders as well?

Also, will you need professional surveying and as-builts upon the completion of this project?

Thank you,

LUKE JOHNSON

Project Engineer

Reynolds Construction, LLC

From: Damini Ettam <dettam@weilerengineering.org>

Sent: Monday, February 10, 2025 8:43 AM

To: Luke Johnson <Luke.Johnson@reynoldscon.com>

Subject: Re: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

WARNING: This email originated outside of Reynolds Construction from dettam@weilerengineering.org. DO NOT CLICK LINKS OR ATTACHMENTS UNLESS YOU RECOGNIZE THE SENDER AND KNOW THE CONTENT IS SAFE.

Great, thanks for the update.

Damini Ettam

Design Engineer

dettam@weilerengineering.org

6805 Overseas Hwy,

Marathon, FL 33050



From: Luke Johnson <Luke.Johnson@reynoldscon.com>

Sent: Friday, February 7, 2025 3:25 PM

To: Damini Ettam <dettam@weilerengineering.org>

Subject: RE: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

Good Afternoon,

Wanted to let you know that we expect to have a final quote for you hopefully by next Friday, based on conversations with Poly Processing.

Thank you,

LUKE JOHNSON

Project Engineer

Reynolds Construction, LLC

From: Damini Ettam <dettam@weilerengineering.org>
Sent: Tuesday, February 4, 2025 9:02 AM
To: Luke Johnson <Luke.Johnson@reynoldscon.com>
Subject: Re: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

WARNING: This email originated outside of Reynolds Construction from dettam@weilerengineering.org. DO NOT CLICK LINKS OR ATTACHMENTS UNLESS YOU RECOGNIZE THE SENDER AND KNOW THE CONTENT IS SAFE.

Great, thanks for the update.

Damini Ettam

Design Engineer

dettam@weilerengineering.org

6805 Overseas Hwy,

Marathon, FL 33050



From: Luke Johnson <Luke.Johnson@reynoldscon.com>
Sent: Monday, February 3, 2025 8:31 PM
To: Damini Ettam <dettam@weilerengineering.org>
Subject: RE: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

Hi Damini,

Everything is going fine for now. I'm waiting to hear back from the tank supplier from pricing.

I will let you know if I/we have any further questions.

Thank you,

LUKE JOHNSON

Project Engineer

Reynolds Construction, LLC

From: Damini Ettam <dettam@weilerengineering.org>

Sent: Monday, February 3, 2025 4:06 PM

To: Luke Johnson <Luke.Johnson@reynoldscon.com>

Subject: Re: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

You don't often get email from dettam@weilerengineering.org. [Learn why this is important](#)

WARNING: This email originated outside of Reynolds Construction from dettam@weilerengineering.org. DO NOT CLICK LINKS OR ATTACHMENTS UNLESS YOU RECOGNIZE THE SENDER AND KNOW THE CONTENT IS SAFE.

Hello Luke, I hope you're doing well. I wanted to follow up on the pricing details.

Please let me know if you have any updates or if you need any additional information from our end to move forward.

Looking forward to your response.

Thank you.

Damini Ettam

Design Engineer

dettam@weilerengineering.org

6805 Overseas Hwy,

Marathon, FL 33050



From: Luke Johnson <Luke.Johnson@reynoldscon.com>

Sent: Wednesday, January 29, 2025 6:31 PM

To: Damini Ettam <dettam@weilerengineering.org>; Joshua Vondersaar <joshua.vondersaar@reynoldscon.com>; Jason Brownlee <Jason.Brownlee@reynoldscon.com>

Cc: Steve Suggs <ssuggs@weilerengineering.org>; Abigail Connell <aconnell@weilerengineering.org>

Subject: RE: REQUEST FOR PRICING AREA 4 CHEMICAL TANK REPLACEMENT

Received.

Reynolds is appreciative of the opportunity to provide a quote for the below.

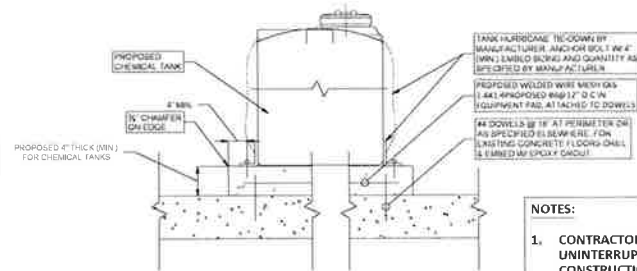
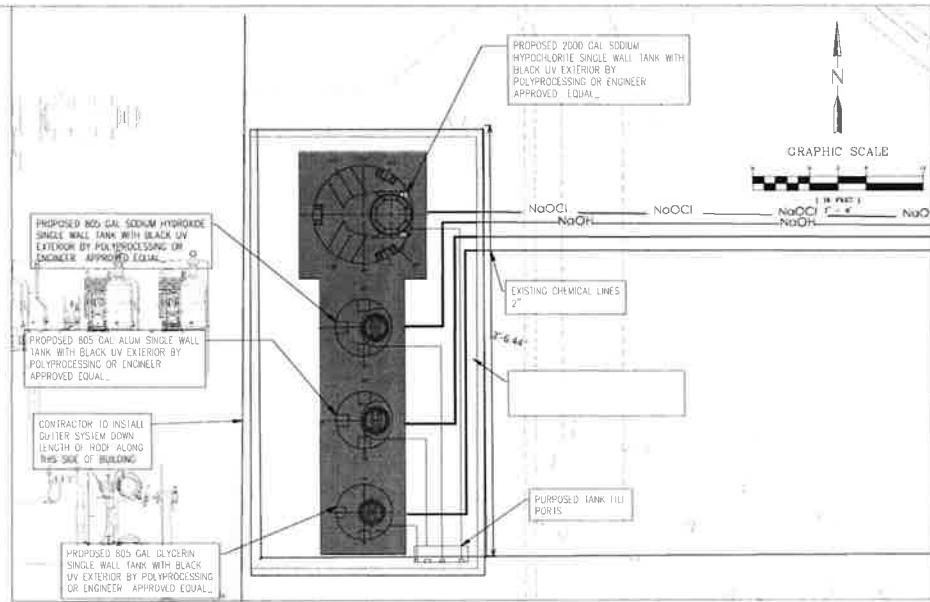
We will review and provide a response.

Thank you,

LUKE JOHNSON

Project Engineer

Reynolds Construction, LLC




1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING UNINTERRUPTED SERVICE OF CHEMICAL TANKS WHILE CONSTRUCTION IS IN PROGRESS. COORDINATE WITH PLANT STAFF FOR PERIODS WHEN CHEMICAL FEED MAY BE EFFECTED.
2. PLANS ARE DIAGRAMMATIC IN NATURE AND DO NOT SHOW ALL ASPECTS OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY HARDWARE, FITTINGS, ACCESSORIES, ETC., NEEDED TO PLACE THE CHEMICAL TANKS INTO PROPER WORKING ORDER.
3. CONTRACTORS TO DEMOLISH EXISTING EQUIPMENT PADS REPAIR AND RECOAT CONCRETE SLAB AND INSTALL A NEW EQUIPMENT PAD FOR PROPOSED TANKS.
4. CONTRACTOR TO RECONNECT EXISTING CHEMICAL PIPING INTO EXISTING CHEMICAL TANKS.

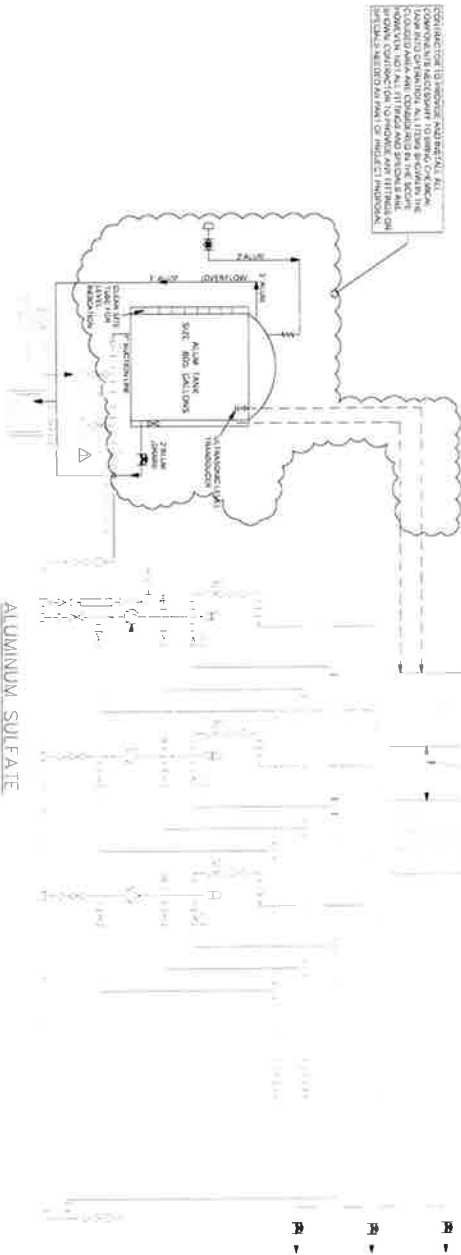
[illegible]



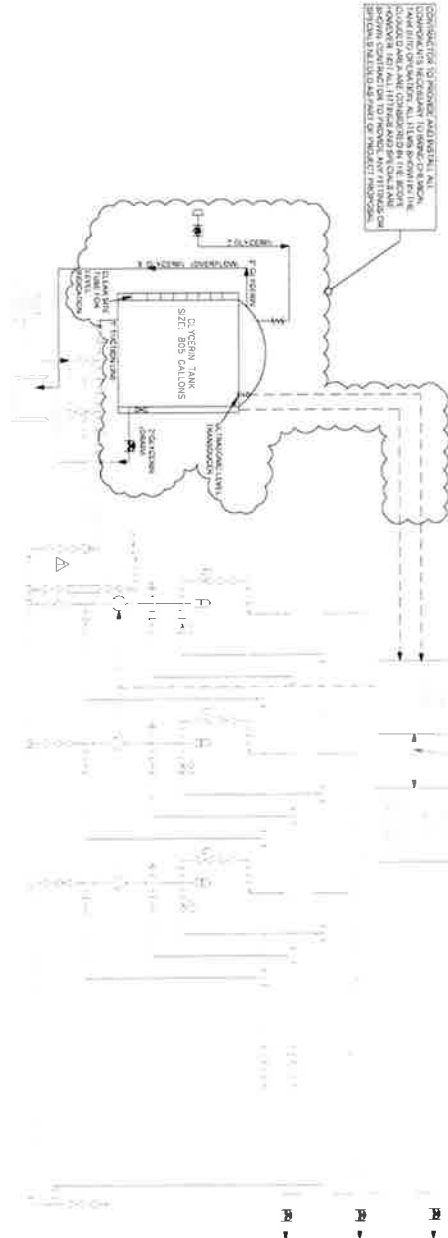
CONTRACTING TO PROVIDE AND MANAGE ALL CONSTRUCTION NECESSARY TO IMPROVE CROWDING INTO COMPLIANCE WITH THE GOVT. THE SCHEDULED AIRS ARE CONSIDERED IN THE JOINT INVESTMENT FOR ALL STRINGS AND PERSONS SHALL BE OWN CONTRACTOR TO PROVIDE ANY FITNESS OR SPECIALTY YIELDING AS WELL AS PROJECT PROGRESS

Description		Revision	AREA 4 CHEMICAL LINE DIAGRAMS	 WEC <i>Change in engineering</i> WILLIAMS ENGINEERING & CONSULTANTS MARATHON FLORIDA 33500 (407) 500-0770	Project Information			
1. INITIAL REVISIONS		2. REVISIONS	AREA 4 CHEMICAL TANK REPLACEMENT		Approved By	Design	MM	
3.		4.	CITY OF MARATHON		Scale	AS NOTED	Drawn	MM
5.		6.	MARATHON, FL		Rev No	221001.001	Checked	SB
7.		8.			Date Issued			

ALUMINUM SULFATE
FEED SYSTEM



GLYCERIN
FEED SYSTEM



AREA 4 CHEMICAL LINE DIAGRAMS

AREA 4 CHEMICAL TANK REPLACEMENT
CITY OF MARATHON

MARATHON, FL

WEC *choice in engineering*
6005 OVERSEAS HIGHWAY
MARATHON, FLORIDA 33956
(888) 754-7700

Project Information

Approved By	Design	20
Drawn	AS NOTED	24
Rev No.	Drawn	24
Date	Checked	25
12/20/14		

WEILER ENGINEERING CORPORATION



201 WEST MARION AVENUE - SUITE 1306 | PUNTA GORDA | FL 33950
TEL 941-505-1700 | FAX 941-505-1702 | WWW.WEILERENGINEERING.ORG

6805 OVERSEAS HIGHWAY | MARATHON | FL 33050
TEL (305) 289-4161 | FAX(305) 289-4162

AREA 4 CHEMICAL TANK REPLACEMENT

To: Reynolds Construction
From: Damini Ettam
Date: January 29, 2025
Re: Area 4 Chemical Tank Replacement

Project Scope: Replacement of Chemical Tanks.

Objective:

The project aims to replace the existing chemical tanks with four (4) chemical storage tanks with new XLPE tanks of specified capacities for Sodium Hypochlorite, Sodium Hydroxide, Alum, and Glycerin. from Poly processing . This includes demolition of existing tanks, removal and chipping of existing equipment pads, surface preparation and coating of floors, construction of new concrete equipment pads , rebuilding the maintenance pad, and installing the new tanks. A gutter system will also be added along the roof's side. The goal is to ensure the new tanks are properly integrated, with all piping and necessary fittings to provide a functioning systems.

Scope of Work:

1. Existing Conditions :

- The site is an active chemical feed system that must remain operational during construction.
 - Existing concrete pads are present and will require demolition and surface preparation.
 - Adequate space is available around the tanks, but safe working areas and access must be maintained.
 - The site includes existing electrical panels, conduits, piping, and SCADA connections.
 - The contractor must field-verify all dimensions, elevations, and utilities before starting work.
 - Site conditions that may affect the installation of new concrete pads must be confirmed by the contractor.
 - Any required excavations must comply with local codes and safety standards.
- 2.

- The site is an active chemical feed system that must remain operational during construction.

- Existing concrete pads are present and will require demolition and surface preparation.
- Adequate space is available around the tanks, but safe working areas and access must be maintained.
- The site includes existing electrical panels, conduits, piping, and SCADA connections.
- The contractor must field-verify all dimensions, elevations, and utilities before starting work.
- Site conditions that may affect the installation of new concrete pads must be confirmed by the contractor.
- Any required excavations must comply with local codes and safety standards.

2. Temporary Facilities and Controls :

- The contractor is required to supply all temporary piping, connections, and support necessary to relocate and operate the existing chemical tanks, ensuring uninterrupted chemical feed throughout the project.
- Temporary setups must be secure, meet safety requirements, and be clearly labeled.
- The contractor is responsible for providing any necessary temporary electrical, lighting, and other utilities required for construction activities.
- Clear access for Owner/Operations staff must be maintained at all times.
- Work activities must be coordinated to avoid disruption to ongoing facility operations.
- Contractor shall secure the work area as needed.
- All work must adhere to local, state, and federal regulations regarding dust, noise, and chemical spill control.
- Best management practices must be implemented to prevent contamination of surrounding areas.

3. Tank Demolition and Removal :

- Remove and dispose of the existing chemical storage tanks in compliance with all applicable regulations.
- Chip or demolish existing equipment pads as needed to facilitate the installation of new pads.
- Remove any remaining tank anchoring systems, embedded metals, or other obstructions to prepare the site for new installations.
- Properly dispose of all demolition debris off-site at a proper facility.
- Exercise care to avoid damage to existing structures, utilities, and equipment that are to remain in service.
- Repair any damages caused by demolition activities at no additional cost to the Owner.

4. Concrete Work and Floor Coating :

- Provide and place concrete pads for the new chemical tanks as specified in the project plans.

- Perform all formwork, reinforcement, finishing, and curing in compliance with applicable codes and best practices.
- Coordinate with the tank manufacturer to ensure proper bolt patterns or anchoring inserts are incorporated into the pads.
- Clean and prepare any damaged or spalled areas of the concrete floor following demolition.
- Fill or patch voids to create a smooth and even surface.
- Apply a chemical-resistant floor coating system that is compatible with the chemicals to be stored.
- Follow the manufacturer's recommendations for surface preparation, primer application, and coating thickness.
- Ensure the floor coating system is fully cured before installing the new tanks.

5. Chemical Tank Installation :

- Furnish and install four (4) chemical tanks with the following capacities:
 - Sodium Hypochlorite: 2,000 gallons
 - Sodium Hydroxide: 805 gallons
 - Alum: 805 gallons
 - Glycerin: 805 gallons
- Ensure the tanks are compatible with the chemicals they will store.
- Verify structural and dimensional compatibility of the new tanks with the constructed concrete pads.
- Install a manufacturer-approved hurricane strap system for each tank to meet local wind load requirements, following all instructions for bolt sizes, anchor spacing, and strap tensioning.
- Disconnect, remove, and replace or modify all necessary piping, valves, and fittings to ensure the new tanks are fully operational.
- Retain and ensure existing priming ports on the suction line remain in their designated locations.
- Provide all required adapters, transitions, and supports to align existing piping with the new tank nozzles.
- Install new fill lines for each tank, including fill connection points and any required valves.
- Align piping and floor slopes to direct potential chemical spills to the existing containment area or floor drains, as applicable.
- Install a site gauge (site tube) on each chemical tank for visual level indication

6. Gutter Installation :

- Install a new gutter system along the side of the building where the chemical tanks are located, following the diagrammatic project plans.
- Ensure the gutter materials are sized to handle roof drainage flows and are corrosion-resistant.
- Install downspouts to direct runoff into an existing retention area on the east side of the building.
- Provide all necessary trenching, piping, splash blocks, or other components required to convey water to the retention area.

- Ensure proper slope for the system to facilitate water flow and secure all connections to prevent leakage or blockages.

7. Electrical Modifications :

- Provide ultrasonic level transducer to measure and transmit tank levels to the LCP and SCADA system.
- Verify the compatibility of the ultrasonic level transmitters with the stored chemicals.
- Install conduit, wiring, and cable tray (if needed) to connect the new level transmitters to the existing LCP, using watertight or PVC Sch 80 conduit as necessary.
- Label all conduits and cables according to facility standards.
- Coordinate with the Owner's controls integrator to ensure proper scaling, reading, and display of level signals in the SCADA system, including updates to screens, alarms, and historical trending for each new tank level.
- Test all instrumentation loops for accuracy, proper signal communication, and alarm functions.
- Demonstrate system functionality to the Owner or Engineer.

8. Testing, Startup, and Training :

- Fill and test each new tank using water or an approved test fluid to check for leaks.
- Test all piping connections under operational pressure to ensure there are no leaks.
- Demonstrate the full operation of each chemical feed system, including level indication, and SCADA alarms for the low level.
- Provide a commissioning checklist and complete it with the Owner or Engineer as a witness.
- Conduct on-site training for the Owner's staff on the operation, maintenance, and troubleshooting of the new tanks and associated instrumentation.

9. Project Closeout :

- Address and complete any punch-list items identified during the walkthrough promptly.
- Include copies of all test and commissioning reports.
- Ensure all workmanship and materials are warranted for a minimum of one year from the date of final acceptance, or as specified by local requirements or manufacturer's warranties.

10. Contractor Responsibilities :

- Ensure full compliance with local, state, and federal regulations, including environmental and safety requirements.
- Follow all OSHA guidelines and adhere to local safety regulations.
- Maintain a safe working environment for employees, the Owner's staff, and the public.
- Perform all work using new, high-quality materials.

- Conduct work in accordance with approved submittals and manufacturer recommendations.
- Submit product data, shop drawings, and installation instructions for all major equipment (e.g., tanks, anchors, level transmitters, coatings).
- Provide the proposed sequence of construction, details, and project schedule for review.
- Coordinate with the Owner to schedule outages or operational changes, minimizing disruption.

Notes:

The drawings from the Owner/Engineer are for reference and may not show every detail needed for construction. The Contractor is responsible for providing and installing all necessary components to meet the design, performance, and code requirements. The Contractor must verify all field dimensions and conditions before starting fabrication or construction.