

# ADDENDUM NO. 1

TO:

**ALL PLAN HOLDERS** 

RE:

City of Linden, Texas

LI-01-15 Contract C-Elevated Storage Tank

ADDENDUM DATE:

March 27, 2023

BID DATE:

March 30, 2023

The Plans, Specifications and Contract Documents for the above referenced project are hereby modified as follows:

# Clarification to Bidders:

- -Technical Specifications Section 13210-2.1 Structural and Foundations Designs Plans shall be sealed and submitted by a Professional Engineer Licensed in the State of Texas
- -Shop Priming of the tank material is acceptable.

# Technical Specification:

-Replace original section 13215 (4 pages) with attached section 13215 (4 pages).

ADDENDUM NO. 1 ISSUED BY:

A.L. FRANKS ENGINEERING

Kiron Browning, P

Project Manager



# MODIFICATIONS TO EXISTING STEEL ELEVATED STORAGE TANK SECTION 13215

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

A. Furnishing all materials, tools, equipment, and necessary labor to raise, modify, and touch-up the painting of the existing 100,000 gallon elevated storage tank.

# 1.2 REFERENCES (LATEST EDITION)

- A. SSPC-SP 3, "Power Tool Cleaning"
- B. SSPC-SP 6, "Commercial Blast Cleaning"
- C. SSPC-SP 10, "Near-white Blast Cleaning"
- D. SSPC Steel Structures Painting Manual, Volume 1, "Good Painting Practice"
- E. SSPC Steel Structures Painting Manual, Volume 2, "Systems and Specifications"
- F. SSPC-SP 11, "Power Tool Cleaning to White Metal"
- G. American National Standards Institute/National Sanitation Foundation Standard 61, Drinking Water System Components – Health Effects
- H. AWWA Standards D100-11, "Welded Steel Tanks for Water Storage" and D102-06, "Painting Steel Water Storage Tanks"
- I. AWWA Standard C-652, "Disinfection of Water Storage Facilities"

#### 1.3 SUBMITTALS FOR INFORMATION

#### A. Product data:

- 1. Detailed design data, including verification of foundation design, signed and sealed by a Texas Professional Engineer. Consider dead, live, wind, earthquake, and snow loads for tank design.
- 2. Detailed method to be used to raise the existing elevated storage tank.
- 3. A painting schedule listing the brand and manufacturer of paint, including printed instructions from the paint manufacturer.
- 4. Provide a color chart for each type of exterior finish coat required.
- 5. Detailed field drawings, signed and sealed by a Texas Professional Engineer.
- 6. Provide manufacturer's information sheets and material safety data sheets (MSDS).
- 7. Payment and Performance Bonds for 100% of the contract amount. All bonds shall be executed by a surety company that has an AM Best Rating of at least "A" or "A+".

# 1.4 QUALITY ASSURANCE

- A. Workmanship shall be of quality modern practices.
  - 1. Welders must be qualified within the previous year, in accordance with the Requirements of the American Welding Society.
  - 2. Records of compliance of these specified tests shall be available for review.
  - 3. Welding and testing shall be in accordance with AWWA D100-11.

# 1.5 CONTRACTOR QUALIFICATIONS

- A. Qualifications of the bidder shall be submitted with the bid. The following data shall be submitted:
- 1. A list of a minimum of ten (10) elevated tanks raised of equal or greater capacity. Provide a telephone number and contact with each tank referenced. The projects shall have been completed by the contractor's own forces. No subcontracting of the raising process will be allowed on this project.
- 2. Safety statistics must be submitted to show past safety performance.
- 3. The contractor shall maintain Professional Liability Insurance with a minimum limit of \$3,000,000 each occurrence and aggregate.

#### 1.6 WARRANTY

A. Provide a one-year warranty on labor and materials.

## **PART 2 PRODUCTS**

## 2.1 EXISTING ELEVATED STORAGE TANK

A. Volume: 100,000 gallons
B. Type: Multi-column
C. Location: Linden, Texas
D. Height: 130'-0" to HWL
E. Modified: 150'-0" to HWL

F. History: Erected in 1986 by Pittsburgh Des-Moines Steel

## 2.2 TANK MODIFICATIONS

- A. Height of tank shall be raised by 20 feet to achieve a new HWL of 150'-0".
  - 1. The tank shall be taken out of service and completely drained by the Owner prior to any modifications. This can be done by isolating a valve and conforming to OSHA lock out & tag out procedures.
  - 2. Verify design of foundation to accommodate raised tank reactions. Modify foundations as necessary to comply with current Design Standard AWWA D100-11 and/or IBC 2012.
  - 3. The existing tank shall be raised in place by extending the supporting tower by the length required to achieve the new specified height.
  - 4. Steel pipe overflow shall be extended by the length required to achieve the new overflow elevation.
  - 5. Extend interior ladder and exterior tower ladder.
  - 6. Extend safety climb device as required.

## 2.3 PAINTING

A. Utilize all of the following preparation techniques for the cleaning and coating of the elevated water storage tank.

# B. Coatings Application:

- 1. Perform coatings work with skilled and experienced craftsmen familiar with the specified coatings systems.
- 2. Adhere to the coatings manufacturer's instructions for preparation and applications.
- 3. Allow each application to dry thoroughly before the next coat is applied. Do not apply coatings systems during wet or foggy weather or when the air temperature is below 32 degrees Fahrenheit of less than five degrees above the dew point.

# C. Disinfection and refilling:

- 1. Before placing the tank into service, clean out and disinfect the tank with a chlorine solution.
- 2. The OWNER will furnish water for sterilization.
- 3. Tank disinfection must comply with AWWA Standard C 652, Method III.
- 4. The OWNER will collect samples and submit for bacteria testing.
- 5. The OWNER will then put the tank into service.

## D. Paint Schedule:

- 1. Tank interior new material will be blasted to a SSPC #10 and receive a prime coat of NSF approved paint to match existing system in accordance with product data sheets. One complete coat of NSF approved epoxy paint will then be applied to all new steel.
- 2. Tank exterior new material will be blasted to a SSPC #6 and receive a prime coat of paint to match existing system.
- 3. Existing tank interior damaged areas will be spot cleaned to a SSPC #11 and receive two coats of an NSF approved epoxy paint.
- 4. Existing tank exterior damaged areas will be spot cleaned to a SSPC #3 and receive a spot primer coat of epoxy paint and a urethane finish coat.

# 2.4 CLEAN-UP

A. Upon completion of project, remove or dispose of all rubbish and other unsightly material caused by tank modification operations.