

**ADDENDUM NO. 1
TO THE CONTRACT DOCUMENTS FOR
Well Number 8 Pump Building**



To All Planholders and/or Prospective Bidders:

The following clarifications, changes, additions, and/or deletions are hereby made a part of the Contract Documents for the construction of the Well Number 8 Pump Building as fully and completely as if the same were fully set forth therein:

A. PART 1, BIDDING REQUIREMENTS

1. None

B. PART 2, CONTRACT FORMS

1. None

C. PART 3, CONDITIONS OF THE CONTRACT

1. None

D. PART 4, SPECIFICATIONS

1. Attached Section 01 22 00 Measurement and Payment Addendum 1 replaces Section 01 22 00 Measurement and Payment in its entirety.
2. Attached Section 46 36 53 Calcium Hypochlorite Tablet Chlorination System is added to the technical specifications.

E. DRAWINGS AND DETAILS

1. None

F. QUESTIONS

1. Q: Over excavation of the building pad per the geotechnical report in B.1 on Page 8, show us excavating 10-11 feet until we reach the Sand and Gravel layer. Is this the intent to remove and replace this material with Granular Backfill. Please clarify.

A: See C-1A Notes 1 and 2 and S-1B Geotechnical Note 2.

2. Q: What bid item do you want the over excavation and fill (both shallow and deeper) to be placed in?

A: Bid Item 3.

3. Q: What is the Rock Base and Asphalt Thickness?

A: Per Geotechnical Report, paragraph I.2, 3” of Asphalt and 6” of UBC.

4. Q: Can you clarify the chlorine residual and turbidity analyzers?

A: See Process Equipment (Section 11 54 00)

5. Q: Will it be the General contractor's responsibility to pay for soils (compaction) and concrete testing?

A: Yes, contractor is responsible for Quality Control Test as described in Section 01 45 23 – Testing Agency Services. The testing frequency is described in Section 01 45 00 – Quality Controls and Materials Testing.

Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 in the Bid Form or by submitting the Addendum with the bid package. Bid Forms submitted without acknowledgment or without this Addendum will be considered in nonconformance.

City of West Jordan

Appended hereto and part of Addendum No.1



END OF ADDENDUM NO. 1

SECTION 01 22 00
MEASUREMENT AND PAYMENT_ADDENDUM 1

PART 1 GENERAL

- A.All work completed under this contract shall be in accordance with the Drawings and Specifications and will be measured by ENGINEER/OWNER. The quantities appearing on the Bid Schedule are approximate only, and are prepared for the comparison of bids. Payment to CONTRACTOR on bid items with unit prices other than "Lump Sum" will be made for actual quantities of work performed and accepted, or material furnished in accordance with the Contract. The scheduled quantities of work to be done and materials to be furnished may be increased or decreased in accordance with the General Conditions.
- B.The term "Lump Sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure, portion of work, or unit is specified "Lump Sum" as the unit of measurement, the unit will include fittings, accessories, and all work necessary to complete the work as shown on the Drawings and as specified.
- C.When the accepted quantities of work vary from the quantities in the Bid Schedule, CONTRACTOR shall accept as payment in full, so far as contract items are concerned, payment at the original contract unit prices for the work done. OWNER reserves the right to add to or delete from quantities listed in the bid schedule in order to match the total bid with the budgeted money available.

1.2 BASE BID SCHEDULE

A. BID ITEM NO. 1 - "MOBILIZATION"

1. **GENERAL.** This bid item is provided to cover CONTRACTOR's cost for general and miscellaneous responsibilities and operations not normally attributed to any other single bid item within this schedule. This shall include, but is not limited to, work described or enumerated in Section 01 71 13 - Mobilization.
2. **METHOD OF MEASUREMENT.** Mobilization shall not be measured, but shall be paid for on a lump sum basis for the completion of the work as required in Section 01 71 13 - Mobilization.
3. **BASIS OF PAYMENT.** Payment will be made at the contract lump sum bid price. Payments will be made in accordance with the following schedule:
 - a. When 10% of the original contract amount is earned, 25% of the amount bid for mobilization will be paid.
 - b. When 25% of the original contract amount is earned, an additional 25% for a total of 50% of the amount bid for mobilization will be paid.
 - c. When 50% of the original contract amount is earned, an additional 25% for a total of 75% of the amount bid for mobilization will be paid.

- d. When 75% of the original contract amount is earned, an additional 25% for a total of 100% of the amount bid for mobilization will be paid.

B. BID ITEM NO. 2 - "CONSTRUCTION SURVEYING AND SWPPP"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on performing construction surveying complete and submission of a completed SWPPP as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for performing construction surveying complete and submission of a completed SWPPP. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item.

C. BID ITEM NO. 3 - "PUMP HOUSE STRUCTURE, GENERATOR SCREENING WALLS AND CONCRETE PAD"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on excavation and construction of pump house structure, generator screening walls and concrete pad complete as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for excavation, disposing of unsuitable native soils, grading, importing and compaction of structural fill, construction of pump house structure including footings, foundation, reinforced masonry structure, framing, roofing, interior finishes, furnish and installing buried piping and buried conduit and concrete floor complete; construction of generator screening walls, concrete pad and all concrete flatwork complete. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item.

D. BID ITEM NO. 4 - "PUMP, SHAFT AND MOTOR"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on installation of the pump, shaft and motor complete as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for well conditioning including bailing of the well and video of the well casing from top of casing to the bottom of the well complete, installation of the pump, column piping, sounding tube, water level transducer, pre-lube tubing, shaft and related appurtenances, sole plate, pump discharge head, concrete collar and motor complete. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item. Prior to payment, the pump must be in proper operating condition.

E. BID ITEM NO. 5 - "PUMP STATION PIPING, VALVING, AND CHLORINATION SYSTEM"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on installation of pump station piping, valves, fittings, flowmeter, instrumentation, and chlorination system complete as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for installation of pump station piping, valving, appurtenances, piping supports, and

chlorination system and appurtenances complete. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item.

F. BID ITEM NO. 6 - "PIPELINE (DISCHARGE, FLOOR DRAIN SEWER, PUMP-TO-WASTE) AND PUMP-TO-WASTE DISCHARGE STRUCTURE"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on installation of discharge, floor drain sewer, and pump-to-waste pipelines and construction of pump-to-waste discharge structure complete as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for installation of discharge to existing water system, floor drain sewer, and pump-to-waste pipelines and construction of pump-to-waste discharge structure complete. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item.

G. BID ITEM NO. 7 - "SITE IMPROVEMENTS (LANDSCAPING, FENCING, PAVEMENT, AND CURB)"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on construction of site improvements complete as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for construction of site improvements including, but not limited to finish grading, installation of granular base, compaction, landscaping, fencing, pavement, and curb. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item.

H. BID ITEM NO. 8 - "ELECTRIC POWER SUPPLY, ELECTRICAL SYSTEMS, INSTRUMENTATION, CONTROL PANELS, GENERATOR AND TRANSFER SWITCH"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on connection to existing electric power supply, installation of electrical systems, instrumentation, control panels, generator and transfer switch complete as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for connection to existing electric power supply, installation of all wellhouse electrical systems including wiring and conduit, motor control center, VFD, RTU panel, complete instrumentation and control systems, control panels, generator and con-vault fuel tank, and automatic transfer switch, power to all incidental controls including the chlorination system, lighting and appurtenant controls complete. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item to result in a fully functioning and operational wellhouse.

I. BID ITEM NO. 9 - "HVAC SYSTEM"

1. **METHOD OF MEASUREMENT.** Measurement shall be based on construction and installation of the HVAC system complete as one item.
2. **BASIS OF PAYMENT.** Payment shall be at the contract price bid on a lump sum basis for construction and installation of the HVAC system complete, including ventilation

louvers and fans, ducting, electrical resistance heaters, air conditioning units, electrical power for equipment and instrumentation. Payment shall be considered full compensation for all labor, equipment, materials and incidentals required to complete this item.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

- END OF SECTION -

SECTION 46 36 53
CALCIUM HYPOCHLORITE TABLET CHLORINATION SYSTEM

PART 1 GENERAL

1.1 GENERAL DESCRIPTION

- A. The system shall be designed to feed low concentrations of calcium hypochlorite in solution intermittently or continuously as required for addition of chlorine to water from a drinking water well. The system shall be a single pre-assembled, package unit in a welded aluminum frame consisting of chlorinator, electrical boxes, centrifugal pump, and balance tank for ease of installation and operation. Field assembled systems shall not be acceptable. The system shall be the PowerPro® Model 3012 by AXIALL, LLC. Only NSF Standard 60 listed Accu-Tab® SI (scale inhibitor) calcium hypochlorite tablets by AXIALL, LLC shall be used.
- B. Any system offered shall use an NSF Standard 61 listed erosion feeder and an NSF Standard 60 listed calcium hypochlorite tablet.

1.2 SYSTEM FEATURES

- A. A maximum chlorine solution level of 0.05% (500 ppm) shall be maintained to prevent calcification in system components.
- B. Delivery shall be by erosion feed technology to control accurate and consistent concentration limits in the chlorine treatment solution.
- C. The chlorinator shall automatically and continuously feed a limited quantity of chlorine in solution as needed; when the system is not running, no more chlorine than that amount which can be fed in one minute or less shall be left in the tank to prevent chlorine loss.
- D. A centrifugal pump wired to the system electrical box shall feed freshly mixed chlorine treatment solution only as required for maximum efficiency.
- E. All piping in the chlorinator unit shall be Schedule 80 PVC for durability.

1.3 WARRANTY

- A. The manufacturer shall guarantee in writing that this unit, if operated in accordance with written instructions given and accepted by the Owner, will perform in complete accord with the specifications. All components will be warranted against manufacturers' defects for twelve (12) months from its original installation date or thirteen (13) months from its AXIALL shipment date, whichever first occurs. Only Accu-Tab® SI tablets can be used in these chlorination systems.

PART 2 PRODUCTS

2.1 SYSTEM COMPONENTS

- A. *Tablet Chlorinator.* Accu-Tab® chlorinators by AXIALL, LLC are designed exclusively for Accu-Tab® SI calcium hypochlorite tablets by AXIALL, LLC. Tablets are placed on a sieve plate inside the chlorinator; as water flows across the sieve plate, the tablets erode at a rate proportional to the flow rate.
- B. *Inlet Water Supply Connection with Filter.*
Model 3012 1" FNPT (fresh water supply of 15 GPM required)
- C. *Inlet Solenoid Valve.* Opens and closes on command when the system receives a signal.
- D. *Flow Control Valve.* PVC gate valve mounted in line with the flow meter allows operator to adjust flow of water-dissolving stream.
- E. *Solution Tank.* Made of medium-density polyethylene. Capacities:
Model 3012 22 gallons
- F. *Primary Solution Tank Level Control.* Made from PVC and 316L stainless steel, this float valve meters the tablet by-pass flow. The by-pass stream balances the variation in the water-dissolving stream. The float valve opens or closes to maintain the pump rate as it is manually throttled.
- G. *Secondary High/Low Level Solution Tank Control.* Prevents the solution tank from overflowing. High level: when activated, a switch opens the circuit to the solenoid valve, causing the valve to close. Low level: shuts pump down preventing cavitation. A restart timer prevents the pump from "chattering".
- H. *Solution Delivery Pump.* Delivers chlorinated solution into a pressurized stream. A Grundfos vertical multi-stage centrifugal pump shall be included with the capacity of producing 125 psi.

- I. *Solution Injection Pump Air Bleed.* Used to prime the pump at start-up, or at any time, if necessary. Also functions as a recycle line for tank cleaning.
- J. *Primary Backflow Prevention.* A PVC Ball check valve prevents reverse flow of water into the system.
- K. *Discharge Control Valve (manual).* Used to balance system output water flow with system input water flow.
- L. *Outlet Connection.*
 - Model 3012 1" FNPT
- M. *NEMA 4X Electrical Enclosures, UL listed.*
- N. *Aluminum Frame: Type 6061-T.*
- O. *Inlet Pressure Regulator.* Schedule 80 PVC pressure regulator installed for water inlet pressure above 70 PSIG.
- P. *Inlet Pressure Gauge.* Gauge reading 0 to 250 PSIG installed for inlet pressure above 70 PSIG.
- Q. *Control Option.* A variable frequency drive (VFD) motor on the solution delivery pump is controlled by the process controller. Capability to control in Flow-Pacing, Residual, or Compound Loop modes shall be provided.
- R. *Weight Scale.* Load cell factory-installed under the chlorinator to measure tablet weight.

2.2 ELECTRICAL REQUIREMENTS

- A. Each system to be designed per available power. The control panel shall operate on 120V, 1-phase power. The unit shall receive a 4-20 mA pacing signal for chlorine dosing.
- B. The control panel shall provide the following relay contacts for remote monitoring and control:
 - 1. Chlorinator Remote Run
 - 2. Pump Running
 - 3. Solution Tank High Level
 - 4. Solution Tank Low Level
 - 5. System Flow
 - 6. Weight Scale Alarm

PART 3 EXECUTION (Not Used)

- END OF SECTION -