



Pump Mechanical Technical Services, LLC

**DATE: 08/21/26**

**BUYBOARD VENDOR # 770-25**

**TO: City of Mission, TX / SHARY Golf Club**

**Reference: New MCI-Flowtronex Pump station**

## **PROJECT SITE PARAMETERS**

**Pumpset: 10 FT**

**Wetwell Depth: 11 FT**

**Wetwell Dimensions: 72 IN**

**Inlet Condition: WETWELL**

**Supply Power: 480V 3PH 60HZ**

**Pump Station Requirements: 1600 GPM AT 120 PSI AT STATION DISCHARGE**

**Existing Station FTX#: T015439**

## **SCOPE OF SUPPLY**

**MCI UL Listed QCZJ Packaged Pump Station**

**Model Number: PPS-N-VT2-1600-120-SV-P-48-3-6**

**Built Under ISO9001:2015 Certification**

### **Main Control Panel**

#### Custom Enclosure

- **UL 508a Listed Control Panel Custom Engineered & Manufactured in Same Facility as Pump Station**
- Watertight UL Type 4 Enclosure
- 72 IN x 72 IN x 18 IN (HxWxD), Final Panel Size Confirmed in Approval Drawings
- 12 ga. Mild Steel Construction with Self-Healing Zinc Primer and Superior Outdoor Rated Powder Coated Textured Finish
- Heavy Duty Concealed Hinge / 3- Point Latch with Handle (Pad Lock Capable), Easily Removeable Doors and Center Post for Servicing
- Rigid Steel Backplate with Pure White Powder Coat
- Stainless Steel Doorstop(s), (Standard on All Doors)
- 12IN Data Pocket Containing All Pertinent Panel Documentation and As Built Drawings for Easy in Field Reference
- **Manufactured in the USA**

### Cooling/Heating

- QTY (1) UL Listed Low Maintenance Heat Exchanger Designed for Energy Efficient Cooling and Increased Electrical Component Longevity

### Main Power

- 400-Amp Main Fused Disconnect to Protect Valuable and Critical Components from Overloads and Abnormal Supply Power Conditions
- Industry Leading Short Circuit Current Rating (SCCR) of 100,000 Amps to Impede Catastrophic Failure
- Type 1 Surge Protection w/Status Indicators for Safeguarding of Electrical System Against Destructive Transient Power Surges
- Active Incoming Line Phase Monitor W/Primary Fusing for Detection of Voltage Imbalance, Phase Sequence, and Loss of Phase
- Regulated & Adjustable DC Power Supply for Safe User Operation and Stable Clean Power to Control Processing Components
- GFCI Outlet for Convenient Laptop Power
- Robust Industrial Control Power Transformer w/Primary Fusing

### Pump/Motor Control/Power

- Control & Power for QTY (2) 75 HP **Main Pump/Motor** with Shared VFD/XL Operation
  - Green Illuminated Off/On Switch with Running and Blinking Fault Indication
  - Pump/Motor Running Feedback
  - Wired for Motor Space Heater
  - Variable Frequency Drive Operation
    - High Accuracy Pump/Motor Speed Control
    - Manual VFD Speed Pot
    - VFD Bypass Switch Per VFD for Alternate Pressure Control Mode in the Event of VFD Failure
    - Equipped With Input Impedance Per VFD for Smooth, Stable, & Consistent Power
    - Fast Acting Fusing for VFD Protection
    - VFD Fault with Auto Restart
  - XL Operation
    - Advanced Fuse Protection Technology for Safeguarding Against Power Surges and Overloads
    - Solid State Overload Protection with Precise Monitoring Per Motor and Shutdown Safety Including Contactor Interlocks for Safe Operation
- Control & Power for QTY (1) 5 HP **PM Pump/Motor** with Dedicated VFD Operation
  - Green Illuminated Off/On Switch with Running and Blinking Fault Indication
  - Pump/Motor Running Feedback

- Variable Frequency Drive Operation
  - High Accuracy Pump/Motor Speed Control
  - Manual VFD Speed Pot
  - Equipped With Input Impedance Per VFD for Smooth, Stable, & Consistent Power
  - Fast Acting Fusing for VFD Protection
  - VFD Fault with Auto Restart

## Control Features & Hardware

- MCI MPC Remote Intelligence Platform
  - Fast Processing Robust PLC for Self-Sufficient Automatic Operation
  - 12IN Industrial-Grade High-Resolution Touchscreen Designed for Demanding Environments and an Intuitive User Experience
    - HMI Screen Layout Users Can Customize to Their Individual Preferences
- System “Full Size” Type 4 Operator Control Devices
  - Manual/Off/Auto System Control
  - Red Illuminated Fault Push Button
  - Blue Illuminated Maintenance Light
- PLC Flow Adjustable Fertigation Run Relay with Dry Contacts
- System Safeties:
  - Main Inlet Safety
    - Low Level Shutdown w/Auto Reset
  - Low Discharge Pressure Shutdown/Hard Fault
  - High Discharge Pressure Shutdown w/Auto Restart
  - Phase Failure, Imbalance, and Low Voltage Protection
- Operation Features
  - Remote Intelligence
    - One Click Secured Remote Login/Access to all your systems
    - Advanced Trending Screen with State-of-the-Art Interrogation Capabilities
    - Realtime Fault Monitoring Providing Users Immediate Email Alerts
    - Integrated Mechanical & Electrical Drawings with Accelerated On-Screen Access to Technical Schematics for Efficient Troubleshooting and Servicing.
    - AI Ready
  - Door Device Lamp Test Function
  - Automatic Alternation of Pumps Based on Least Run Time
  - Intelligent Slow Ramp Feature for Automatic Line Fill
  - 3-Year Flow Total Logging Day/Week/Month/Year
  - Pump Run Times
  - Event Log
  - Flow and Station Trending

- Assignable I/O
- **Multi-Parameter Adjustable Pump Station Lockout**
  - Lockout Parameters: *\*Individualized Day/Time Settings\**
    - Pressure Setpoint/Max
    - External Input
    - Max Number of Pumps Allowed
    - Power Consumption
    - Max VFD Speed
- **Lake Level Control**
  - Hand/Off/Auto Selector Switch
  - Sensor Included in System Instrumentation Section
- **Motion-Sensing Interior LED Lighting Package for Improved Visibility During Control Panel Service**
- **MCI Remote Cell Monitoring w/6 Year Activation (Cell Service Starts When Equipment Ships from MCI)**
  - **nSite, MCI's Cloud Based Solution NO SUBSCRIPTION FEE**
    - Scheduled Monthly Email with Flow Report in Excel Format
    - Access To One Full Year of Pressure, Flow, Alarms and Event Data
  - **Remote Pump Station Disable Feature from Any Smart Device Or PC**
  - **Factory Support Remote Access to PLC/HMI and VFD for Programming and Troubleshooting**
  - **nAlert**
    - Manage Maintenance Due Dates for All Aspects of Maintenance on Your Pumping Station
    - Warning Light, Display Message and Email Alert When Due
    - Monitor and Report Irregular Operation of Irrigation System, Pump System and Filter System

### **System Instrumentation**

- **316SS Low Level Probe Set with PNR Relay**
- **Discharge Pressure Transducer**
  - 316SS Multi-output Programmable Pressure Transducer, with Local Display, Protective Display Cap, and Cord Set
- **Submersible Level Transducer**
  - 0-34.6' 316SS Level Transducer with Filter, Extra Weight, and 60 FT Cable
- **6 IN Networkable Magnetic Flowmeter with Local Flow Display, Fertigation Frequency Output Prewired to Panel Terminals, Corrosion Resistant NSF-61 Approved Lining, Flanged Connections, and Precise 0.5% Flow Measurement Accuracy**
- **4 IN 316SS Pressure Gauges with Full Body 316SS Monolithic Block and Bleed Valves**

## **Pump Assemblies**

- **QTY (2) 75 HP Vertical Turbine MAIN Pump, (84.9 % Efficiency), Rated for 800 GPM @ 303 FT TDH Including Station Losses.** To Include:

- **PUMP**

- Minimum 375PSI High Pressure Rated Cast Iron Bowls w/316SS Investment Cast Impellers for Superior Corrosion Resistance, Improved Performance at Higher Pressure, and Extended Pump Lifespan
- High Strength, Corrosion Resistant, Rotationally Balanced 416SS Stainless Steel Shafting
- 416SS Head Shaft Including Bronze Adjusting Nut and Gib Key
- **MCI Custom Teflon Pump Sealing Packing System Designed to Prevent Water from Leaking on the Pump Skid While Providing Shaft Cooling**
- MCI Fusion Bonded Epoxy Coated Fabricated Carbon Steel Discharge Heads
  - Pump Heads Feature MCI's Integral, Maintenance Free Air Relief System with No Moving Parts to Purge Harmful Airlocks
  - High Strength Construction, Engineered to Maximize Stable, Efficient Power Transmission Between Motor and Pump
- Threaded Carbon Steel Column Pipe Including Water Lubricated Low Friction Line Shaft Bearings with Vibration Minimizing 5 FT Maximum Spacing
- Stainless Steel Mesh Pump Strainer with Easy to Attach SS Clips

- **MOTOR**

- 75 HP, 1800 RPM, 460/3/60, Premium Efficient, Vertical Hollow Shaft Motors with Motor Space Heaters, and Non-Reverse Ratchets

- **VALVES**

- **6 IN Full 316SS Grooved Pump Discharge Isolation Valve w/ Lever Actuator Offering Vibration Minimization and Increased Installation/Service Flexibility**
- **6 IN Pump Silent Wafer Check Valves with Corrosion and Abrasion Resistant Fusion Bonded Epoxy, SS Disc, and Heavy-Duty Spring to Reduce Hydraulic Shock**

- **QTY (1) 5 HP Submersible Turbine PM Pump & Motor.** To Include:

- **PUMP (GRUNFOS)**

- 304SS Interchangeable Pump Bowls Featuring Optimized Hydraulic Surfaces for Increased Performance and Efficiency
- 304SS Corrosion Resistant Impellers Including Thrust Balancing Stop Rings
- 316SS Threaded, High Strength Discharge Column Pipe
- 2IN Fusion Bonded Epoxy Coated SCH40 Pump Head

- **MOTOR**

- 5 HP, 460/3/60, Premium Efficient, Corrosion Resistant 304SS Submersible Motor (GRUNFOS)

- **VALVES**

- 2 IN Full 316SS Grooved Pump Discharge Isolation Valve w/ Lever Actuator Offering Vibration Minimization and Increased Installation/Service Flexibility
- 2 IN Pump Silent Wafer Check Valves with Corrosion and Abrasion Resistant Fusion Bonded Epoxy, SS Disc, and Heavy-Duty Spring to Reduce Hydraulic Shock

### **Station Isolation Valving**

- 6 IN Station Discharge Isolation Butterfly Valve w/Lever Operator, Corrosion-Inhibiting 316SS Disc and EPDM Elastomers, Abrasion Resistant Fusion Bonded Body, and 250PSI Bubble Tight Shutoff Capacity
- 316SS Threaded Ball Valves, 1.5IN and Below

### **Station Pressure Relief Valve**

- Fusion Bonded Epoxy 4 IN Station Pressure Relief Valve with Corrosion Mitigating 316SS Internals, Bronze Piloting, Piped to Wet Well with Isolation Butterfly Valve w/Lever Operator, SS Disc, EPDM Elastomers, and Bonnet Quick Air Purge Ball Valve

### **Station Filtration and Controls**

- QTY (1) 10 IN, Low-Pressure Drop, Fusion Bonded Epoxy, Cast Iron Wye Strainer with Service Friendly SS Screen Access and Automatic Flush Assembly
  - **Control and Power**
    - QTY (1) Filter Inlet Pressure Transducer
      - 316SS Multi-output Programmable Pressure Transducer, with Local Display, Protective Display Cap, and Cord Set
    - Manual/Off/Auto Filter Flush Control Switch for Flush Operation Control
    - Filter Run Command (Auto & Manual)
    - Filter Fault
  - **Valving and Piping**
    - 1.5IN Solenoid Actuated, 24VDC, Pressure Reducing Pilot Valve with Corrosion-Inhibiting Body and Components
    - 1.5IN x 4IN 316SS Flush Line Assembly Piped to Skid's Edge

## **MG Aluminum Pump Skid**

- Reinforced, Custom, Corrosion Resistant, Marine Grade Aluminum Pump Skid Fabricated Using Heavy Duty, High Strength Structural Channel, Tubing, and Plate
  - Integral High Thrust Structural Pipe Supports
  - 1-Inch-Thick VT Pump Plate Over Wet Well to Provide Maximum Support and Vibration Dampening During Operation
  - Removeable, Heavy-Duty Wet Well Access Hatch with Stainless Steel Hinges for Serviceability
  - Multi-Step, Thermally Cross-Linking, Non-slip Skid Powder Coating for Structural Protection and Operator Safety

## **Station Piping**

- Carbon Steel Station Piping
  - Custom Formulated, Electrostatically Adhering, Thermally Cross-Linking, Fusion Bonded Epoxy Coating
    - NSF 61 Certified, Drinking Water Safe, Fusion Bonded Epoxy Coating
    - Extreme Resistance to Corrosive Water and Harsh Chemicals
  - All Piping Above 2IN Shall Be Both Internally and Externally Coated
- Piping Below 2IN shall be 316SS
- Hose Bibb Connection for Handy, Pressurized Water Access
- Corrosion and Wear Resistant Zinc Hardware

## **Self-Cleaning Automatic Lake Screen**

- QTY (1) SCS10BB Self-Cleaning Lake Screen with SS Hardware and Corrosion Resistant Aluminum Screen, Rated for 1900 GPM at 51 GPM Backwash and 65 PSI Minimum Backwash Pressure with a 2 IN FNPT Supply Line Connection
  - **Control and Power**
    - QTY (1) Manual/Off/Auto ALS Switch
    - ALS Run Command (Auto & Manual)
    - ALS Filter Flush Command
  - **Valving and Piping**
    - Grooved Supply Line Isolation Ball Valve
    - 1.5IN Solenoid Actuated, 24VDC, Pressure Reducing Pilot Valve with Corrosion-Inhibiting Body and Components
    - 2IN Wye Strainer with 24VDC, Solenoid Flush Valve
    - 2IN 316SS Discharge Supply Line Pressure Gauge with 316SS Isolation Ball Valve
    - 1.5IN x 2IN 316SS Supply Line Assembly Piped to Skid's Edge
      - From Skid's Edge to ALS Supply Connection is Customer Supplied and Installed

### **Cellular Central Irrigation Communication Package**

- Allows the **Toro** or **Rainbird** Irrigation Central Computer to Communicate Directly with the MCI Flowtronex Pump Station.
- Allows User Defined Adjustments During Scheduled Irrigation Cycles

### **Warranty Items**

- **Warranty Includes crane if needed**
- **6-year warranty on Variable frequency drive (Includes Lightning Damage Coverage and Labor to Replace)**
- **6-Year Warranty on ALL COMPONENTS IN ELECTRICAL PANEL, Inclusive of power related damage such as lightning. Includes parts only.**
- **2-year warranty on Station.**

**On-Site Set Supervision, Start Up and Training Included in Pricing.**

**New Complete Pump Station Only PRICE: \$225,366.00**

**Includes Freight**

|                                            |                     |
|--------------------------------------------|---------------------|
| PMTS FACTORY CERTIFIED- DEMO- SET-STARTUP  | \$ 33,600.00        |
| CRANE SERVICE & RIGGING- DEMO-SET (2 DAYS) | \$ 7,600.00         |
| AUS Divers (Demo-Install) Auto Lake Screen | \$ 5,400.00         |
| <b>TOTAL</b>                               | <b>\$271,966.00</b> |

**\*SALES TAXES NOT INCLUDED, IF APPLICABLE**

**ADDERS:**

**\*Performance Bond (IF Required) \$ 12,000.00**

**\*Master Electrician Service/ Permit IF required \$ 3,800.00**

**FOB: Dallas, Texas**

**\*Lead Time: 16-18 Weeks + (4 weeks) for Approval Drawings from date of PO#.**

**\*CUSTOMER RESPONSIBLE FOR ANY PERMITS (IF REQUIRED)**

**MCI Flowtronex reserves the right to substitute alternate products for any named brand products based on availability.**

## **PMTS SCOPE:**

- 1) DEMO EXISTING PUMP STATION WITH CRANE SERVICE AND REMOVE COMPLETE EXISTING **STATION THRU EXISTING ROOF COPULA AND DOUBLE DOOR ENTERANCE.**
  - 2) RECEIVE NEW PUMP STATION TRANSPORT AND OFFLOAD WITH CRANE SERVICE.
  - 3) INSTALL NEW PUMP STATION SKID OVER WET WELL ASSEMBLY AND PUMPS MANIFOLD WITH WYE STRAINER AND DISCHARGE PIPING ON ADJUSTABLE SADDLES AND CONNECT TO EXISTING Z-PIPE FLANGE WITH CRANE SERVICE.
  - 4) SET NEW CONTROL PANEL WITH SS 6" LEGS, PUMPS AND MOTORS AND CONNECT MEHCANICALLY.
  - 5) CONNECT TO EXISTING Z-PIPE FLANGE.
  - 6) CONNECT ELECTRICAL CONDUITS TO ALL MOTORS AND CONTROLS TO CONTORL PANEL.
  - 7) SUPERVISE AMERICAN UNDERWATER DIVE TEAM TO REMOVE AND REPLACE AUTO LAKE SCREEN.
  - 8) CONNECT WYE STRAINER FLUSH LINE TO EXISTING FILTERS FLUSH LINE.
- \*PMTS WILL HAUL OFF OLD EQUIPMENT FOR DISPOSAL ON PMTS TRAILER.

## **CUSTOMER RESPONSIBILITIES**

- 1) PROVIDE PMTS CREW TRUCKS AND TRAILER AND TRANSPORT ADEQUATE AND SAFE ACCESS TO EXISTING PUMP STATION SITE FOR CHANGE OUT.
  - 2) IF EXISITNG INTAKE SELF CLEANING SCREEN DOES NOT EXIST, CITY WILL BE RESPONSIBLE FOR INTAKE PIPING ADAPTER MATERIALS TO FIT UP NEW SELF CLEANINGS SCREEN, ADDITIONAL DIVER LABOR AND RUNNING BELOW GRADE 2" WATER FEED LINE FROM PUMP HOUSE TO NEW SELF CLEANING SCREEN.
- \*WILL DEDUCT DIVERS FEE IF NO LAKE SCREEN INVOLVED**
- 3) CUSTOMER RESPONSIBLE FOR ANY PERMITS IF REQUIRED. (PMTS CAN QUOTE ADDER FOR PERMITTING IF REQUIRED)

**Seller warrants that the water pumping system or components will be free of defects in Materials and workmanship for 2 year from date of authorized start-up;**

**Provided that all installation and operation responsibilities have been properly performed and documented by our authorized service provider. The defect must not be caused by ordinary wear and tear on the system. Seller will provide a replacement part or component during the warranty life. Repairs done at Seller's expense must be pre-authorized. Upon request, Seller will provide advice for troubleshooting the system.**

**This proposal contains equipment that may require costly means to remove or replace based on site conditions. Seller will not accept liability for costs associated with the removal or replacement of equipment in difficult to access locations. This includes but is not limited to the use of diving services, barges, helicopters, or other unusual requirements.**

**Default of any agreement with Seller or;**

- a. The misuse, abuse of the pumping package outside its intended use.**
  - b. Failure to perform required maintenance service.**
  - c. Pumping water is not suitable for irrigation.**
  - d. Exposure to electrolysis erosion.**
  - e. Water salinity in excess of 2000 parts per million.**
  - f. Water from a reverse osmosis plant without countermeasures in place.**
  - g. Water with a Langelier Index less than -0.5 and greater than +1.5**
  - h. The presence of destructive gaseous or chemical solutions in or around the packaged system.**
- 1. Customer driven delays of 6 months or more are subject to a pricing review.**
  - 2. The parties explicitly agree that liquidated damages shall not be applicable or accepted in any circumstance arising out of or in connection with the project by Motor Controls Inc. Liquidated damages, penalties, or similar charges imposed for delays, defaults, or any other reason, shall not be considered valid, and the purchasing party expressly waives their rights to seek or enforce such damages against Motor Controls Inc. unless a written and signed approval from Motor Controls Inc. has been obtained.**
  - 3. Any field modifications made to piping supplied MCI without MCI's expressed approval will void the warranty.**

4. After PO, any SCADA related needs beyond the listed scope of work will be subject to a change order. Any remote SCADA integration assistance required will be billed at \$250/hour.
5. The terms contained herein may be modified only by written agreement signed by Buyer and an officer of Seller, PMTS/MOTOR CONTROLS INC.

Is this sale Taxable? (Circle one)      YES      NO

(If non-taxable please provide tax exempt certificate for the INship-toIN state)

**\*\*Please fill out fields below and return all pages. \*\***

Date: \_\_\_\_\_ Total Purchase Amount: \_\_\_\_\_

Buyers Name: \_\_\_\_\_

Buyers Signature: \_\_\_\_\_

Email Order Confirmation To: \_\_\_\_\_

Requested Ship Date: \_\_\_\_\_

Deliver To: \_\_\_\_\_

Delivery Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Delivery Contact Name: \_\_\_\_\_

Delivery Contact Number: \_\_\_\_\_

Delivery Contact Email: \_\_\_\_\_

Attentively,

*Ric Martinez Sr.*

Pump Mechanical Technical Services  
Ric @PMTService.com (512) 743-7867

Billing  
PO Box 1566  
San Marcos, TX 78667

Physical

3400 FM 78  
McQueeney, TX 78123  
(830) 4317181