

# INVITATION TO BID INSTALLATION OF UV DISINFECTION ASSEMBLIES AT MULBERRY WW TREATMENT PLANT PROJECT NO. B26-PW-10733-500714 ADDENDUM NO. 1 DECEMBER 4, 2025

Attention is called to the following changes, additions, clarifications and/or deletions to the original solicitation and they shall be considered in preparing submissions:

There is no change in the opening date. **Submissions are due no later than 3:00 p.m., Arizona Time, DECEMBER 17, 2025**, at the City Clerk's Office, 2330 McCulloch Blvd. N., Lake Havasu City, AZ 86403 or electronically via the DemandStar system.

# **ITEM ONE (1): QUESTIONS AND ANSWERS**

**Question 1:** Can we get the specifications for the UV assemblies?

**Answer 1:** Yes. Please refer to Exhibit A of this Addendum.

**Question 2:** Is the system connected to the SCADA network?

**Answer 2:** It is not currently connected; however, it will need to be reconnected to the SCADA system after the installation is completed.

**Question 3:** What sort of electrical work is involved?

**Answer 3:** While the system should theoretically be "plug and play", there will be some replacement of control units. Exhibit B shows photos (taken on the pre-bid site walk) of items being replaced that may need electrical work.

Question 4: Will the plant need to be shut down during the installation process?

**Answer 4:** Ideally, one bay will be shut down for replacement while the other is left running. Although not ideal, we can shut the plant down for up to 8 hours if necessary.

**Question 5:** What about the start-up after installation is complete?

**Answer 5:** The manufacturer will be on site twice for start-up operations (once for each bay).

**Question 6:** Will the contractor be responsible for disposing of the old components?

**Answer 6:** No. The City will retain ownership of any removed components as they can be used as spare parts for the other two plants (until such time their respective UV assemblies are replaced).

Question 7: Will the deck plates need to be replaced?

**Answer 7:** No. The existing plates will be reinstalled on each bay.

**Answer 8:** Are there any components *not* being replaced?

**Answer 8:** The hydraulic control panel for the entire system and the shutoff gates at each end of the two bays will remain in place.

**Question 9:** Are there any electrical "as built" plans available?

**Answer 9:** City staff believes there are, however, it will take some time to locate them. Once found, they will be posted in a subsequent Addendum 2.

Andrew Klos, CPPB Senior Procurement Specialist

#### **ULTRAVIOLET MODULES**

Model and Make: Standard UV3000PlusTM System

Quantity Supplied: 36 UV modules each containing 6 Lamps

Material of Construction: 316 Stainless Steel frame

Approximate Weight: 98 lbs

#### SYSTEM CONTROL CENTER

**Quantity Supplied:** One (1) SCC **Location/Mounting:** Wall Mounted

Enclosure Material / Rating: 304 Stainless Steel - Type 4X (IP66)

Controller Type: Allen-Bradley L320ER

Operator Interface: Beijer-Type 4X Outdoor Rated (12")

**SCADA Protocol:** Modbus Ethernet (PLC)

Surge Protection: Yes

Approximate Weight: 200 lbs

# **POWER DISTRIBUTION CENTERS**

Quantity Supplied: Six (6) PDCs

Enclosure Material / Rating: 304 Stainless Steel - Type 4X (IP66)

Surge Protection: No

Approximate Weight: 220 lbs

#### **HYDRAULIC SYSTEM CENTER**

The Existing Hydraulic System Center (HSC) will be utilized however new hydraulic hoses will be provided to run from the HSC to the PDC's

#### SUPPORT RACKS

**Quantity Supplied:** Six (6) Module Support Racks **Material of Construction:** 304 Stainless Steel

Approximate Weight: < 100 lbs each

# **LEVEL CONTROLLER**

The existing Automatic Level Controllers (ALC's) will be utilized.

## WATER LEVEL SENSOR KITS

Quantity Supplied: Two (2) Electrode type low water level sensors and two (2) LCP per UV

channel

**Enclosure Rating:** Type 4X

Approximate Weights: 25 lbs (LCP) and 10 lbs (Sensor)

## **FLOW CONDITIONER**

**Quantity Supplied:** Two (2) – one per channel **Material of Construction:** 304 Stainless Steel

Associated Headloss per FC: 1.7 inches at Peak Flow

Approximate Weight: 60 lbs

#### **STREAM™ CONNECTION**

Stream™ Connection is a digital support tool that provides our Technical Assistance Center with instant access to the UV system to quickly diagnose and resolve UV issues. The Stream connection is a free service to streamline technical support requests. Stream provides secure and encrypted connection external to the SCADA network and configured in the UV System Control Center.

## SPARE PARTS, SAFETY EQUIPMENT AND ADDITIONAL EQUIPMENT

Description	Quantity
TrojanUV3000Plus Integra Lamp/Sleeve Assembly (4 pack)	5
TrojanUV3000Plus Ballasts	6
Operators Kit (including face shield, gloves and cleaning solution)	2
ActiClean Drill Pump Kit	1
Module Cables	5
Communications Board	1
Wiper Seal Kit	10 Canisters
Electrode Level Sensor and Probes	1
Wiper Canister Nipple	12

## **DOCUMENTATION (SHOP DRAWINGS AND O&M MANUALS)**

The following documentation will be supplied by Trojan per the following schedule:

- One (1) electronic copy of Trojan Shop Drawing Submittals within a minimum 4 6
  weeks after receipt of written purchase order. Note that Submittals will not be
  issued externally until PO is fully executed.
- One (1) electronic copy of Trojan Standard O&M manuals at time of equipment delivery (hardcopies available upon request)

## **DELIVERY, START-UP AND TRAINING**

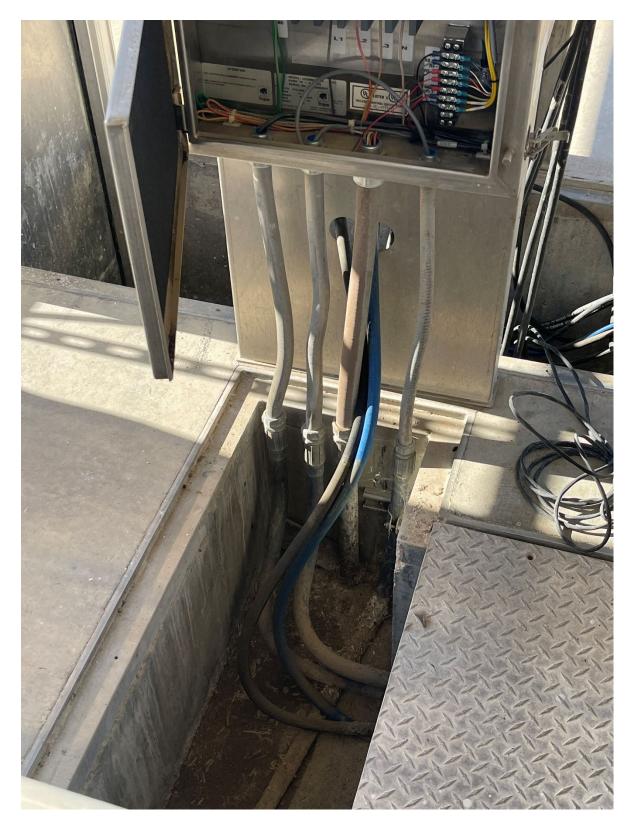
The following start-up services will be provided by Trojan-certified technicians:

- Installation assistance as required by phone or fax. Technical Assistance Center 1-866-388-0488 or tac@trojantechnologies.com
- Up to 6 days in 2 trips for:
  - start-up, testing of the installed UV equipment and classroom and/or jobsite training for operations staff
    - Note that If the Trojan's Certified Service Technician determines the Contractor work is not complete and the start-up cannot be completed in the allotted time a return visit will be scheduled at the Contractors expense.
    - If trainees are not available a return visit will be scheduled at the Contractors

## **WARRANTY**

Trojan will warrant the equipment and parts for 12 months after UV equipment start-up or 18 months after equipment shipment, whichever comes first. Warranty does not cover labor, consumables and/or wear components. Refer to attached Terms and Conditions for additional details.

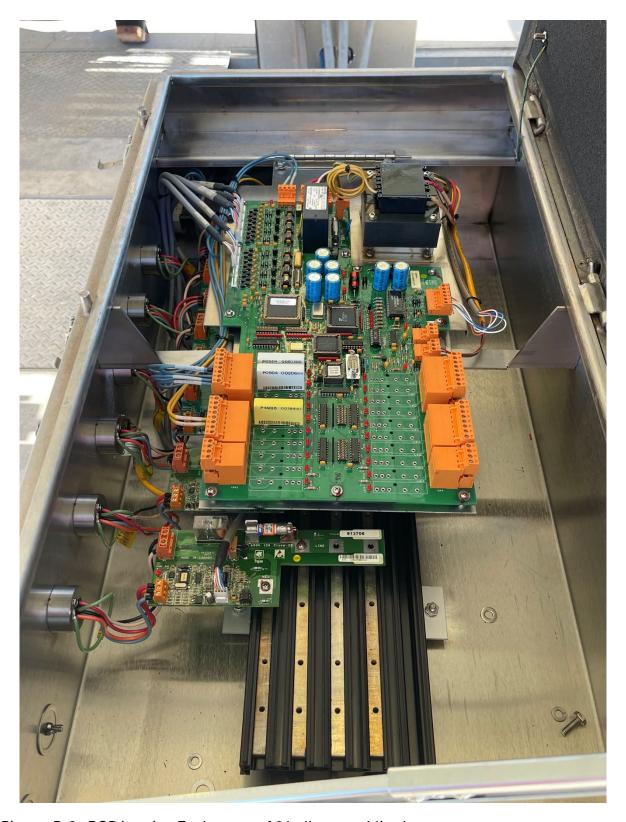
- UV lamps shall be warranted for 12,000 hours prorated after 9,000 hours.
- Lamp drivers shall be warranted for 5 years, prorated after 1 year.



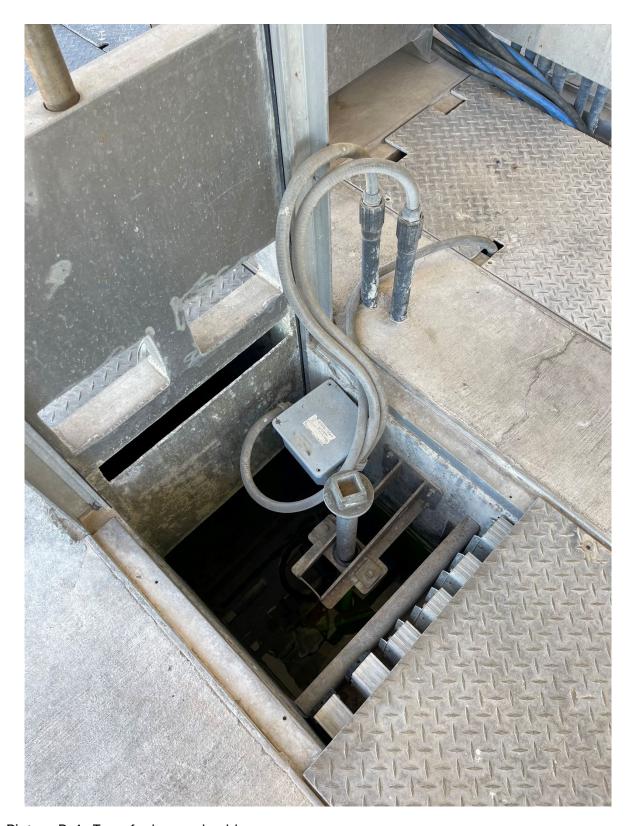
Picture B-1 : Conduit



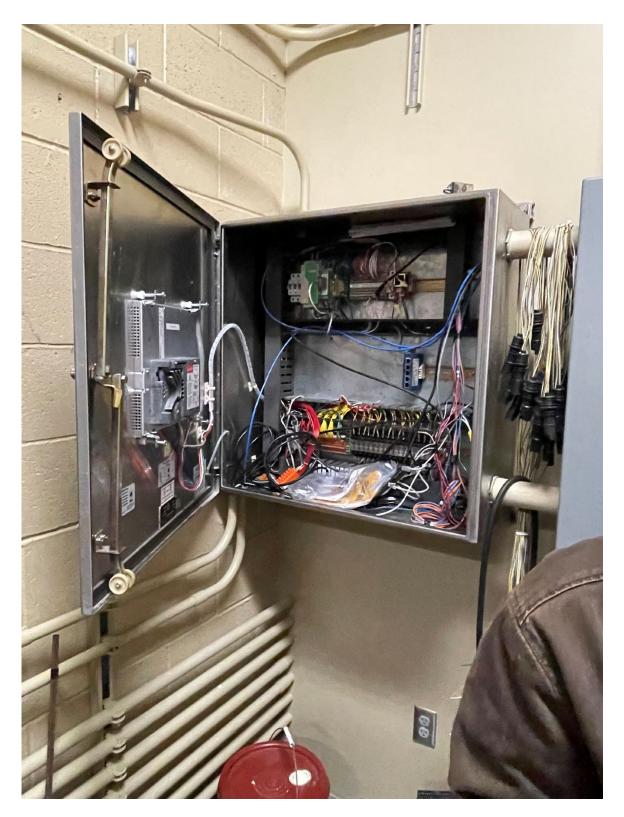
Picture B-2: Cables from Power Control Board to bulb assemblies.



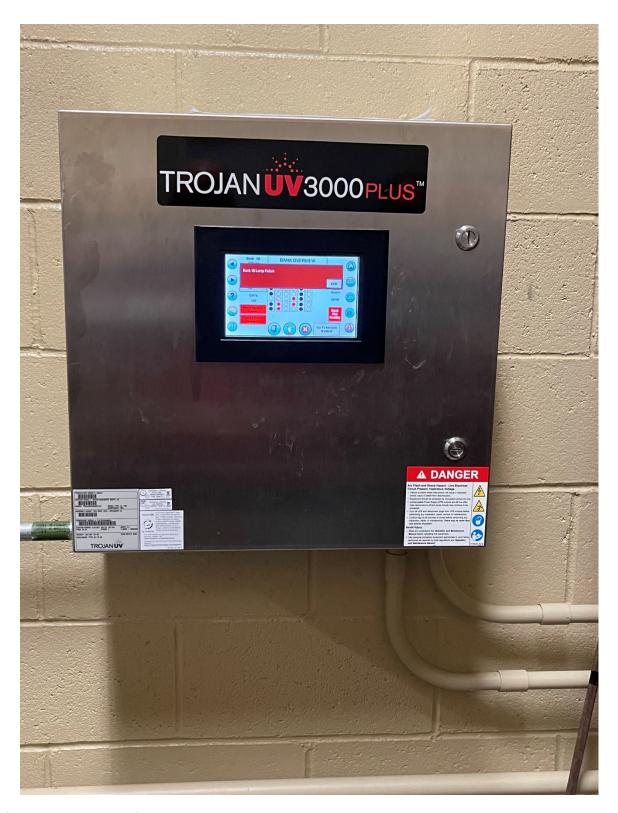
Picture B-3: PCB interior. Each group of 6 bulb assemblies has one.



Picture B-4: Transfer box and cables



Picture B-5 : Previous controller box (functioning as a junction box)



Picture B-6 : Actual Controller box



Picture B-7: Bulb assembly (6 UV bulbs on stainless steel rack with wiring). Installed as groups of six racks. A total of six groups is installed (36 total assemblies).