### **AMENDMENT #1**

### **EXHIBIT A**

#### SCOPE OF ENGINEERING SERVICES

# WATER RECLAMATION FACILITY DISTER MCC & UV/ADMIN TRANSFER SWITCH REPLACEMENT PROJECT NO. 19-2485/CIP NO. 51216

## **PROJECT DESCRIPTION**

HDR was selected by the City to provide engineering services for the design and construction of the Digester MCC & UV/Admin Transfer Switch Replacement project. The UV/Admin Building main service switchgear is operationally deficient and replacement of the equipment is required. Similarly the Digester Facility Motor Control Center (MCC) has reached the end of its useful life and was recommended for replacement in the recently completed Facility Plan. These improvements include:

- Replacement of the Digester Complex MCC-4. The new MCC will be relocated to the adjacent oil storage building. A portion of the existing building will be walled off and HVAC equipment will be provided for heating, cooling, and air purification.
- Replacement of the UV/Admin Building Main Service Switchgear. The switchgear has limited reliability due to age and condition of the equipment. Replacement of the switchgear is necessary to provide a reliable source of power during utility outages and after utility power is restored.

## **SCOPE OF SERVICES**

Additional improvements to be included in the design and construction phase services which are being added by Amendment #1 include:

- Addition of a new power feed to the recently constructed cold storage shed. Construction plans and specifications will be updated and added to the set to include this new power feed.
- Addition of electrical metering device to monitor the UV/Admin power source and report status to SCADA. A meter specification and details for connecting to the existing SCADA system were provided and a scope of work was developed and provided to the City's SCADA integrator.
- Addition of civil site work drawings is required to replace surfacing that will be removed to access underground conduits. Revisions to underground conduits are required to accommodate the new gear and bring the transfer switch installation into compliance with the electrical code.
- A site visit by HDR's Sr Electrical Engineer was completed at the request of the City. The visit
  was required to investigate unknown conditions and develop recommended solutions to project
  challenges.
- Incorporation of revisions to draft plans after the electrical site visit. Utilizing the old MCC building as a junction box location was the City's initial preferred approach but was subsequently determined not to be the preferred solution.
- Additional construction phase services were requested by the City due to the projects increased complexity and requirements beyond the original project requirements.

The additional improvements listed above will be incorporated into the existing scope of engineering services and carried forward through the construction phase services for the project.

## Assumptions:

- All daily on site construction phase services will be conducted by local HDR staff. The local HDR staff will coordinate with outside offices as needed to ensure compliance with the project requirements.
- The amendment adds 40 hours of on-site observation, the original contract included 8 hours, and therefore the total onsite time will be 48 hours.
- One trip for verification of project completion is included for a Sr Electrical Engineer.
- A total of twelve construction meetings are included in the amended scope of services.