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September 26, 2019

The City of Bisbee
Jesus Haro
1415 Melody Lane, Building G
Bisbee, AZ 85603

Subject: Out of Scope Letter Agreement – SCADA Upgrade and Improvements

Dear Jesus,

Operations Management International, Inc. (OMI) is pleased to offer services to procure and manage the San Jose WWTF SCADA system upgrades and assess the options for communicating the City's lift stations back to the SCADA.

- Scope: OMI will provide services set forth in Exhibit A
- Term: Services will commence upon the City of Bisbee providing OMI with the Notice to Proceed.
- Price of Services: The lump sum price for the services provided under this Out of Scope letter agreement \$83,948.20.
- Billing and Payment Terms: The City of Bisbee shall be billed for these additional services upon completion of the work and payment will be due and payable within thirty (30) days following receipt of OMI invoice.

These services shall be performed under the terms and conditions per Section 13.2 Out of Scope, of the Agreement dated November 26, 2018 between OMI and the City of Bisbee, which are incorporated herein by reference, and remain in full force and effect.

If these terms are agreeable to you, please sign both copies of this letter. We will return on fully executed original for your files.

Sincerely,

Ron Jacobsen
Project Manager

Both parties indicate their approval of the above described services and by their signature below:

City of Bisbee

Operations Management International, Inc.

Authorized: 

Authorized: 

David M. Smith, Mayor

David Sohns, Manager of Projects

Date: October 17, 2019

Date: 10/03/19

Exhibit A

General

This scope of work describes the services rendered by Jacobs / OMI to the City of Bisbee to provide oversight of the SCADA upgrades, assess the current vulnerabilities related to cyber security and evaluate options to communicate the lift stations back to the SCADA server.

Scope of Work Tasks

The proposed Scope of Work is described, as outlined below:

Task 01: SCADA Upgrades

The purpose of this task is to provide oversight management, system coordination and procure Aqua Aerobics efforts to upgrade the current SCADA server located at the San Jose WWTF. It has been identified by Jacobs staff that there are issues with communications to the current software housed on the SCADA server causing inherent operational control issues. The SBR relies on automation feedback from the SCADA in order to stay in compliance with the WWTF discharge permit.

A few operations concerns are listed below:

- Operational parameters not polling into the PLC and HMI which allow real time data, 24-hour data tracking. The SBR system relies on this data to correct itself operationally to adjust units according to flows, accurate timing for wasting, valve operations and aeration.
- On 9/25/2019 the staff arrived at the treatment plant and noticed that the plant lift station did not function correctly. There were no notifications via SCADA to inform staff of high levels and the third influent did not come on as intended due to the lack of communications from the headworks back to the HMI.
- The dissolved oxygen monitoring units are not polling correctly thus potentially using more air than required resulting in increased blower demand.
- There is no 24-hour trending of influent and effluent flow data. This is critical to determine peak flows and total flows. The SBR relies on flow information to control processes during dry weather and wet weather conditions. The UV system relies on this flow data to determine how much UV power is required to control disinfection.
- The staff relies on the plant data gathered manually to control processes, to track equipment run times for preventative maintenance, estimating flow data and process control changes. With the SCADA improvement much of this estimating will be only a back up when needed.

The SCADA upgrade will also include a Historian for data logging. The current SCADA system does not have an historian to permanently log data from the SBR system. Having an historian is critical for performance monitoring, trending for troubleshooting process changes and eliminates the need for daily manual spreadsheet tracking.