



TO: Eric Wenger, P.E., Director
Public Works Department

FROM: Chris Browning, General Manager
Oklahoma City Water Utilities Trust

DATE: October 1, 2021

SUBJECT: Request for Engineering Services
Water Project WT-0253
Draper Water Treatment Plant Existing HSPS Electrical Improvements
Draper Water Treatment Plant

Please advertise for consultants to submit Letters of Interest to provide preliminary engineering, final design, construction administration, construction management, inspection, and as-built drawing services for the above-mentioned project.

Oklahoma City Water Utilities trust (OCWUT) owns, operates, and maintains the Draper Water Treatment Plant (WTP) to provide drinking water to its citizens and wholesale customers. The WTP has a rated capacity of 150 million gallons per day (MGD) with plans to expand in the future to 200 MGD.

The Draper WTP receives two separate power feeds from Oklahoma Gas and Electric at 4.16 kilovolts (kV). Both feeds go to a substation that provides power to the medium voltage switchgear located in the Auxillary HSPS. This switchgear provides power throughout the facility via a medium voltage, 12.47 kV electrical loop. A recent study (WY-0002/SY-0003) evaluated the electrical infrastructure and developed an immediate and near-term improvements plan.

The Existing HSPS was constructed in 1964, during the original construction of the Draper WTP. The switchgear in the Existing HSPS has reached the end of its useful life due to various factors. Components of the Existing switchgear are undersized and/or failing, which limits the operation of the Existing HSPS. The Existing HSPS is susceptible to lightning strikes, which result in damage to sensitive electrical and control equipment. In addition, the working space in the Existing HSPS is extremely limited.

The engineer is responsible for assessing the current switchgear, conduits, and wiring in the Existing HSPS and providing recommendations for removal and replacement. The engineer is also responsible for review of electrical equipment for compliance with all applicable codes. Finally, the engineer will provide preliminary engineering, final design, bidding, construction administration and management, inspection, and as-built services for the recommended improvements of the switchgear in the Existing HSPS.