



SOUTH TREATMENT PLANT RAW SEWAGE PUMPS & DRIVES REPLACEMENT

Project Summary

This work was conducted in the operating wastewater treatment facility of South Treatment Plant in Renton, WA. The new equipment replaces three of six raw sewage pumps in operation since South Plant came online 50 years ago. King County estimates the new pumps, which feature variable frequency drives that can adjust to flow rates, will reduce the plant's energy consumption by 1.9 million kilowatt hours per year per year, equivalent to powering 212 homes annually.

Equipment and Systems Overview

- 480V(low) & 4160V(medium) Variable Frequency Drives
- 600V Metal Class MCC
- Dry type transformers
- Medium Voltage Switchgear (temporary and permanent)
- Lighting
- raceways, boxes and supports
- Arc Flash Protection
- Grounding

Offeror Role

Subcontractor

Owner Information

King County Department of Natural Resources And Parks
South Treatment Plant, 1200 Monster Road Renton, WA

Glen Hiraki, Project Manager
glen.hirkai@kingcounty.gov
206.263.1783

Project Value

\$9,525,000

Contract Amount & Type

\$ 2,988,200—*Firm Fixed Price*

Customer Information

Harbor Pacific, Inc.
19628 144th Ave NE Suite A
Woodinville, WA. 98072
Gary Wood, Project Manager
425.488.7131 x 105

Project Start and Finish Dates

9/17/2014 —3/3/2017

Project Location

South Treatment Plant
1200 Monster Road SW Renton, WA

The scope of this project was to upgrade three of the six raw sewage pumps; replace the clutches with VFD's; upgrade the building HVAC system, remove and replace Medium and Low Voltage switchgear which provides power to the Administration, Maintenance and Influent buildings; replace wiring and cable; add control instrumentation as shown on the drawings. The pumps being replaced were Pump 1, 4 & 6 with their respective drives. The new pumps remained the same sizes 36 x 36 and capable of flows of 80mgd; 48x 48 capable of 110MGD and 30X30 capable of 60mgd. Pumps reused the existing piers with modifications.

Burke Electric Scope

Burke was responsible for removing and replacing Medium and Low Voltage switchgear which provides power to the Administration, Maintenance and Influent buildings; replace wiring and cable; add control instrumentation as shown on the drawings. Burke was also responsible for providing temporary switchgear capable of operating the Administration Building, the Maintenance building and Influent pumps 2, 3, 4, and 5. Temporary Switchgear was turned over to King County in working condition at the end of construction. Burke was also responsible for the testing and commissioning for all new equipment.

Burke Electric Project Personnel

Ken Nash, *General Foreman*
Dominic Burke, *COO & Project Manager*
Katie Morton, *PE & Safety Manager*

