

working for clean rivers

Authorize competitive solicitation & contract to procure large electrical gear for the Columbia Boulevard Wastewater Treatment Plant Main Substation Replacement Project Council Item #860



ENVIRONMENTAL SERVICES CITY OF PORTLAND

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BES Project Number E10897

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Main Substation – Location





Main Substation – Purpose and Function

- Receives power for entire Treatment Plant from Portland General Electric (PGE)
- Distributes power to all facilities and equipment at Treatment Plant
- Protects Treatment Plant electrical distribution system from damage resulting from electrical malfunctions





Action Item:

- Main Substation originally constructed in 1971; has reached end of life
- Entire substation must be replaced





Milestones to Date

- Ordinance 189054 approved in June 2018 for design of Main Substation Replacement
- Design documents are
 60 percent complete
- BES is preparing to purchase major, large, long-lead items of electrical gear in order to expedite construction phase





Project Budget and Schedule

- Procure Owner-Furnished Equipment Cost Estimate: \$3,500,000
 - Pre-purchase cost estimate level of confidence: Moderate
- Total Project Budget: \$5,054,400





Purpose of Pre-Purchase of Large Equipment

- To expedite construction phase of Main Substation Replacement
 - Long-Lead Electrical Items will take 6 months to manufacture and deliver
- To enable final construction documents to reflect the selected equipment supplier
 - Smoother Construction Phase
 - Reduced Risk of Change Orders and Contractor Cost Overruns



Main Substation Construction

- The construction phase of the Main Substation Replacement will be performed by the pre-selected contractor for the Secondary Treatment Expansion Program (STEP)
- Installation of this equipment will be part of a negotiated guaranteed maximum price agreement to be presented to Council as part of the Secondary Treatment Expansion Program (STEP)



Authorize a competitive solicitation and goods and services contract to procure 15 kV primary metering switchgear, 15 kV main switchgear, 5 kV switchgear, and medium-voltage substation transformers for the Columbia Boulevard Wastewater Treatment Plant, for the amount of \$3,500,000.



Questions

Thank you



Environmental Services | E10897 Council Ordinance Item #860