

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



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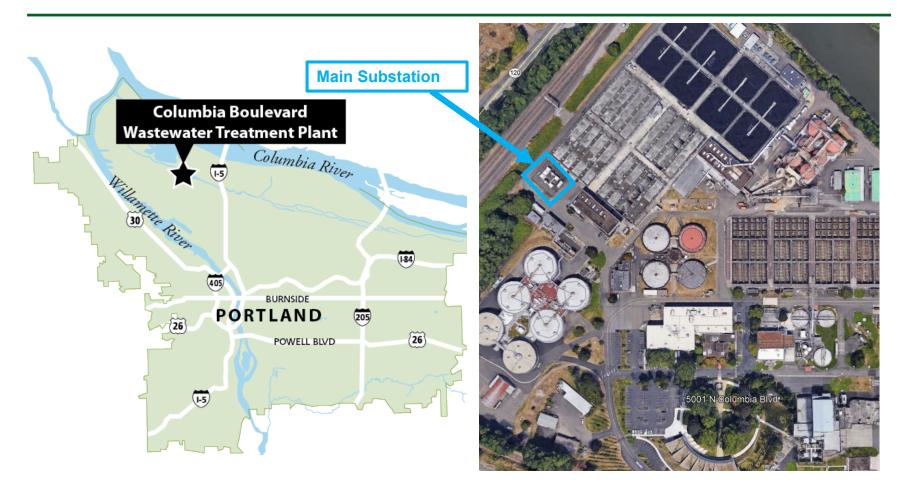
Project Manager

BES Project Number E10897

September 11, 2019



### **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

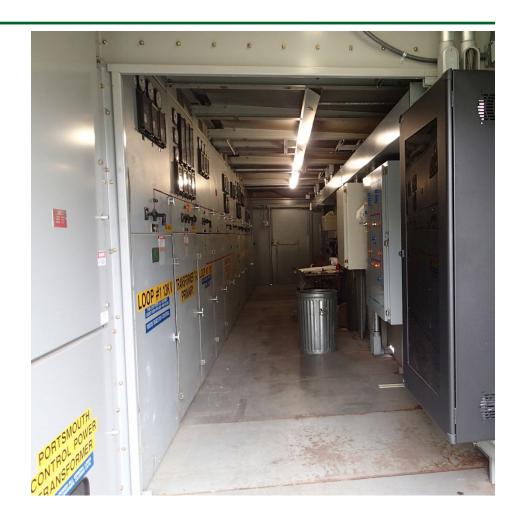




#### **Milestones to Date**

- Ordinance 189054

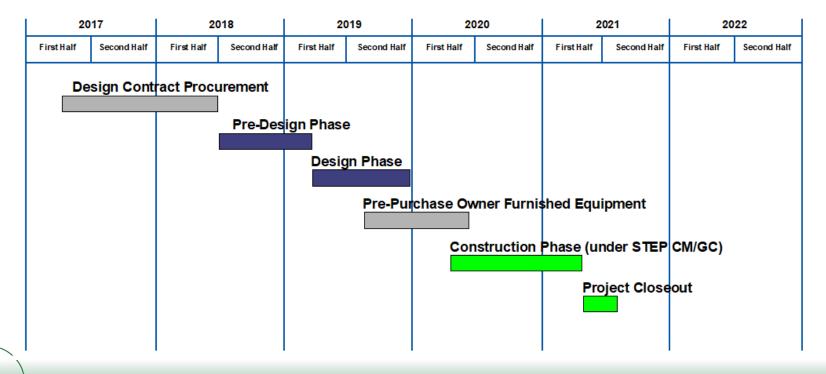
   approved in June 2018
   for design of Main
   Substation
   Replacement
- Design documents are 60 percent complete
- BES is preparing to purchase major, large, long-lead items of electrical gear in order to expedite construction phase





## **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)



#### Recommendation

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

