

working for clean rivers



Sheridan Trunk Work Zone 1/5 Realignment (E11006)

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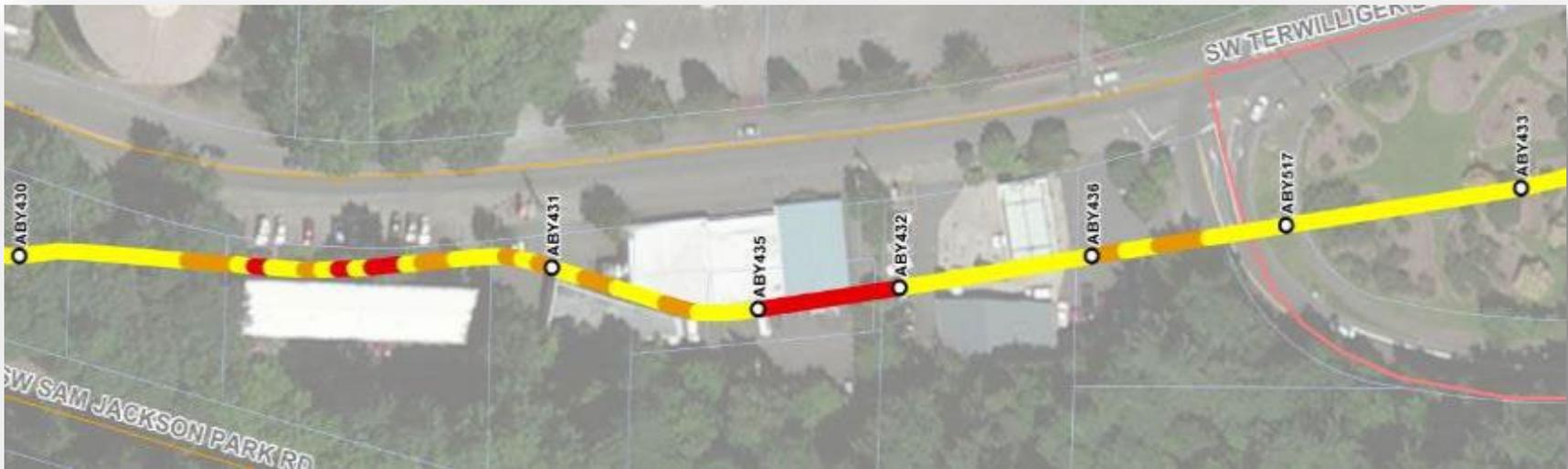


ENVIRONMENTAL SERVICES
CITY OF PORTLAND

Mingus Mapps, Commissioner
Dawn Uchiyama, Director

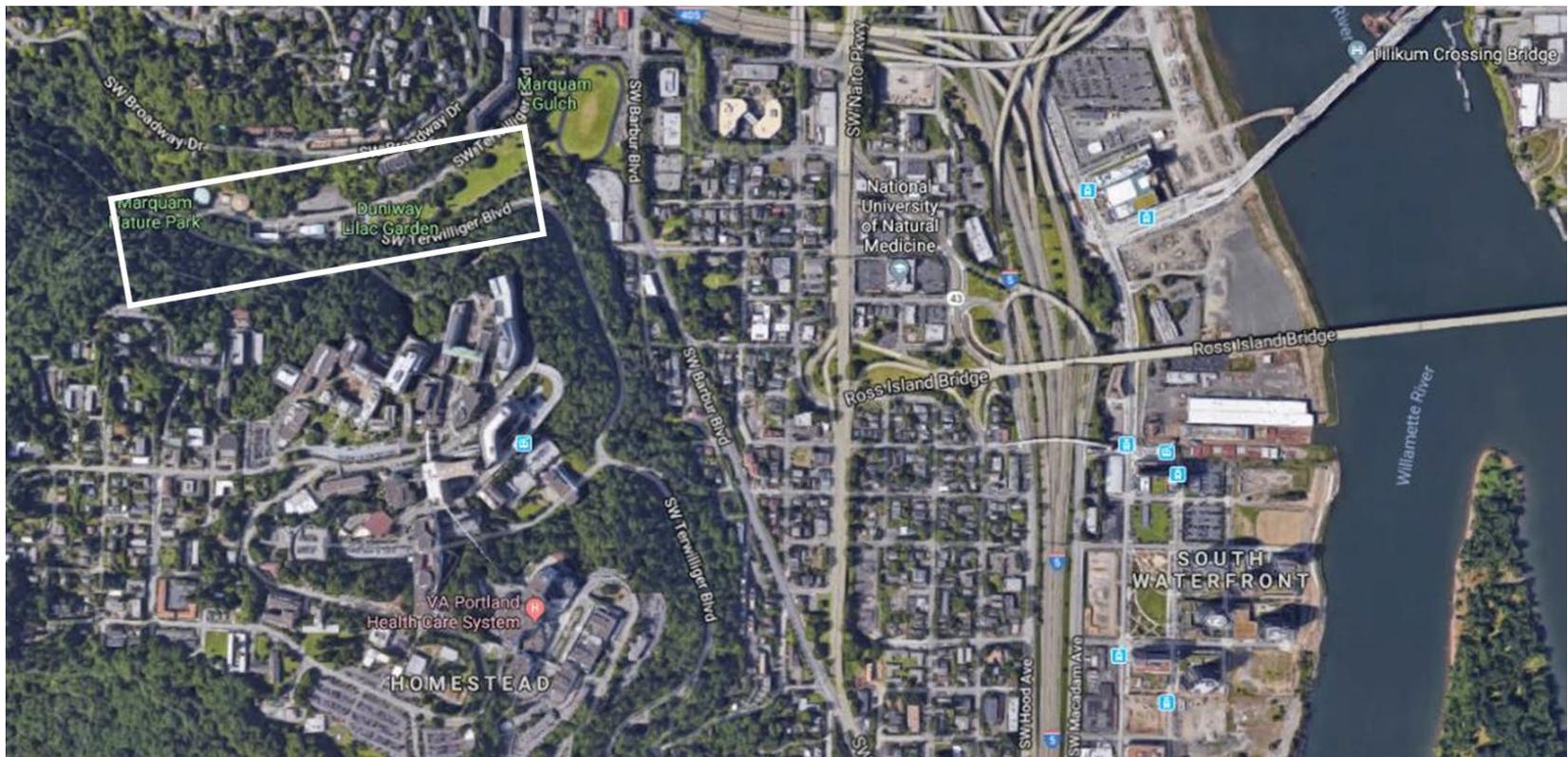
THE PROBLEM

- Video inspections revealed severe structural defects in parts of Sheridan Trunk sewer pipeline.
- A pipeline collapse would cause extensive surface flooding and create a risk to public health and safety.



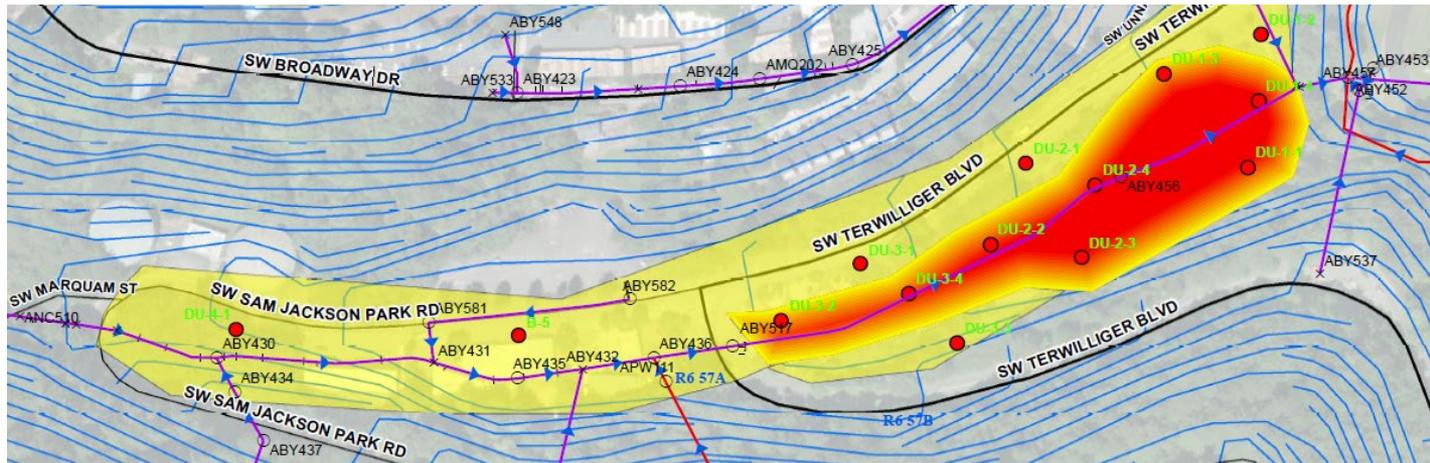
PROJECT OVERVIEW

- Sheridan Trunk built in the early 1900's
- Constructed in Marquam Gulch, Southwest, Portland
- Monolithic concrete 40"x40" horseshoe shaped pipeline, 20-85 feet deep.



PROJECT CHALLENGES

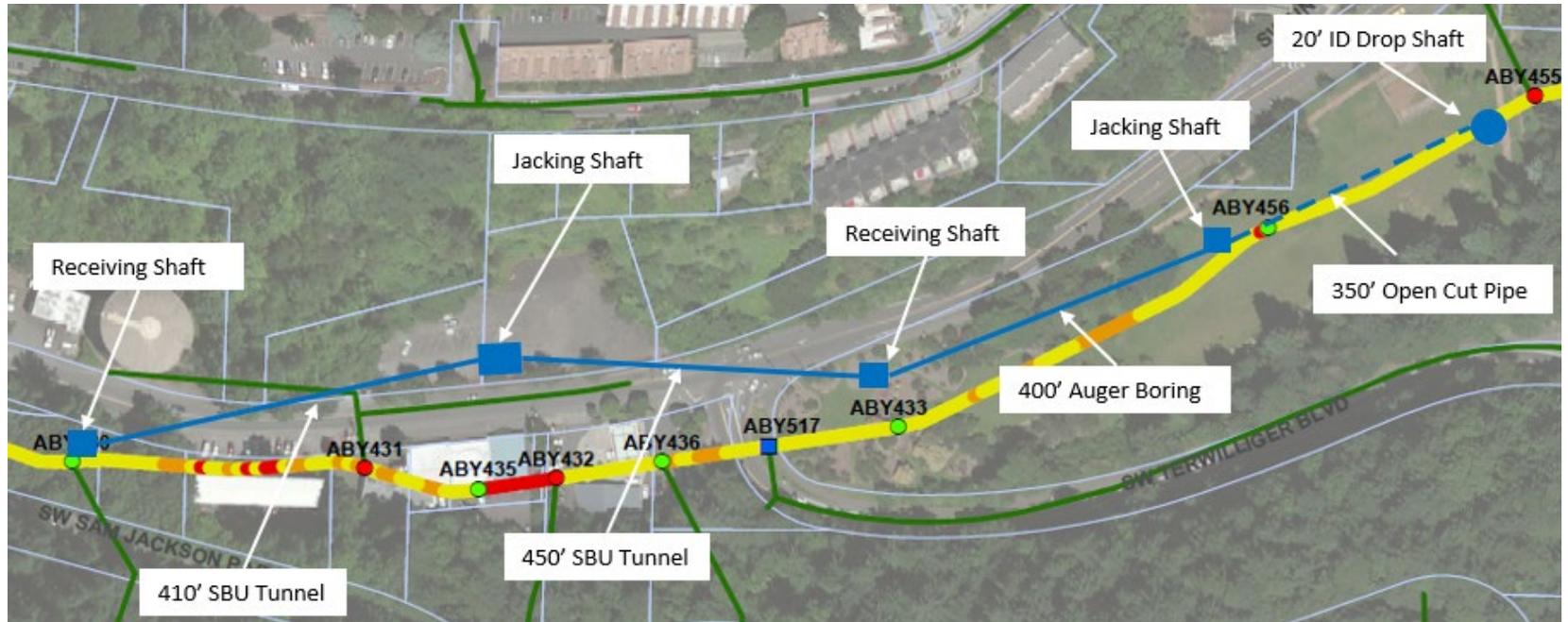
- **VARIABLE SUBSURFACE CONDITIONS**
- Excavation of rock in the upper segments; noise and vibration impacts
- Existing sewer lies under an historic landfill; contaminated media and odors



- **CONSTRUCTION CONSTRAINTS**
- Construction on private property; OHSU, apartments, lab, dispensary, gas station
- Close proximately to OHSU/VA ambulance route; SW Sam Jackson Park Road.
- **STAKEHOLDERS AND PUBLIC INVOLVEMENT**
- Private businesses, institutions, public parks
- Construction easements on private properties



THE SOLUTION



- Realign pipeline to the north; away from commercial/residential buildings
- Specify trenchless pipeline construction (tunnel bore)
- Retire existing trunk sewer pipeline in place and quitclaim sewer easements



PROJECT COSTS & SCHEDULE

Approach	Construction	Total Project
<i>Design-Bid-Build Delivery</i>	<i>Approx. \$18.4 M</i>	<i>Approx. \$21 M*</i>

* Class 3 ranges (-20% lower to +10% higher) not shown

Design		Procurement		Construction	
<i>Start</i>	<i>Finish</i>	<i>Start</i>	<i>Finish</i>	<i>Start</i>	<i>Finish</i>
<i>OCT 23</i>	<i>DEC 24</i>	<i>JAN 25</i>	<i>MAY 25</i>	<i>JUNE 25</i>	<i>AUG 27</i>



COUNCIL ACTIONS

- October 2018
 - Approved award of on-call, task order-based contracts in the Large-Scale Sewer Rehabilitation Program (LSSRP)
- Next:
 - Authorization to Award Construction Contract January 2025



DESIGN ENGINEERING TEAM

- Previous Project Development Phase completed with existing on-call services utilizing Large Scale Sewer Rehabilitation Program contract
- Utilizing LSSRP Task Order for Design would greatly exceed task order value limits
- New Design Engineer Team selected through competitive, QBS procurement
- New Design Engineering Team brings the expertise with the complex design elements and a history of working on similar projects; e.g., westside and eastside CSO tunnels, conduits and shafts
- Total negotiated fees = **\$1,458,892**
- COBID subconsultant utilization of **45.7%**
 - 26.3% to MBE
 - 19.4% to WBE, ESB, DBE



RECOMMENDATION

- Authorize award of PTE contract for project Design Phase

Questions?

