



# City of Coburg 750,000 Gallon Reservoir

City Council Special Session  
Tuesday, April 26, 2022





# Agenda

- 1 Introductions
- 2 Benefits of Centralized and Elevated Storage
- 3 Conceptual Site Layouts
- 4 Conceptual Cost Estimates
- 5 Elevated Tank Types
- 6 Next Steps
- 7 Q&A Discussion

# Benefits of Centralized and Elevated Storage



## **Proximity to other City Water Facilities**

Operations staff visits the Sarah Lane Tank / BPS site regularly; advantageous to build new facilities close-in



## **Reliability of Gravity Storage**

An elevated reservoir would continue to serve customers through an extended power outage or standby power failure



## **Power Savings**

Pump water to the elevated reservoir, then flow by gravity (system currently pumps 24/7)



# Conceptual Site Layout 1

Alt 1 - Build new elevated reservoir, rehabilitate existing reservoirs  
(elevated reservoir at Sarah Lane may not be feasible; alternate sites to also be reviewed)

## Rehabilitation Elements may include:

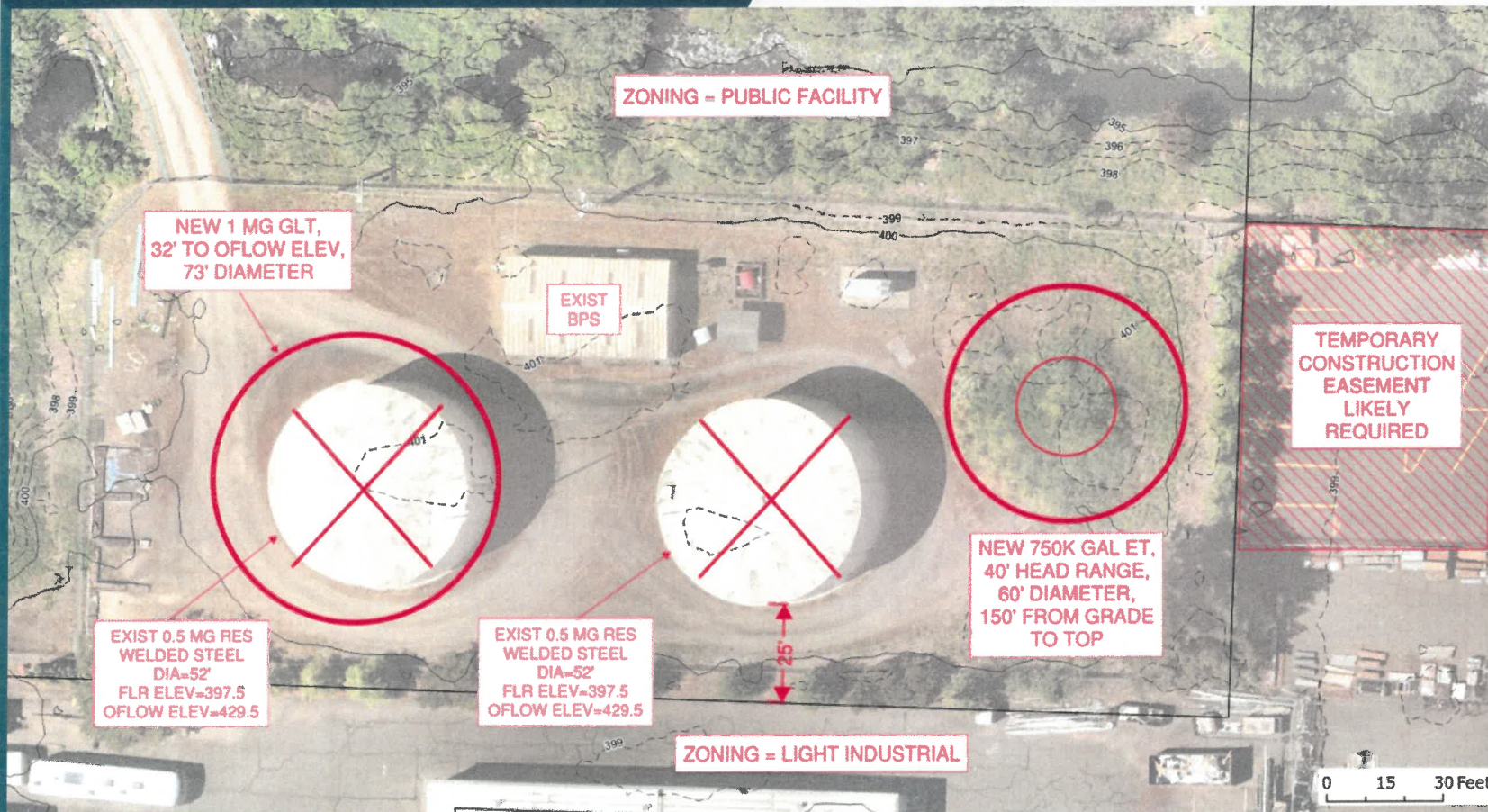
- Expand concrete foundation (seismic)
- Add mechanical anchorage (seismic)
- Miscellaneous stiffening and appurtenance upgrades
- Maintenance painting





# Conceptual Site Layout 2

Alt 2 - Build new elevated reservoir, replace existing reservoirs



**This Alternative will be necessary if:**

- The cost of rehabilitation outweighs the cost of replacement (seismic)
- The site is too constrained to add an elevated reservoir, and a different site is not identified

# Conceptual Costs

- Initial Project:

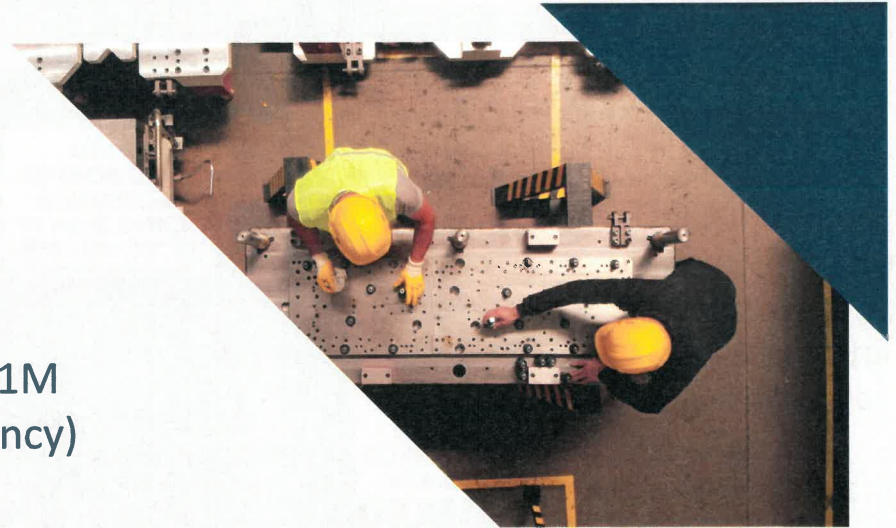
- New 750K Gallon Elevated Tank\* -- \$3.5M
- Mobilization, Piping, BPS modifications -- \$1M
- Total = \$4.5M to \$5.5M (including contingency)

- Future Elements:

- Tank Rehabilitation\*\* -- \$1.6M (including contingency)
- Tank Replacement -- \$2.1M (including contingency)

\*Will depend on style of tank selected. Cost is representative of “multi-column” or “legged” tank, which will be most cost effective

\*\*Scope is uncertain. A Seismic Analysis is needed to determine viability of rehabilitation.







Multi-Column  
Elevated Tank





# Spheroid Elevated Tank







Composite Elevated Tank

# Next Steps

- ✓ Conduct Feasibility Study for new elevated reservoir
  - ✓ Review possible elevated reservoir construction at Sarah Lane site
  - ✓ Review possible elevated reservoir construction on a different parcel in the City, locations TBD
  
- ✓ Seismic Analysis of existing reservoirs
  
- ✓ Hydraulic Modeling
  
- ✓ Public Outreach Assistance







Thank you!

*murraysmith* 

