



Creating Flexibility in Bellevue

A Unique Approach to Maintaining Water Service During Construction of Critical Facilities and Lessons Learned

PNWS-AWWA | Spring Conference

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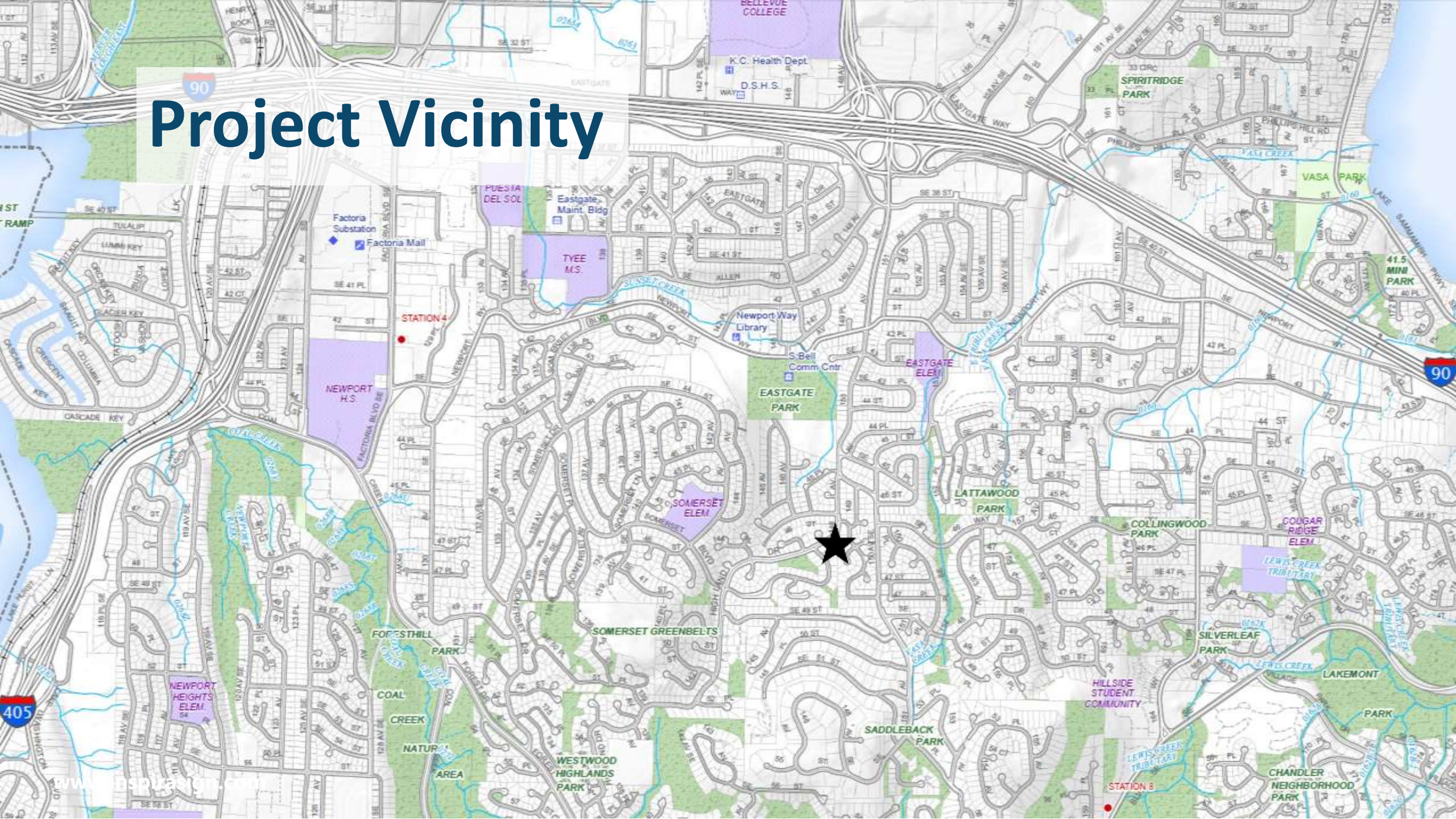
Agenda





Introduction

Project Vicinity



Project Vicinity



Existing Facilities

850 Zone Pump Station

- 1964
- Two 1250 gpm centrifugal pumps
- Non-reinforced CMU building

700 Zone Welded Steel Reservoir

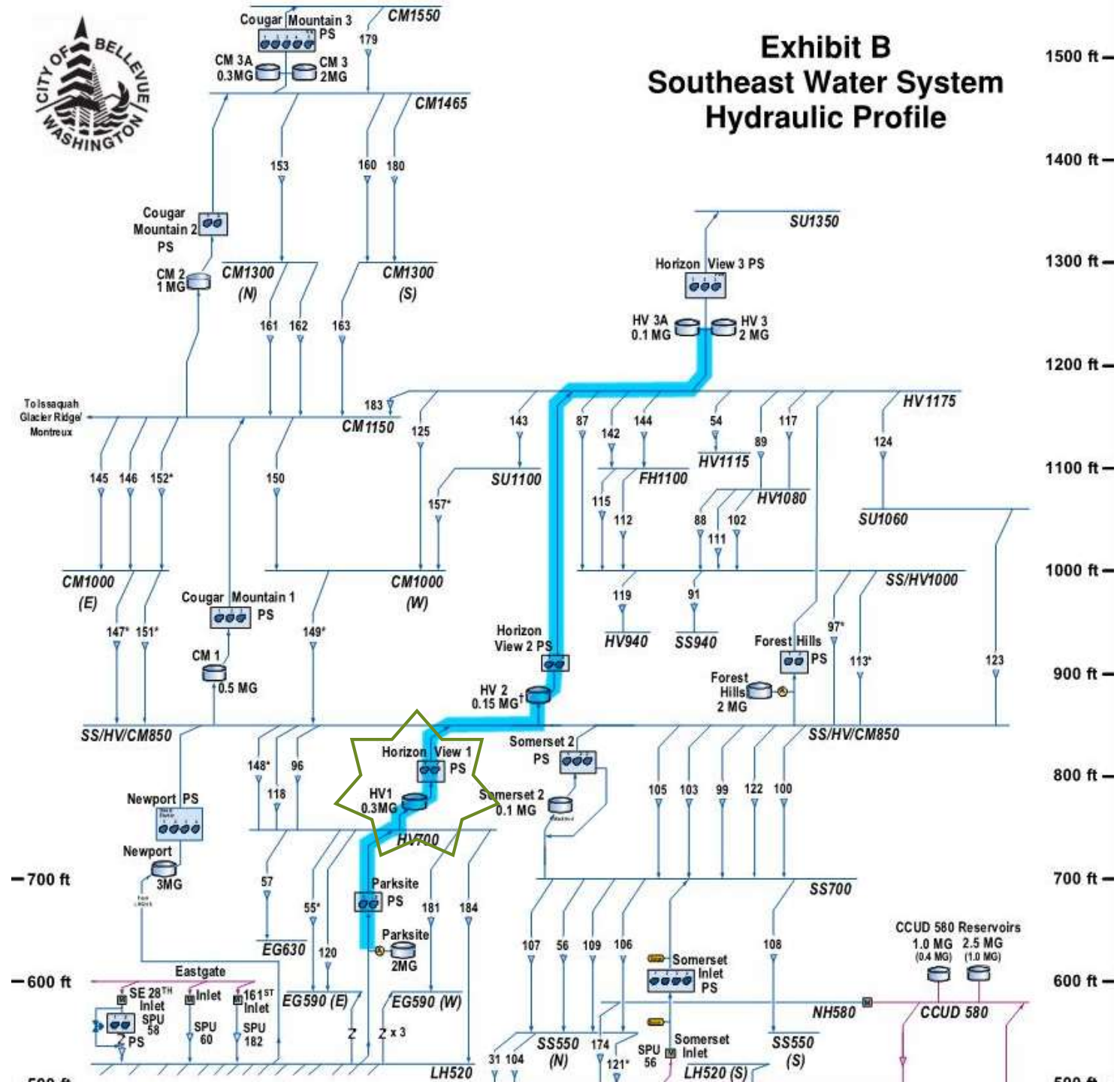
- Built in 1958 on another site
- Moved to current site in 1963
- 0.2 MG nominal capacity

PROPERTY OF
CITY OF
BELLEVUE
TRESPASSERS WILL
BE PROSECUTED

STOP

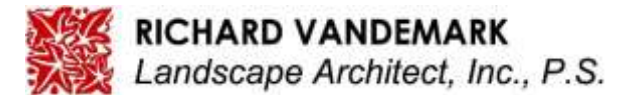


Exhibit B Southeast Water System Hydraulic Profile

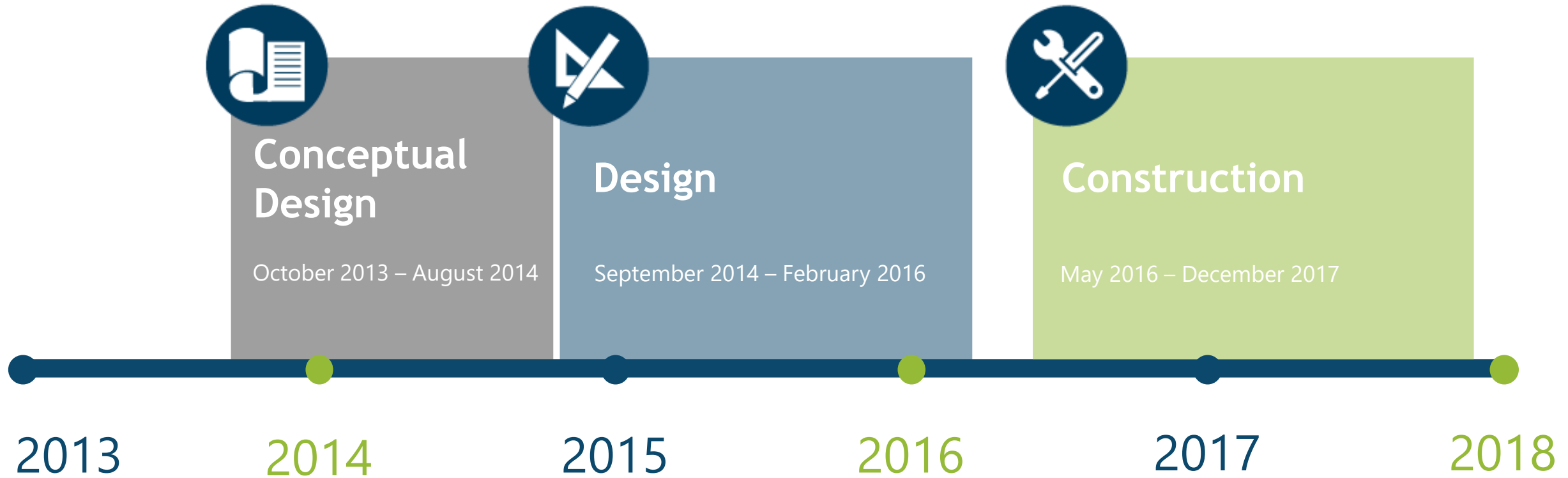


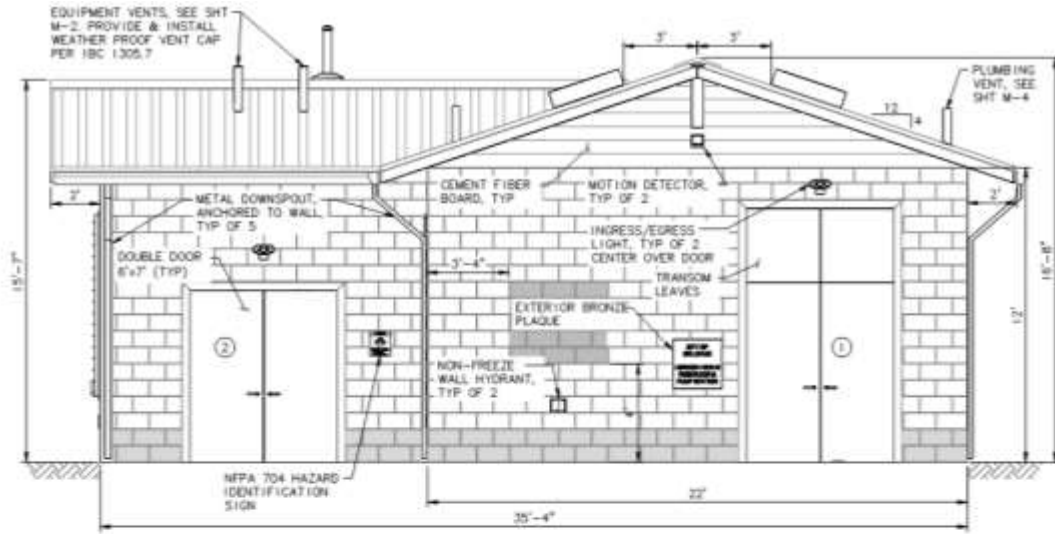
Project Team

Owner	City of Bellevue
Prime Consultant	Murraysmith, Inc.
Structural Engineer	Peterson Structural Engineers, Inc.
Electrical Engineer	R&W Engineering, Inc.
Instrumentation & Controls	S&B, Inc.
Cathodic Protection	NW Corrosion Engineering
Landscape Design	RVLA, Inc.
General Contractor	Pacific Crest Construction
Reservoir Contractor	T Bailey, Inc.

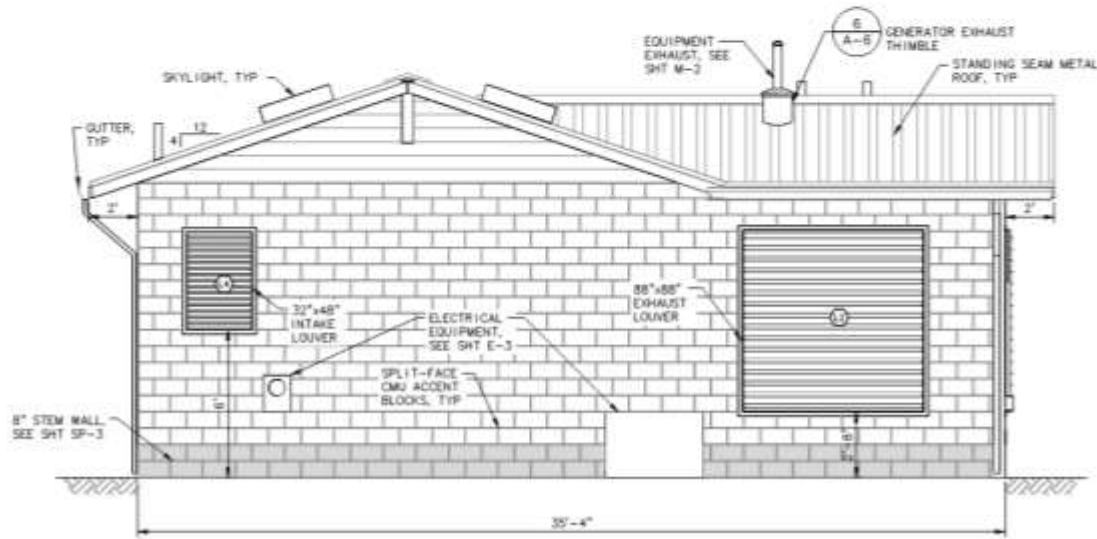


Schedule





SOUTH ELEVATION
SCALE: 3/8"=1'-0"

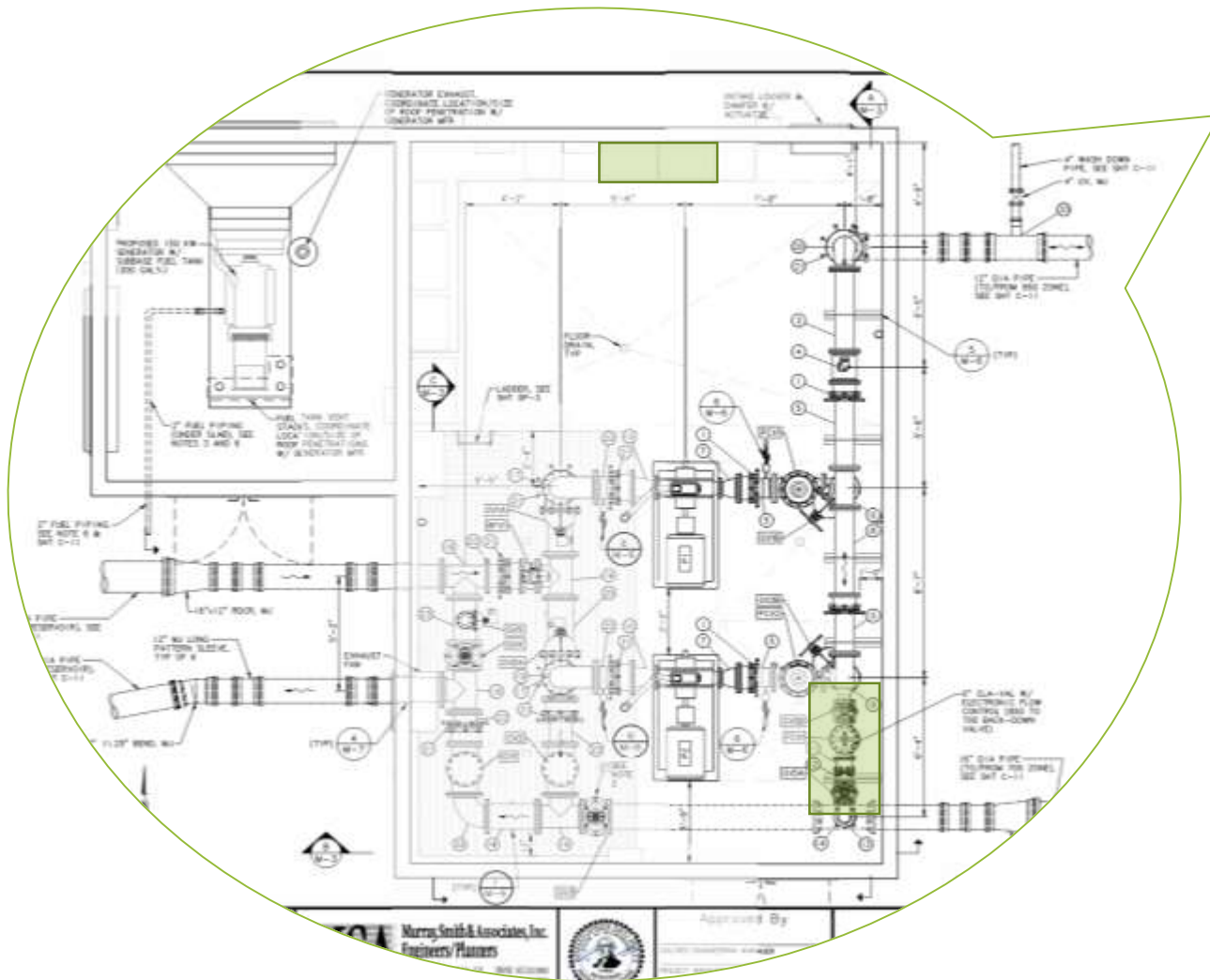


NORTH ELEVATION
SCALE: 3/8"=1'-0"



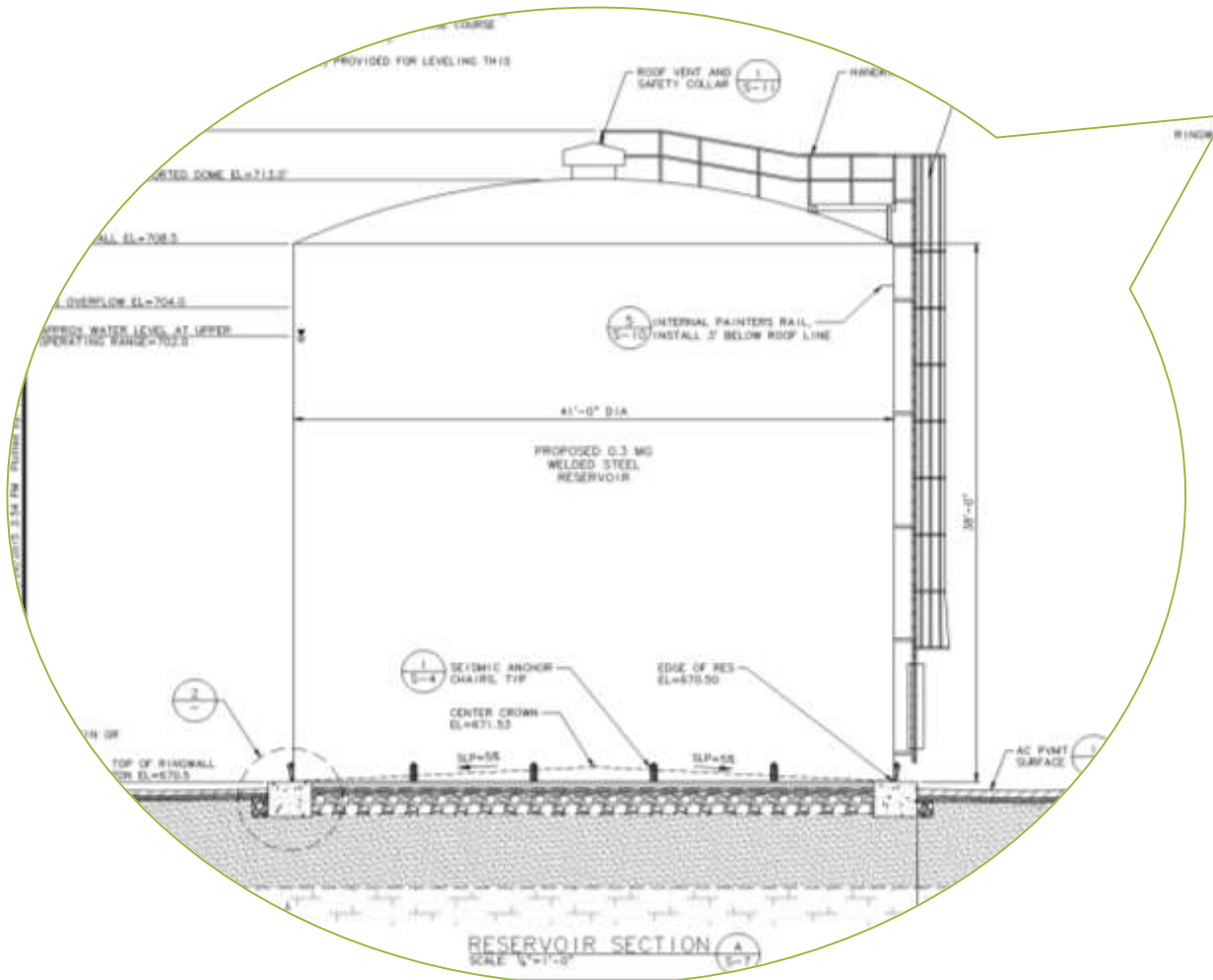
Design

Pump Station



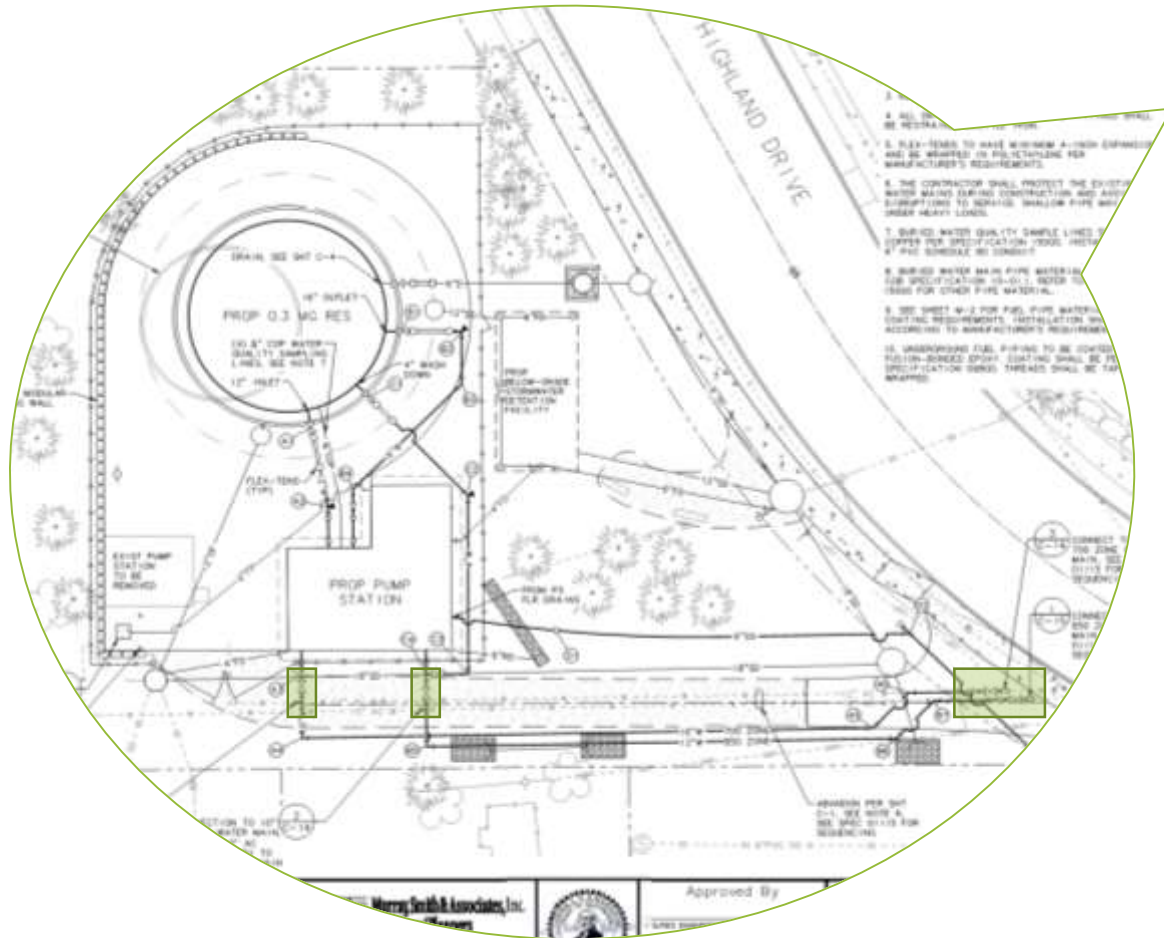
- 1800 gpm
- Horizontal centrifugal pumps with VFDs
- 850 Zone / 700 Zone back-feed
- On-site generator

Reservoir



- 0.3 MG
- Welded steel tank
- 41' D x 43' H
- Self-supporting dome roof
- Separate inlet and outlet

Site Improvements



- AC water main replacement
- Stormwater improvements
- Improved access
- Dechlorination manhole
- Landscaping



Construction

Challenges

- Small site
- Minimize service disruption



Maintaining Service During Construction



Site Preparation



Pump Station



Pump Station



Pump Station



Site Piping



Reservoir



Reservoir



Reservoir



Restoration





Lessons Learned



Final Thoughts



Q&A





murraysmith



Thank you!