



Construction Method:
Microtunneling

Project: **Balch Consolidation Conduit,
City of Portland BES**

Location: **Portland, Oregon**

Job Scope:

- ❖ Specifications
- ❖ Settlement Calculations
- ❖ Schedules for Construction
- ❖ Cost Estimates
- ❖ Geotechnical Baseline Report
- ❖ Contractor Selection
- ❖ Specialized Construction Management

Project Description:

Staheli Trenchless Consultants served as the microtunneling specialty consultant for design and construction services on the Balch Consolidation Conduit Project. The project included approximately 6,500 feet of 84-inch microtunneling on five drives. Soils on the project were widely varied and included extremely soft silts and clays that required ground improvement prior to microtunneling. The project also included very aggressive open-graded gravels and cemented Troutdale formation, and crossed beneath three major streets and the Burlington Northern Rail Road. The longest microtunnel drive was 1,690 feet.

An alternative contracting mechanism was used for project delivery that included bringing the Contractor on the design team at the 60% design level to negotiate final design modifications and cost parameters. STC provided specialized construction management services during the microtunneling portion of the project.



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