

**Construction Method:** Guided Auger Boring

**Project:** Water System Improvement,  
City of Whitefish

**Location:** Whitefish, Montana

**Date:** 2006-2008



**Job Scope:**

- ❖ Trenchless Alternatives Presentation
- ❖ Technical Specifications
- ❖ Cost Estimates
- ❖ Permit Application Assistance
- ❖ Risk Analysis

**Project Description:**

Staheli Trenchless Consultants performed a feasibility study comparing trenchless alternatives for the installation of a section of 18-inch water main underneath the Burlington Northern Santa Fe railroad tracks. The analysis included the evaluation of a number of crossing locations due to challenging geotechnical conditions, as well as the comparison of construction risks, permitting requirements, and preliminary costs for each construction method. After a trenchless workshop was held with the owner, guided auger boring was selected to install the pipeline.

Construction challenges included crossing beneath the active BNSF railroad tracks, while geotechnical design issues included an underlying layer of very soft weak silt along the alignment, resulting in the possibility of hydrofracture and settlement.



**Reference:**

Paul Montgomery, Anderson Montgomery  
Consulting Engineers (406) 449-3303.

