

# Construction Method: Horizontal Directional Drilling

**Project:** Replacement Water Supply Project

**Location:** Carmichael, CA



## **Job Scope:**

- ❖ Trenchless Feasibility Study
- ❖ HDD Alignment Study and Profile
  - ❖ Pullback and Stress Calculations
- ❖ Geotechnical Risk Evaluation
  - ❖ Cost Estimates
- ❖ Specialized Construction Inspection



## **Project Description:**

Staheli Trenchless Consultants designed and evaluated the construction feasibility for the installation of a 30-inch diameter waterline crossing beneath the American River. STC developed a feasible alignment for horizontal directional drilling running between Rossmoor Bar and Bajamont Water Treatment Plant based on geotechnical conditions, anticipated scour depths, available equipment layout area, and technical considerations including the protection of the American River against hydrofracture. Cost estimates, schedules and layout drawings were provided to aid in the project feasibility determination. STC participated in the design of the HDD, setting all parameters to minimize the risk of the trenchless construction.

During construction, STC provided specialty onsite inspection of all trenchless activities including the collection of data to gauge the Contractor's progress, drilling practices and procedures, and compliance with permit requirements. The project was successfully completed Spring of 2016.



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