



**TUNNELING DIVISION**

**Firms Role:** Microtunneling Subcontractor

**Location:** Sacramento, California

**Owner Reference:**  
Sacramento County Regional Sanitation District

**Designer Reference:**  
Montgomery Watson & Harza

**Start Date:** May 2005

**Completion Date:** April 2006

**Contract Delivery Method:** Design/Bid/Build

**Description of Work:**

The Sacramento Force Main (SFM) Project was the southern most section of the overall Lower Northwest Interceptor (LNWI) Program. It conveyed flows from the Southern Sacramento River Crossing project, just north of Freeport, California, through the Delta Shores area of Sacramento, to the Sacramento Regional Wastewater Treatment Plant (SRWTP), and crossed the environmentally sensitive buffer lands area surrounding the SRWTP. The project consisted of the installation of 4,810 linear feet of dual pressurized 66-inch RCCP and Permalok steel force main by microtunneling under Interstate 5, Laguna and Morrison Creek, wetlands and a 96-inch gravity sewer main. The diameter of the tunnel was 83.5 inches and the maximum drive length was 880 feet using a RVS 800 Soltau MTBM in clays, soft ground and running sand below the water table at a maximum depth of 55 feet.

**Project Challenges:**

The project site conditions consisted of running sands and high ground water. In addition, we tunneled under environmentally sensitive buffer lands, wetlands, a 96-inch gravity sewer main and the Interstate 5 freeway using normal machinery and methods.

