



UNDERGROUND DIVISION

Projects:

- Emergency Woods Street Trunk Sewer Relocation
- Woods Street Trunk Sewer Abandonment
- Emergency Woods Street Trunk Sewer Rehabilitation

Firms Role: General Contractor**Location:** Portland, Oregon**Owner:**

City of Portland

Designer:City of Portland
Bureau of Environmental Services**Start Date:** September 2005**Completion Date:** May 2007**Contract Delivery Method:** Design/Bid/Build**Description of Work:**

This project was located in an extremely busy section of metropolitan Portland. The microtunnel crossed fifteen traffic travel lanes, including two interstate freeways and major arterial streets, serving the greater downtown area. The project also required close coordination with local businesses and residents to minimize impacts and we were able to successfully complete all work with minimum disruption. In addition, JWF designed and maintained a bypass pumping system that handled abnormally high winter flows, while coordinating closely with BES to identify multiple discharge points.

These three emergency contracts negotiated with the City of Portland were to replace severely deteriorated sewer lines that serve the Ross Island Bridge and Naito Parkway interchange and the Lair Hill neighborhood of Portland. The work included construction of 400 lineal feet of 36-inch RCP combined sewer from SW First Avenue to SW Second Avenue along SW Grover Street and construction of 275 lineal feet of 24-inch diameter cured in place pipe under SW Barbur Blvd; and approximately 850 lineal feet of 36-inch reinforced concrete pipe installed by microtunneling in one drive with two interjacks. This drive passes under seven different streets and/or freeways including Interstates I-5 and I-405 at a depth of up to 45 feet. Ground conditions include sand-silt and gravels. Project also includes approximately 1,000 lineal feet of 36 inch reinforced concrete pipe (RCF) installed by open cut at a depth of 15 to 25 feet. Other requirements of the project include 140 lineal feet of 48-inch steel casing jack and bore, 350 lineal feet of 48-inch steel casing jack and bore, sheet pile shafts to 30 foot depth, 1,000 lineal feet of 6-inch to 16-inch sewer services, extensive bypass pumping, and abandonment of existing sewer using cellular grout. In addition, the project required restoration and repair of street surfaces and related utilities in the area of construction.

