



DOT I-670 / 71 Split Interchange Realignment

LOCATION: Columbus, OH

OWNER: Ohio Department of Transportation
(614) 466-7170
1980 West Broad Street
Columbus, OH 43223

PRIME CONTRACTOR: Kokosing Construction Co.
Attn: Greg Hamilton
(614) 824-2750
889 McKinley, Columbus, OH 43219

PROJECT PROFILE

In May 2011, ODOT awarded the \$200M 1st Phase of the Columbus Crossroads, the largest highway reconstruction program in the history of Central Ohio to the Design-Build Team of Kokosing Construction and CH2M HILL. Super Excavators provided a \$6.1M Subcontract to instal 426 vertical feet of jacking and receiving shafts to microtunnel approximately 4,500 feet of 54" storm sewer, and 280 feet of 60" storm sewer by open cut.

The microtunneling for this project was broken down into five separate runs, all using an Akkerman SL60 MTBM, and tunneled beneath the I-670/71 freeway system. The longest drive was 1,030 feet. Soils on this project varied from soft sands to stiff clays to wet sands to wet sands/cobbles/boulders. Groundwater was heavily present throughout the project.

Six construction work shafts were installed totaling approximately 420 vertical feet. Each shaft was supported with liner plates & steel ribs, and required substantial and specialized dewatering with deep wells and pumps due to high hydrostatic pressure. Concrete plugs were poured in shaft bottoms to compensate for bottom heave and reduce hydrostatic pressures. Groundwater was controlled in the tunnel eye of the shaft through chemical grouting and dewatering.

By-pass pumping was used during the entire project to divert sanitary sewer flows. Traffic was maintained on the freeway and on/off ramps. The project occurred in a mix of residential and commercial areas, and demanded a fast paced and condensed schedule due to critical freeway shutdown requirements.



TOTAL VALUE OF CONTRACT:
\$6,122,477.00

COMPLETION TIMELINE:
OCTOBER 10, 2011 - JUNE 30, 2012

COMPLETED AS:
SUBCONTRACTOR