

CONTRACTOR PLAN CENTER

A WEEKLY REPORT ON CONSTRUCTION PROJECTS IN OREGON, WASHINGTON AND THE PACIFIC NORTHWEST



BLOCK 38, PORTLAND, OREGON
SCHEFFLER NORTHWEST
GC: HOFFMAN CONSTRUCTION

Scheffler Northwest, one of the Portland Area's largest full-service drilling and shoring firms, recently completed construction activities on the 3720 South Waterfront project. The 3720 Condo tower is the fourth residential development in the 38 acre South Waterfront Central District, located a few blocks south of the iconic Aerial Tram lower station. With a total height of 325 feet, the 30-story condo tower with 3 levels of below ground parking is one of the most intriguing structures in this area, with a striking curved façade and attached 5 story sidecar that will house both retail and residential units. At a total cost of approximately \$160 million, it was the fourth largest private Oregon construction project to start in 2007.

Scheffler Northwest worked as a subcontractor to Hoffman Construction on this project. Their scope of work included installation of 162 tiebacks for the sheetpile shoring system, as well as installation of 112 drilled shafts ranging in diameter from 24" to 48", with a maximum depth in excess of 115'. The drilled shafts were not only the foundation for the structure, but due to the combination of conventional shoring and top-down style of construction, the shafts also acted as parking garage columns beneath the main tower. The work was very challenging, as the drilled shafts required permanent and temporary casing, drill slurry, and coring into underlying bedrock. Given the proximity of the project to the Willamette River, the soil conditions varied significantly from shaft to shaft, both in the depth of the basalt bedrock and the number of boulders and cobbles within the shafts. The project was also made difficult by the number of crafts working on the project at any one time, placing a huge premium on Hoffman Construction's ability to coordinate activities of their many subcontractors.

While there were a number of challenges, the drilling and shoring portions of the project were completed successfully, with all tiebacks and drilled shafts meeting or exceeding the quality requirements set forth by the designers. Much of the credit for this goes to the ability of the Owner, designers and contractors to quickly arrive at solutions to conflicts as they arose, as well as the foresight of Hoffman and Scheffler Northwest's management teams to recognize and resolve issues before they impacted the work.

Shown in the photo, Scheffler Northwest's Soilmec 516 drill rig is being hoisted from the project site after completion of the second phase of drilled shaft installation in the conventionally shored portion of the project. As the top of the drilled shafts in this portion of the project are approximately 30' below original ground and the perimeter is shored with sheetpile and tiebacks, the drill rig needed to be hoisted from the site using a 300-ton crane – a unique conclusion to a very remarkable project.

Developer:	Block 38 Investors, LLC
Architect:	GBD Architects
Structural Engineer:	KPFF Consulting Engineers
Geotechnical Engineer:	GeoDesign, Inc
General Contractor:	Hoffman Construction Company