



PROJECT PROFILE

Signature Centre

Construction Observation and Load Testing | Golden, CO



CLIENT

Martin Martin, Inc.

BACKGROUND

The Signature Centre is a five-story office building located in Golden, Colorado. Construction of the building was completed in late 2007. The building was constructed on a foundation system comprised of vertical and battered helical screw piles, drilled approximately fifteen to twenty feet into the claystone bedrock underlying the site. Approximately five years after construction of the building, evaluation of the foundation system and testing of replica screw piles indicated that the original foundation system was not adequate to support the building.

Michael W. West & Associates, Inc. (MWWAI)—now joined with WJE—was asked to provide geotechnical engineering services to the structural engineer for the project.

SOLUTION

Initial project work included geotechnical investigations to characterize subsurface conditions and to develop design criteria for a supplemental foundation system that would include high bearing capacity spread footings and micropiles.

MWWAI subsequently provided geotechnical engineering services, including estimation of the load capacity of the screw piles, assistance during load testing of replica screw piles, load testing of micropiles, and construction observation services during construction of the supplemental foundation system. The building remained in service and was occupied during construction of the supplemental foundation system. MWWAI also provided expert witness services for the project.

