Summary of Anchored Earth Retention and Excavation Support Experience

May 2013

INTERSTATE 75 ANCHORED SOLDIER PILE WALL - Jellico, Tennessee

BOWEN BUILDING SHORED EXCAVATION - Washington, D.C.

ROCKY CREEK ANCHORED SOLDIER PILE WALL - Big Sur, California

MICROPILE & ANCHOR SLOPE STABILIZATION - Salem, South Carolina
Dan Brown and Associates, PC (DBA) specializes in geotechnical engineering and deep foundation design, with emphasis on problem solving relating to foundation engineering and slope stability problems. The firm includes associates with special expertise in construction, design, testing, and research. Principals and Senior Engineers include:

- Dr. Dan Brown, P.E., Ph.D., D.GE
- Dr. Steve Dapp, P.E., Ph.D., D.GE
- Dr. Eric Loehr, P.E., Ph.D.
- Dr. John Turner, P.E., Ph.D., D.GE
- Mr. Barry Meyer, P.E., MS
- Mr. Paul Axtell, P.E., MS, D.GE
- Mr. Jon Gould, P.E., MS
- Mr. Tim Siegel, P.E., G.E., MS, D.GE
- Mr. Robert Thompson, P.E., MS, D.GE

DBA’s portfolio includes numerous slope stabilization, anchored earth retention, and braced excavation projects serving as consultant on geotechnical design, interpreting load test results, construction methods, and expert witness. Consulting by DBA on such projects can be provided at any stage of the project during design or construction, working for owners, designers or contractors. DBA can provide full design services, peer review of designs by others, or evaluations of construction problems. Of the DBA staff, Dr. John Turner and Mr. Tim Siegel are the leading experts in these services, supported by the engineering expertise of the remaining staff. Dr. Turner and Mr. Siegel are both licensed as Geotechnical Engineers in the State of California, having experience in seismic analysis and design. The firm is licensed in most states and can easily obtain licensure in any remaining states.
Project Experience:

**7th Street Bridge, Fort Worth, TX.** In-Progress. Value-engineered design of a secant pile drilled shaft wall for protection of a flood-control levee and bridge abutment along the Trinity River. DBA is engineer of record for the wall design and consultant to the geotechnical specialty subcontractor. Owners are Texas DOT and U.S. Army Corps of Engineers.

**Micropile and Anchor Slope Stabilization, Salem, SC.** Completed in 2012. Design of slope stabilization system using micropiles and tie-back anchors connected through a reaction beam.

**1616 Rhode Island Ave., Washington, D.C.** Completed November 2011. Support of excavation for construction of a 9-story building. Excavation was up to 48 feet deep with soldier piles and four rows of tieback anchors, 3 and 4-strand anchors. DBA was consultant to Steele Foundation, Inc. on design of the anchored soldier pile wall.

**Sibley Memorial Hospital, Washington, D.C.** Shoring work completed December 2012. Design of anchored tangent pile wall for support of excavation. Max wall height is 29 feet, with two rows of 3-strand anchors; for Steele Foundation, Inc. Building is currently under construction.

**4035 S Capitol St., Washington, D.C.** In-Progress. Design of anchored soldier pile wall to provide temporary support of excavation and long-term landslide stabilization for a parking structure. Wall is 25 feet in height and includes two rows of 2-strand anchors. Steele Foundation, Inc., March 2011.

**Residences at Little Nell, Aspen, CO.** Completed 2006. DBA provided expert services 2010-2012 in litigation involving excessive wall deformations and remediation of a 35-ft high anchored earth retention system for construction of a major development at the base of the Aspen ski slope.

**Blue Cross/Blue Shield of Tennessee, Chattanooga, TN.** Completed in 2008. Design of a soil nail wall for a 50 ft high excavation in highly weathered shale for construction of a multi-level parking garage. *(performed by Mr. Siegel prior to joining DBA)*

**Carlyle Block-L Project, Alexandria, VA.** Completed 2007. Design and analysis of anchored soldier pile wall for support of excavation for new building. 24-foot deep excavation with two rows of 2 and 3-strand anchors. *(performed by Dr. Turner prior to joining DBA)*

**Interstate 75, Jellico, TN.** Completed in 2005. Design of an anchored soldier pile wall to stabilized a roadway cut through weathered rock. *(performed by Mr. Siegel prior to joining DBA)*

**US 19, Cherokee, NC.** Completed in 2005. Design of a H-pile and tie-back retaining system for top-down construction adjacent to US 19 in downtown Cherokee. *(performed by Mr. Siegel prior to joining DBA)*
1500 Massachusetts Ave., Washington, D.C.
Completed 2003. Design of anchored tangent pile wall for support of excavation and permanent foundations, for construction of the Post Building, competed in 2003. (performed by Dr. Turner prior to joining DBA)

Micropile/Tieback wall, Wears Valley, TN.
Completed in 2003. Design of a micropile and tie-back retaining system for top-down construction in Wears Valley – adjacent to the Great Smoky Mountains National Park. (performed by Mr. Siegel prior to joining DBA)

Publications by DBA Staff:


