Wolf Creek Dam Repairs

Kentucky’s Wolf Creek Dam has been leaking, requiring the U.S. Army Corps of Engineers (USACE) to operate Lake Cumberland at lower levels, and causing long-term financial impacts to surrounding areas. The Corps assessed the situation and cited Wolf Creek among its highest-risk dams. In 2007, the Nashville District of the USACE issued the RFP (request for proposals) Solicitation for the Phase II of the foundation remediation to which several worldwide geotechnical companies responded.

TREVICO/Solelance JV, with North American headquarters in Charlestown, Mass., was awarded the $341.4 million project in July 2008 for the construction of the 4,200-foot-long concrete barrier wall with average depth of 275 feet. The methodology selected to stop the seepage through the karstic rock formation involves a combination of secant piles and rectangular panels.

WIRTH International, Houston, will supply the specialized equipment, drill rigs and drill string for the installation of the secant piles customized for the special requirements of this unique project. It is anticipated that the cooperation with WIRTH, linked to the customization of the equipment, will be continued throughout the project. Technical assistance will be provided by American Commercial Inc., a DSI company headquartered in Bristol, Va. Similar methods and equipment were successful at the Walter F. George Dam project in Alabama by the TREVICO/Solelance JV.

The Wolf Creek Dam Project started in the fall of 2008, with a contract performance period of four years. Once this project is complete, the dam will be fully functional, resulting in several benefits to the area, including healthy fish habitats, visitor and tourism financial impacts, as well as the ability to maximize use of all the hydropower plants in the Cumberland River System.