PROJECT DESCRIPTION:
The South Cobb Tunnel project represents the largest capital improvement project in the history of the Cobb County, Ga., Water System. Shea Traylor was awarded the $305 million contract. To construct a 6 mile long, 27 ft excavated diameter tunnel located in hard rock, with depths ranging from 150 ft to 400 ft.

QUIKRETE® Non-Shrink Precision Grout was selected to anchor rock bolts to the surface of the tunnel. The project required 29,000 rock bolts to be installed in 2” diameter by 10’ deep holes. The bolts were placed in the hole and an expansion tip was spread by turning an internal screw. The rock bolts have a flow tube attachment connected to the mixing pump. This tube delivered the Non-Shrink Precision Grout to the base of the bolt; the hole was then filled back-to-front to secure it in place.

QUIKRETE® Non-Shrink Precision Grout is a high strength, portland cement based grout with a 25 minute working time (73° F), making it ideal for use in applications where multiple anchors are required. Non-Shrink Precision Grout achieves a compressive strengths of 12,500 psi (86.2 MPa) in 28 days and a pull-out strength over 35,000 psi (241 MPa).

PROJECT START DATE:  
August 2009

PROJECT COMPLETION DATE:  
June 2011

GENERAL CONTRACTOR: Shea Traylor

QUIKRETE® PRODUCTS USED:  
• 50 lb Precision Non-Shrink Grout : 5,000 bags