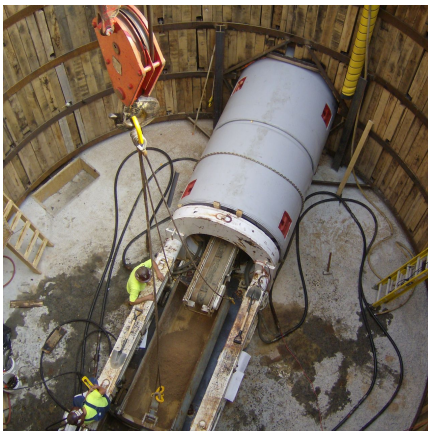
# Project Profile: TBM TUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

## Flint River Transmission Main - Phase 2
Atlanta, GA

### PROJECT OVERVIEW AND CHALLENGES

The Flint River Transmission Main project was constructed using conventional TBM tunneling in the Hapeville neighborhood of south Atlanta, GA beneath Old Dixie Highway and an active Norfolk Southern railroad. The single 1,040' tunnel consisted of three separate curves. The first two were per plan, while the third was a 650' radius curve added during the tunnel excavation process to avoid a waterline conflict at the Receiving Shaft unknown prior to the TBM Launch. Bradshaw's scope of work also included the excavation of 30' deep, rib-and-lagging Launch and Receiving Shafts, as well as the installation and backfill grout of 30" DIP force main in the tunnel. Bradshaw used a mobile ready mix plant to batch the grout required for the tunnel backfill. This plant was also used to produce grout needed to abandon more than 10,000' of existing 24" and 30" pipelines.



### PROJECT INFORMATION - 468

**OWNER:**
City of Atlanta
Dept. of Watershed Mgmt.
Michael Hallworth
(404) 350-9401
MHallworth@AtlantaGA.gov

**ENGINEER:**
Jordan, Jones & Goulding
Wojciech Klecan
(770) 455-8555

**CONTRACTOR:**
Garney Construction

**COMPLETION DATE:**
1/17/2009

**GEOLOGY:**
Silty Sand with areas of Partially Weathered Rock

**EXCAVATION METHOD:**
Akkerman WM 60B TBM

**MINING DIMENSIONS:**
1,040 x 72" Ø Liner Plate

**FINAL LINING:**
30" Ductile Iron Pipe

**FOR MORE INFORMATION:**
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Refer to Project 468