Project Profile: TBM TUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

Sumter Avenue Storm Drain
Rock Hill, SC

PROJECT OVERVIEW AND CHALLENGES

Bradshaw installed a replacement storm drain under the Norfolk Southern Railroad. The tunnel traversed two mainline and one siding sets of tracks in Rock Hill, SC. The existing CMP storm drain was collapsing. The tunnel was accomplished by installing 84" diameter x 24" wide smooth back 4-flange liner plates behind a shielded Akkerman tunnel machine. The machine was launched into the base of an embankment fill and encountered a couple of steel piles under the railroad that were cut out of the way at the forward shield by hand with no problems. After completion of the liner plate tunnel, 3-4 inches of reinforced shotcrete was installed for the final lining of the new storm drain.

PROJECT INFORMATION - 441

OWNER:
City of Rock Hill
Utilities Dept., Storm Water Division
803-325-2500

ENGINEER:
Armstrong Glen, P.C.
704-529-0345

CONTRACTOR:
Garawaco, Inc.

COMPLETION DATE:
8/15/2006

GEOLOGY:
Wet sandy fill and natural alluvium at the base

EXCAVATION METHOD:
Akkerman Shielded Tunnel Machine

MINING DIMENSIONS:
191 x 84" Ø

FINAL LINING:
84" Liner Plate
Shotecrete

FOR MORE INFORMATION:
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Refer to Project 441