Project Profile: HAND TUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

Kirkwood Road Tunnels
Arlington, VA



PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction completed 276' of 48" x 48" hand-mined wood box tunnels for electrical conduit. The main challenges of the project were not known when the project began. The tunnels were supposed to be in soft ground, but partially complete with the first tunnel our crew encountered some hard rock. There was great difficulty in removing the rock for 25' of the tunnel without blasting or the access to use larger equipment. Also, the location where one shaft was to be installed for two tunnels was over-run with other utilities. So, instead of two "dog-legged" tunnels, we installed one larger curved tunnel. Because it was unknown that the tunnel was to be curved when started, our crew had to go back and re-mine about 20' of tunnel. The curved tunnel ended up to be 150' long. All these challenges were compounded by the high traffic streets that they took place.





PROJECT INFORMATION - 476

OWNER:
Dominion Virginia Power
Will Sigafoose
(301) 420-6041

ENGINEER:
Dominion Virginia Power
Will Sigafoose
(301) 420-6041

CONTRACTOR:
Flippo Construction Company, Inc.

COMPLETION DATE:
6/18/2009

GEOLOGY:
Clay, Silt, Rock

EXCAVATION METHOD:
Hand Mine

MINING DIMENSIONS:
276' x 48" x 48"

FINAL LINING:
Wood Box

FOR MORE INFORMATION:
Mike Wanhatalo, Project Engineer/Estimator
(410) 970-8307
mwanhatalo@bradshawcc.com
Refer to Project 476