Project Profile: MICROTUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

I-66 Sanitary Sewer Crossing
Fairfax, VA



PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction contracted with the Fairfax County Department of Public Works to install a new 18" sanitary sewer line across I-66, abandoning a previously installed line. During shaft installation, unforeseen partially weathered schist was encountered that could only be excavated using a hammer drill. Fairfax County performed additional geotechnical investigation to determine the extent of the rock and it's potential impact on the tunnel installation. After some delay, it was determined that the originally planned 43" microtunnel excavation would still be acceptable. Despite encountering additional rock along the drive, Bradshaw successfully used their 43" Herrenknecht AVN-800 to complete the crossing with minimal production impacts. Additional work consisted of installing new manholes to connect to the existing system, and abandoning of the original line.





PROJECT INFORMATION - 515

OWNER:
Fairfax County
Department of Public Works
12000 Government Center Parkway,
Suite 463
Fairfax, VA 22035
703.324.5815

ENGINEER:
CDM Smith
Danial Gilroy
703.691.6500

CONTRACTOR:
Bradshaw Construction Corporation

CONTRACT VALUE:
$889,675

COMPLETION DATE:
1/31/2013

GEOLOGY:
Partially weathered schist and sands

EXCAVATION METHOD:
Herrenknecht AVN-800 MTBM

MINING DIMENSIONS:
330' x 43" Ø

FINAL LINING:
18" Ductile Iron Pipe

FOR MORE INFORMATION:
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Refer to Project 515