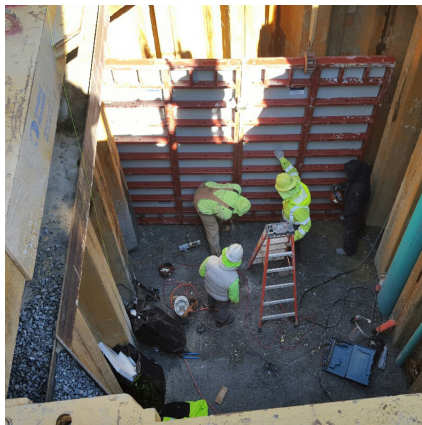


## South Trunk Sewer, Section G Forcemain Replacement Norfolk, VA



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw installed 136 linear feet of 50.5 inch steel casing to accommodate a 30 inch ductile iron sewer line under East Brambleton Avenue at the intersection with St. Paul Boulevard in downtown Norfolk, VA. Soil conditions consisted of sand under the water table. Microtunneling was required due to the need to keep the busy intersection open, and because the saturated sand would have been problematic for other tunneling methods. Job was completed without settlement to the highway or adjacent utilities in spite of the challenging conditions.



### PROJECT INFORMATION - 556

#### OWNER:

Hampton Roads Sanitation District  
Engineering Dept.  
Shawn Heselton  
757-353-5464  
sheselton@hrsd.com

#### ENGINEER:

AECOM  
Will Gibson  
757-306-4000  
william.gibson@aecom.com

#### CONTRACTOR:

Tidewater Utility Construction, Inc.

#### COMPLETION DATE:

2/26/2016

#### GEOLOGY:

Sand

#### EXCAVATION METHOD:

Herrenknecht AVN-1000 MTBM

#### MINING DIMENSIONS:

136' x 50.5"Ø

#### FINAL LINING:

30" Ductile Iron Pipe

#### FOR MORE INFORMATION:

Doug Piper, Project Manager  
410-970-8300  
dpiper@bradshawcc.com  
Refer to Project 556