

SAWS WRIPP Segment 2B

Von Army, TX



PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction completed two drives with four shafts (two per drive) at each tunnel location for a new waterline. The Medina River drive (726 linear feet) included a 70 and 105 foot deep shafts, respectively. The second tunnel at Medio Creek (543 linear feet) consisted of 50 and 55 foot shafts, respectively. 73.5 inch steel casing was installed by slurry microtunneling for both drives for 60 inch steel carrier pipe. Higher than normal groundwater levels from prolonged rain created a persistent challenge during shaft construction. Dewatering efforts were hindered by the ability to install dewatering wells into the claystone. Re-engineering of shaft designs and best management practices enabled the successful construction of shafts and tunnels. Soil conditions consisted of clay stone, hard rock, cobbles, and boulders below the water table.



PROJECT INFORMATION - 550

OWNER:

San Antonio Water System
Victor Yates
210-663-1391
victor.yates@saws.org

ENGINEER:

Civil Engineering Consultants, Inc.
Terry Conn
210-641-9999
tconn@cectexas.com

CONTRACTOR:

Garney Companies, Inc.

COMPLETION DATE:

1/28/2016

GEOLOGY:

Clay, Hard Rock, Gravel

EXCAVATION METHOD:

Herrenknecht AVN-1200 MTBM

MINING DIMENSIONS:

726' & 543' x 73.5"Ø

FINAL LINING:

60" Steel Pipe

FOR MORE INFORMATION:

Mike Wanhatalo, Project Manager
410-970-8300
mwanhatalo@bradshawcc.com
Refer to Project 550