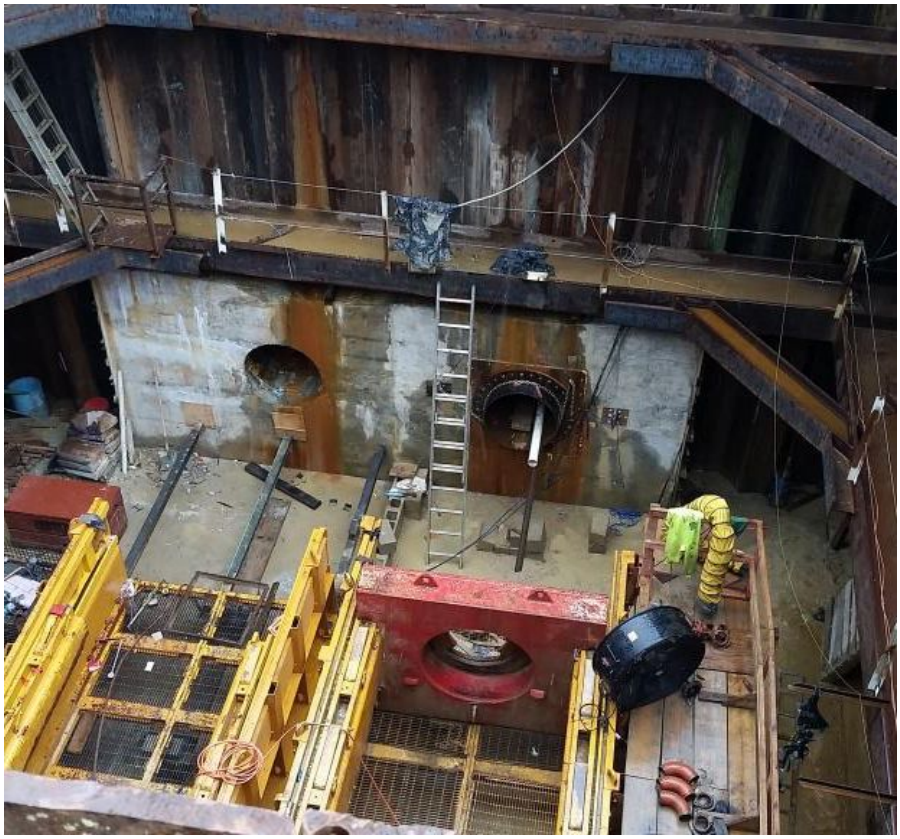
Project Profile: MICROTUNNELING

BRADSHAW CONSTRUCTION CORPORATION
TUNNELING SPECIALISTS

Water Treatment Plant 5 MGD Capacity Expansion New Raw Water Pump Station
Livingston, TX



PROJECT OVERVIEW AND CHALLENGES

Bradshaw was contracted to install twin 36 inch steel casings from a 30 foot deep pump station shaft at the shoreline of Lake Livingston Reservoir to an intake cofferdam in the lake. Each microtunneled casing was 390 foot long and used to install 24 inch ductile iron carrier pipes. The soil conditions consisted of clay and sandy silt 20 feet below the water table. Due to the non-cohesive soil conditions and shallow cover at the retrieval shaft in the lake, the MTBM recovery was performed under water by divers. Additional challenges included unusually heavy rainfall during microtunneling leading to significant flooding of the Livingston area.





PROJECT INFORMATION - 545

OWNER:
Trinity River Authority
817-467-4343

ENGINEER:
Klotz Associates, Inc.
Alexander Kuzovkov
281-589-7257

CONTRACTOR:
Layne Heavy Civil, Inc.

COMPLETION DATE:
7/24/2015

GEOLOGY:
Clay, Sand

EXCAVATION METHOD:
Herrenknecht AVN-600 MTBM

MINING DIMENSIONS:
780' x 36" Ø

FINAL LINING:
24" Ductile Iron Pipe

FOR MORE INFORMATION:
Mike Wanhatalo, Project Manager
410-970-8300
mwanhatalo@bradshawcc.com
Refer to Project 545