

## Upper North Oconee Phase 2B Athens, GA



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction mined 1300' total of 60" steel casing over three different drives with the longest drive being 900'. Within the 60" steel casing, Bradshaw also installed 36" ductile iron pipe for a sewer. Many methods were used to complete this project and handle the varying geology. The AVN 1200 MTBM machine was used to mine under a local railroad. Hand-mining was used to get through partially weathered rock. Finally, using a hard rock TBM, Bradshaw was able to successfully mine a tunnel with a curved alignment.



### PROJECT INFORMATION - 609

#### OWNER:

Athens-Clarke County  
Rhonda Bray  
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#### ENGINEER:

Jacobs  
Tom Kelley  
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#### CONTRACTOR:

Garney Construction

#### COMPLETION DATE:

6/27/2021

#### GEOLOGY:

Gneiss, Schist, Amphibolite

#### EXCAVATION METHOD:

TBM, microtunneling & hand mine

#### MINING DIMENSIONS:

60" & 72"

#### FINAL LINING:

36" DIP

#### FOR MORE INFORMATION:

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Refer to Project 609