

## Appalachian State Steam Tunnel Boone, NC



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction Corporation successfully installed 220' of 84" RCP to act as a steam tunnel for the Appalachian State University. This was achieved by utilizing a 101.5" Lovat TBM capable of mining through hard rock conditions. The pipe was jacked directly behind the TBM. Soil conditions consisted of hard biotite gneiss rock.



### PROJECT INFORMATION - 479

#### OWNER:

Appalachian State University  
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#### ENGINEER:

RMF Engineering  
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#### CONTRACTOR:

Crowder Construction Company

#### COMPLETION DATE:

10/2/2009

#### GEOLOGY:

Hard Biotite Gneiss Rock

#### EXCAVATION METHOD:

Lovat TBM: 101.5" Ø

#### MINING DIMENSIONS:

220' x 101.5" Ø

#### FINAL LINING:

RCP, 84" Ø

#### FOR MORE INFORMATION:

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Refer to Project 479