

## Liberty University Vines Center Arena Lynchburg, VA



### PROJECT OVERVIEW AND CHALLENGES

Bradshaw Construction installed a 250' tunnel underneath the campus of Liberty University in Lynchburg, VA. The direct-jacked 72" fiberglass tunnel was installed through a congested area of campus, underneath utilities, first through a pinnacle of hard and abrasive schist, then transitioning into clay. Challenges included tunneling through the mixed face/mixed reach conditions and maintaining line and grade for the single-pass gravity sewer. Maintaining grade through the harder schist in the invert with weathered rock and weak overburden soils in the crown of the tunnel was achieved, and the transition zone into the clay was successfully navigated.



### PROJECT INFORMATION - 597

#### OWNER:

CMA Associates, Inc  
Alex Houser  
434-841-2916

#### ENGINEER:

Perkins & Orrison  
Russ Orrison  
540-784-0142

#### CONTRACTOR:

Falconer Construction Company,  
Inc.

#### COMPLETION DATE:

8/30/2019

#### GEOLOGY:

Rock, Clay

#### EXCAVATION METHOD:

Herrenknecht AVN-1500 MTBM

#### MINING DIMENSIONS:

250' x 75.4" Ø

#### FINAL LINING:

72" FRP

#### FOR MORE INFORMATION:

Jordan Bradshaw  
410-970-8300  
jordan.bradshaw@bradshawcc.com  
Refer to Project 597