



The Customer
BurWil Construction

Location
Emory,
Virginia

Type
Education

**Date of Project
Completion**
Spring 2022

Interesting Fact
This in-situ solution allowed us to stabilize the settled brick foundation without causing additional damage to the historical structure.

CASE STUDY: UMA was selected by BurWil Construction to perform remedial work at a dormitory at Emory & Henry College's Carriger Hall to address signs of distress on the east and west wings of the south side of the building. This building was suited well to a ground improvement method since the footings were constructed of bricks and stones – also known as a rubble foundation.

HIGH-DENSITY POLYURETHANE RESIN (HDPR) INJECTION

THE PROJECT

Emory & Henry College, founded in 1836, is a private liberal arts college and one of the oldest institutions of learning in Southwest Virginia. General contractor BurWil was tasked with demolition and renovation to convert the former dormitory to the School of Business. The original building (east wing) was built in 1903, and the west wing was added 30 years later. UMA's role was to strengthen subsurface soils beneath the all brick foundation.

THE CHALLENGE

UMA's greatest challenge was to provide an in-situ solution to stabilize the settled brick foundation without causing additional damage to the historical structure. The structural engineer recommended bolstering four corners of the east and west wing due to water infiltration from poor drainage.



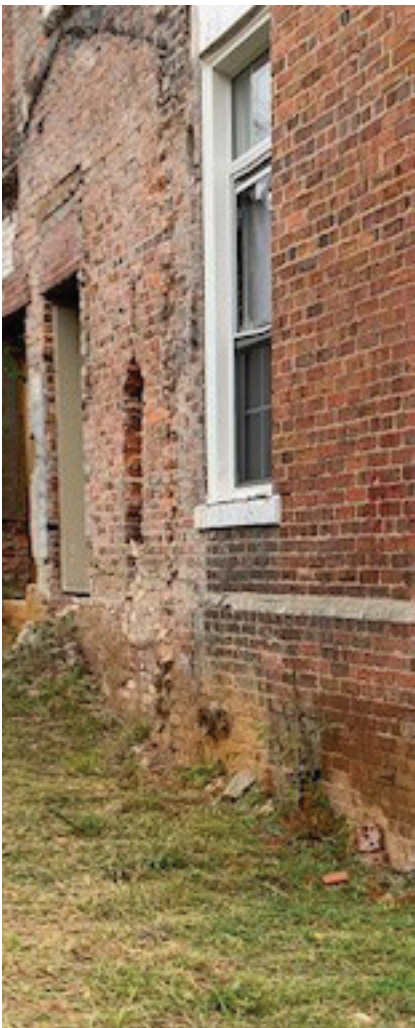
CASE STUDY

THE SOLUTION

Based on the DCP results, we performed HDPR deep injections at multiple depths to stabilize the subsurface soils beneath the all brick foundation. The total treatment area was roughly 200 square feet and we were able to complete the job in 2 days with little disruption to the site.

THE RESULTS

UMA's deep injections proved invaluable on this historically significant project. Not only did we avoid damaging any structures, but we did so in only two days without disrupting the education process. No excavation is required with the HDPR Injection process, so we were able to restore the foundation's bearing capacity and preserve the original foundation design with a non-invasive low-pressure injection process. UMA had stabilized the foundation at Carriger Hall so quickly that the students and staff at Emory College hardly noticed that construction was underway.



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