

CASE STUDY

Collapsed and Corroded Culvert Structurally Relined, Avoiding the Need for Intrusive Excavation

PROTOTYPE APPLICATION OF THE QUADEX LINING SYSTEM® FEATURING GEOKRETE® GEOPOLYMER

VORTEX PRODUCTS USED

1 GeoKrete®



PROJECT SNAPSHOT

OWNER
Walmart for Kleenco

LOCATION
Bentonville, AR

PROBLEM
Two sections of CMP storm culvert had begun to fail. The pipe invert was completely gone, while other sections were partially collapsed, and suffering from ovality. In addition to severe I & I, a total culvert failure was imminent.

SOLUTION
The Quadex Lining System®, utilizing its GeoKrete® Geopolymer, was able to structurally restore the culvert without having to dig and replace it; saving time, money and minimizing surface disruption.

APPLICATION

- Spincast Method
- 66 LF of 41" x 56" CMP Storm
- 75 LF of 29" x 42" CMP Storm

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THE CHALLENGE

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July 2015
Pipe sections showed signs of partial collapse.



October 2017
Section of pipe where partial collapse existed remains in excellent shape after it was structurally relined with GeoKrete.



July 2015
Complete joint failure with pipe suffering from severe ovality, I & I and threat of total collapse.



October 2017
No signs of joint failure or ovality as depicted in the host pipe. Structural GeoKrete liner is intact and continues to provide corrosion protection.