PROJECT > **CSX** Pinkerton Tunnel

Shotcrete MS - Fiber Reinforced Confluence, PA





PROJECT DESCRIPTION:

As part of the National Gateway Clearance Project, the Pinkerton Tunnel needed to be replaced by an alternate tunnel because it did not meet height requirements to accommodate double-stack freight railroad cars. However, removing the deteriorating brick arches and timber liner of the 120-year-old Pinkerton Tunnel would disrupt freight and passenger trains from traveling through the tunnel. Immediate interim repairs were required until the alternate tunnel was constructed. LRL Construction created a unique structural support system by applying QUIKRETE® Shotcrete MS – Fiber Reinforced in 8-inch thick continuous legarch-leg supporting ribs. The ribs were installed on 4-foot centers within the tunnel before finishing with a 4-inch layer of material between the ribs. The "rib" solution dramatically reduced the

amount of shotcrete and labor required for the rehabilitation as compared to the traditional approach of applying shotcrete in 12-inch layers directly on the entire tunnel lining. The project was successfully completed in just 28 days.

CONTRACTOR:

LRL Construction Co., Inc.

QUIKRETE® PRODUCTS USED:

• 3,000 lb Shotcrete MS - Fiber Reinforced: 1,177 bulk bags

PROJECT START DATE:

June 2012

PROJECT COMPLETION DATE:

July 2012



QUIKRETE[®] Shotcrete MS - Fiber Reinforced **Product No. 1228-51**

