PROJECT DESCRIPTION:
After 78 years of service, the 1,008 ft. Blaine Hill Viaduct Bridge was in need of structural repair to its reinforced concrete support columns and arches. The bridge spans Wheeling Creek (a tributary of the Ohio River) and was built to replace the adjacent Blaine Hill S Bridge. Suburban Maintenance Construction Inc. (SMCI) was awarded the contract to make extensive structural and non-structural bridge column repairs. SMCI selected a dry process shotcrete method for this project due to the stop and start nature of repairs. SMCI also saw the benefit of eliminating forming time and the reduced use of forming materials. Prior to the application of the dry process shotcrete, existing exposed reinforcing steel was sandblasted to remove all steel corrosion. SMCI utilized ACI certified Nozzelman to perform the shotcrete work on the bridge rehabilitation. 3000 lb bulk bags of QUIKRETE® Shotcrete MS were the chosen material for this project. Shotcrete MS is a micro silica enhanced high strength repair material with exceptionally low rebound and very low permeability. Bulk bags were chosen on this project for their ease of use, maneuverability on the job-site and overall cost effectiveness.

GENERAL CONTRACTOR:
Suburban Maintenance Construction INC.

QUIKRETE® PRODUCTS USED:
• 3,000 lb Shotcrete MS - Fiber Reinforced: 283 bulk bags

PROJECT START DATE:
July 2010

PROJECT COMPLETION DATE:
October 2011