PROJECT DESCRIPTION:
State DOTs across the country are faced with an aging highway system littered with structurally-deficient bridges near or past their projected lifespan of 50 years. Route 23 in Northern New Jersey presented this challenge to the NJDOT with a bridge deck in Butler, NJ that is battered by severe weather annually and receives extensive truck traffic from a local quarry on a daily basis. Power Concrete was charged by the NJDOT to restore the bridge deck quickly, so the contractor used QUIKRETE® FastSet™ Latex Modified DOT Overlay to complete the job overnight and have Route 23 back open to traffic the next morning. Unlike the traditional multi-step process of restoring bridge decks by making individual patches and then applying a new wear surface, QUIKRETE® FastSet™ Latex Modified DOT Overlay can make partial to full-depth repairs and place a new wear surface in a single pass. For this project, Power Concrete placed and finished the overlay in 54’ long by 15’ wide passes in 20 minutes. The restored bridge deck is expected to last 20 years.

QUIKRETE® FastSet™ Latex Modified DOT Overlay is a fiber reinforced, very low permeability, rapid-setting overlay material specifically designed to fast track concrete bridge deck repair and to extend the service life of concrete bridge decks. Each 3,000-pound bulk bag, which should be mixed to a slump of 8” to 10”, covers approximately 700 square feet when applied at a .5” depth, 350 square feet when applied at 1” depth and 250 square feet when applied at 1 ½” depth. Using a mobile mixer or in a ready mix truck, mix no more material than can be used in 30 to 45 minutes and with the proper surface preparation, QUIKRETE® FastSet™ Latex Modified DOT Overlay can be applied in full-depth repairs up to 8” in a single application. The material contains an integral corrosion inhibitor and reaches 3,000 PSI in three hours.

OWNER: New Jersey DOT  
CONTRACTOR: Power Concrete  
QUIKRETE® PRODUCTS:  
3,000 lb QUIKRETE® FastSet™ Latex Modified DOT Overlay: 8 bags

PROJECT START DATE:  
September 2013  
PROJECT COMPLETION DATE:  
September 2013