

ROADWORKS

by Ruth W. Stidger, Editor-in-Chief

Information and ideas to help managers and contractors build, maintain, and manage roads better.

Projects in the News

The Pennsylvania Department of Transportation selected Vollmer Associates to complete environmental studies and preliminary and final design for the replacement of the SR 1022 bridge over Swatara Creek in Lickdale, Pennsylvania. The 240-foot-long, two-span truss bridge is nearly 100-years old and was placed under a 3-ton limit several years ago. It was subsequently found to have suffered structural failure and closed to all traffic. Redesign of the bridge requires an extensive review of the detailed hydraulic and hydrologic study prepared for Swatara Creek by FEMA.

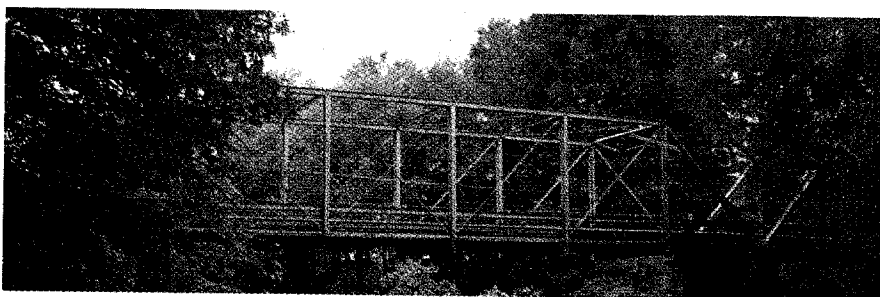
In New Jersey, Vollmer Associates is designing operational and safety improvements to the interchanges at Route 46, Route 3, Valley Road, and Notch Road, all in Passaic County. The improvements include widening Route 46 to provide an east-bound service road from Notch Road to Valley Road and the extension of the three-lane section of Route 3 west-bound to Route 46 west-bound. The project includes reconfiguration of ramps and the replacement of structures at the interchanges,



Improvements are slated for this Garden State road.

the rerouting of a portion of the Third River to a more natural watercourse, signalized intersections, aesthetic treatments to structures, and landscaping to provide screenings and isolate residences from the busy interchanges.

A report from the New Jersey Department of Transportation says that since the beginning of the year it has awarded 71 contracts worth \$325 million and will award another \$235 million in work by the end of the year, increasing contract awards by 42% from last year.



This 100-year-old bridge will soon be replaced.

Study Says Asphalt is Cost-Effective on Rural Roads

A recent study shows that hot-mix asphalt rural road pavements were less expensive to build and maintain over a 40-year period than portland cement concrete pavements.

The study involved evaluation of 481 miles of rural Interstate highways in Kansas. It was conducted by Dr. Stephen A. Cross, associate professor, and Dr. Robert L. Parsons, assistant professor, both with the University of Kansas in Lawrence. The study was initiated by the Kansas Asphalt Pavement Association and completed with the assistance of the Kansas Department of Transportation.

The study examined KDOT's figures on total expenditures on pavements during their life cycles, including original construction, contract maintenance work, rehabilitation, and reconstruction.

The final report stated that "Average yearly maintenance expenditures for PCC pavements during the first 15 years were slightly less than HMA pavements. During the next 25 years, yearly expenditures for PCC pavements were 2.4 times higher than HMA pavements."

Costs were \$63,000 per four-lane mile for PCC compared to \$26,000 for HMA. The numbers were calculated in 2001 dollars.

The study also said that HMA and PCC pavements had similar average service lives until rehabilitation or reconstruction was required, 33 years for HMA and 34 years for PCC. Reconstruction costs for PCC averaged \$2.04 million per four-lane mile compared to rehabilitation costs of \$0.66 million per four-lane mile for HMA.

Results of the study can be found at www.asphaltalliance.com.