Unbonded Concrete on Asphalt

Minnesota
A 6.4-mile-long unbonded concrete overlay was placed on County State-Aid Highway 3 (CSAH 3) in McLeod County, Minnesota, approximately 60 miles west of the Twin Cities. CSAH 3 is a major collector and a primary connection between the city of Glencoe and Trunk Highway 15 (TH 15) to the west; the road services many farm-to-market haulers. Additionally, CSAH 3 features several horizontal curves.

The existing bituminous roadway was 24 feet wide with 8-foot-wide aggregate shoulders. The overlay project involved milling the existing 9-inch asphalt pavement to a designed profile and cross slope to improve the ride and correct deficient superelevation transitions associated with the existing horizontal curves. The concrete overlay design consisted of 6 inches of undoweled plain concrete jointed in 6-by-6-foot panels with a tied shoulder, all of which was placed in a single 32-foot-wide operation.

Missouri
A 9-mile stretch of I-44 near Rolla, Missouri, part of the main connector between the Lake of the Ozarks and St. Louis, was in need of resurfacing. With the Lake of the Ozarks being a major recreation and vacation destination, construction-related traffic delays were a major concern; therefore, the contract specified 90 calendar days for completion. Two miles of the project involved milling 11 inches of the existing asphalt pavement and inlaying an 11-inch concrete overlay. Seven miles of the project involved placing an 8-inch unbonded concrete overlay using a geotextile fabric as the separation layer. The contractor paved 219,137 square yards of concrete in 47 days and turned over the project to the State in 66 days.

Visit our website for more information on Targeted Overlay Pavement Solutions.

Concrete Materials
Sam Tyson
FHWA Office of Preconstruction, Construction, and Pavements
(202) 366-1326
Sam.Tyson@dot.gov

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