General Project Information

Project Location: Lapham Blvd, Milwaukee, WI
Date Placed: August 2002
Traffic: 1,200 ADT

The city was concerned with both possible reflection cracking and retaining the curb and gutter profile. Traditionally, thicker overlays are used to delay reflection cracking, but that was not an option here. Milwaukee’s conventional overlays typically last 1 to 2 years before crack filling is needed, and the city was concerned about potential water intrusion into the base through the reflection cracks.

Existing Surface Condition

Previous Condition: 229-mm (9-in.) undoweled Jointed Plain Concrete Pavement (JPCP) with a severely cracked HMA overlay.
Reinforcement: None
Surface Preparation: The surface was milled to the curb face as shown in the cross section diagram; there was no treatment to the existing cracks.

Construction Details

Interlayer thickness: 1"
Overlay: 2” conventional HMA (both sections)
Overlay PG used: PG 64-28 (98% reliable)

Performance Data

2002, January and February 2003 and June 2004, since this undoweled JPCP had potential to show accelerated winter reflective cracking as compared to a more stable dowelled JPCP. The graph shows the percentage of the cracks that reflected to the surface. All eastbound interlayer lanes were compared to the westbound control lanes. As of June 2004, only 27% of the cracks had reflected through the interlayer section while 100% had reflected through the control section, a 73% improvement.

For more information about the Strata® reflective crack relief system or other solutions to your paving needs, contact your local Road Science™ representative.