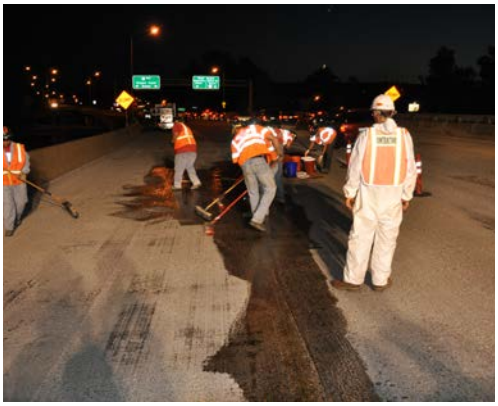

Clockwise from Bottom Left
Shot blasting the surface after milling; Workers apply Bridge Preservation™ Concrete Primer; Normal vehicular traffic over Bridge Preservation™ Aggregated Top Coat

OR22: WILLAMETTE RIVER (MARION STREET) BRIDGE

Salem, OR

Completed 80 mil System
Workers inspect the 80 mil installation prior to the application of the BD Top Coat™.

Between July 26 and September 27, 2011 the Roger Langeliers Construction Company installed 145,800 square feet of Bridge Preservation™ Bridge Deck Membrane (BDM) and BD Top Coat on the OR22 Willamette River (Marion Street) Bridge No. 07253B, built in 1953 in Salem, Oregon.

Project Information
Project Number: 14346
Owner: Oregon DOT
Project Size: 145,800 SF
General Contractor: Roy Houck Construction
Approved Applicator: Roger Langeliers Construction Company

The project began by removing the existing 2+ inches of asphalt wear course using a micro miller. After milling and removal of the asphalt wear course, the entire milled surface was shot blasted to create a clean surface for the application of the Bridge Preservation™ Concrete Primer and spray applied BDM™. Bridge Preservation™ Concrete Primer is the fastest curing primer available on the market and can cure and accept waterproofing in as little as 20 to 30 minutes. 80 mils of BDM™ was applied, followed by the application of 40 mils of BD Top Coat™. The Top Coat material has a slower gel time, which allows Basalt Aggregate to be incorporated into the wet membrane to provide a traction surface for temporary vehicular traffic, as well as additional mechanical adhesion at the interface between the waterproofing membrane and asphalt wear course. Despite the slower gel time, the system can still accept vehicular traffic after just one hour.

Because of the waterproofing schedule, the waterproofing with aggregated top coat was open to normal traffic for four days prior to the application of the asphalt wear course. This allowed large areas to be waterproofed before the asphalt application, which reduced the number of cold joints and resulted in a superior HMA overlay. Even after four days of continuous traffic the aggregated top coat performed well, showing no signs of aggregate loss and providing a non-skid surface for vehicles to travel on.

After completion of the waterproofing installation, a Bridge Preservation approved tack coat was applied, followed by the application of the asphalt wear course at 2-1/2 inches.

Aggregated Top Coat
Aggregate is broadcast into the slower setting top coat.

Bridge Preservation
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