



Clockwise from Bottom Left

Elevation differences were evident on many of the adjacent girders; workers ensure proper fit of the "T-Cups"; Workers spray "T-Cups" into place.

PROVO TO SALT LAKE FRONTRUNNER PROJECT

Salt Lake City, UT



In May of 2011, Cascade Industries Northwest installed approximately 45,000 square feet of Bridge Preservation™ BDM and Bridge Preservation's patented "T-Cup" joint system on 14 bridges for the Utah Transit Authority's Frontrunner Project.

Project Information

Project Number: NA
Owner: Utah Transit Authority
Project Size: 45,000 SF; 14 Bridges

The UTA approached Bridge Preservation because the longitudinal joints of their precast box beam girder bridges were leaking. They had attempted to use typical joint systems, but they had failed because of the vertical deflections present on the bridges during normal use. They required a waterproofing solution that would seal the joint, fit into the 1/4" clearance between the girders, and accommodate the free-floating tabbed protection plates present on the bridges. To complicate matters, the joints were slightly wider than 1/4". Bridge Preservation designed the "T-Cup" joint system, which was narrow enough to fit into the small clearance area, but could also accept the centering tabs.

4-Way Joint

A worker places a 4-way expansion joint at an intersection between the longitudinal and transverse joints.



Completed System

Completion of the spray applied waterproofing on the Winchester bridge.

girders, and accommodate the free-floating tabbed protection plates present on the bridges. To complicate matters, the joints were slightly wider than 1/4". Bridge Preservation designed the "T-Cup" joint system, which was narrow enough to fit into the small clearance area, but could also accept the centering tabs.

After surface preparation and primer application, the joints were positioned and installed using Bridge Preservation™ Joint Adhesive. Bridge Deck Membrane waterproofing was then applied to the bridge deck. The tabbed protection plates were then placed in position and a bond breaker was applied over them. Another layer of Bridge Deck Membrane was applied, providing a "belt and suspenders" waterproofing solution at the joints.



Bridge Preservation

SERVING THE RAIL AND HIGHWAY MARKETS
(913) 321-9000 info@bridgepreservation.com