

LIGHT INDUSTRIAL CASE STUDY

BRIDGE SUPPORTS



1 SITUATION

Concrete, with its porosity and high pH, is susceptible to many forms of decay. Continuing maintenance on concrete structures is a very costly necessity; corroding concrete loses its strength and structural integrity and often leads to corrosion of the rebar within.

A LINE-X® Franchisee in the Northeast recognized the corrosion of the concrete bridge supports in his area, caused mainly by the calcium and salt used to de-ice roads in the winter. He approached the local Department of Transportation (DOT) bridge maintenance engineers to suggest using LINE-X as a barrier between the contaminants and the concrete supports. At the time the local DOT had no other cost effective options to protect the concrete supports so they decided to give LINE-X a try.

2 PROCEDURE

Local DOT officials set up a containment area around the bridge supports and took responsibility for traffic control. DOT also blasted the concrete to remove rust stains and other contaminants from the surface of the substrate. LINE-X coating specialists applied LINE-X SF-515 primer followed by LINE-X XS-350 tinted grey. The coating was applied using an XP2 machine approximately 50-60 mils thick.

These applications are better when the concrete is new and substrate contamination can be better controlled. LINE-X specialists were required to spray XS-350 thicker in some areas to fill the natural bug holes in the concrete.

3 SOLUTION

LINE-X XS-350 was best suited for the project requirements. The LINE-X application was completed by two specialists in one day, causing little interruption in normal activities.

4 RESULTS

LINE-X provided a continuous membrane protecting the concrete bridge supports, extending maintenance cycles. The DOT engineers and regional officials were highly pleased with the results of the application and are looking into future jobs with LINE-X.

