



Project Overview

FRP REPAIR OF BRIDGE PIER SUBJECTED TO IMPACT DAMAGE

Name: I-70 Overpass
Type: Bridge Structure
Location: Kansas City, Missouri
Completed: November 2005

PROBLEM

A truck had run into this bridge pier located near downtown Kansas City, MO. The impact of a truck had caused damage to the concrete pier and had resulted in loss of cover concrete, exposing the steel reinforcement. In addition to loss of strength, the exposed reinforcing bars were subjected to corrosion.

Repair work had to be undertaken with minimal traffic disturbance and without removal of existing concrete traffic barriers.



SOLUTION

QuakeWrap® FRP Repair System was selected since the repair work could be completed within a day with traffic barriers in place. The damaged area was cleaned and patched with a cementitious patching compound; the column was wrapped with two layers of QuakeWrap® FRP glass fabric to increase the strength of the column and to protect against future corrosion of reinforcing steel.



Technical Highlights

- Overpass in downtown Kansas City, MO
- Pier damaged by truck impact
- Concrete cover was broken and spalled
- Repaired damaged area with patching compound
- Wrapped the column with QuakeWrap® FRP glass fabric
- Repair was completed in 4 hours!

Credits

Client: Kansas City Power & Light
Contractor: QuakeWrap, Inc.



“The FRP Retrofit Experts”