

Strengthening Structures | Protecting Lives Worldwide.











Transportation

Buildings

Pipelines

Waterfront

Industry



Project: Enhancement of CN Champaign Railroad

Bridge

Location: USA

Client: Dept. of Transportation

Contract Duration: 4 months

Enhancement of CN Champaign Railroad Bridge, USA

Fibrwrap was awarded a contract to perform repairs on this bridge due to the serious deterioration of the structure especially under the active tracks. The area under the tracks had severe concrete distress on the columns, beams and slabs. Approximately 80 to 100% of the concrete was removed in this area. The balance of the structure had about 30-40% removed.

The columns were formed and poured while the overhead work was restored using the wet shotcrete method. Fiber Reinforced Polymers (FRPs) were used to cover the concrete repairs and extend the life of the repairs. The columns and beams had 100 % FRP coverage while a crisscross FRP pattern was applied to the underside of the slab. The entire structure was painted including the abutment walls.

The work started in mid October and ran into the winter months. The structure had to be enclosed and heated. Melting snow was an issue with water dripping down through the joints between the slabs. A hydrophilic product was injected into the joints to avoid water and icicles over the traffic.

Scope of Works:

- Bridge Concrete Repair & Restoration
- Enhancement of service life of concrete repairs





