



TBTA

Bronx Whitestone Bridge Rehabilitation

Service: General Contracting

Contract: BW 14/84C | Value: \$54.3 Million | Awarded: January 2016 | Contract Completion Date: 6/2018 (Anticipated Completion 6/2017)

PROJECT DETAILS

Miscellaneous repairs and cable wedging and inspection between bands, removal and replacement of suspender ropes, testing of cable wires and suspender ropes. Removal of tuned mass damper and crossover platform. Painting of all exposed surfaces of both cables suspenders and stay cables. Miscellaneous steel rehabilitation including in both towers. Painting girders and floor beams.

Specific work performed by Halmar international:

- Removal of existing wrapping wires and rewrapping cable with new wires
- Removal and replacement of suspender assemblies
- Suspender ropes testing
- Removal and reinstallation of existing cable bands
- Main cable wedging for inspection
- Removal and replacement of wires in the main cable

Cable wire testing program

- visual
- dye penetration
- Strength
- chemical content
- fractographic
- atomic hydrogen content
- surface corrosion

The following ancillary work was performed also:

- Removal treatment and disposal of red lead paste
- Design and refurbishment of wire wrapping machine
- Mock up and testing of wire wrapping machine and producers
- Install grikote Z complex 2C zinc paste
- Design installation and removal of temporary suspender and jacking systems
- Monitoring tension with extensometers
- Install and remove temporary protective covers

Work zone traffic control:

The work is performed under high traffic volumes in restrictive work hours. Special maintenance and protection of traffic strategies ensure the bridge is fully operational after construction and all lanes of traffic are in full service during peak traffic times.

ACCOMPLISHMENTS

Replace and Inspection of Selected Main Cable Panels and Various Structural Repairs and Tuned Mass Damper Removal at Bronx Whitestone Bridge.

Extensive cable work including removal and replacement of assemblies and re-wrapping of cables.

Special construction methods employed to reduce lane closing:

- Design of modular fast erecting work platforms on the main cables -platforms for equipment and material storage at fascia.
- temporary walkways for work access to fascia.