
Bronx-Whitestone Bridge Deck Replacement, BW-82

GPI

Construction Engineering & Inspection



Client/Owner: Triborough Bridge & Tunnel Authority
Project Location: New York, NY

This aggressive redecking project will take place over a 36-month construction schedule starting in December 2003 and ending in December 2006. The redecking will take place while maintaining a single permanent lane closure with three lanes of traffic maintained in the peak direction and two in the off peak direction. In addition to this single-lane closure, the contractor will be afforded a second lane during the overnight period. This will allow him to efficiently remove sections of the existing deck and accept delivery of materials including orthotropic deck and other rehabilitation elements.

Using this single-lane approach, the roadway areas will be replaced with modular deck units on a lane-by-lane basis, progressing from Queens bound lane #3 to Queens bound lane #2 to Bronx bound lane #3 to Bronx bound lane #2 and finishing up with Bronx bound and Queens bound lane #1. Each lane replacement is a discrete stage of construction with a first stage that will in essence prepare the bridge for the six stages of lane replacement. In the pre-stage work, a flexible shield system will be installed and the power, lighting and communication will be relocated from their current position within the median barrier. With this work complete, the median barrier/deck will be replaced with temporary framing/ deck and a movable barrier system. This will enable the contractor to accomplish the lane-by-lane deck replacement while maintaining traffic. Other major work to be performed under Project BW-82 includes the following:

- Complete electrical and communication system replacement;
- Miscellaneous steel repairs;
- Installation of four suspended span travelers;
- Installation of new fire protection and standpipe system;
- Underdeck lateral bracing replacement;
- Replacement of girder pins at anchorages;
- Coatings removal and application.