

IEW CONSTRUCTION GROUP BEGINS REHABILITATION OF STICKEL BRIDGE

Vertical Lift Bridge to Be Completed By Late 2007

In May of this year, IEW Construction Group began a \$33 million construction project to rehabilitate the I 280-William A. Stickel Bridge on the Harrison/Newark borders. As this is a hyperbuild project for the NJDOT, the construction work force is in place for two shifts per day, six days a week, with some work also performed on Sundays when weather permits.

The IEW team's initial actions involved jacking the existing vertical lift span using a series of 700 ton jacks. With the span raised, nine inch diameter pins were inserted to lock the two 2.2 million pound counter weights into place. The span was then lowered back into place, and the cables leading to the counter weights were cut. This rendered the lift span inoperable for 18 months. New cables, supplied by Wire Rope Corp., were installed, and IEW began the rehabilitation of all motors, gears and control systems.

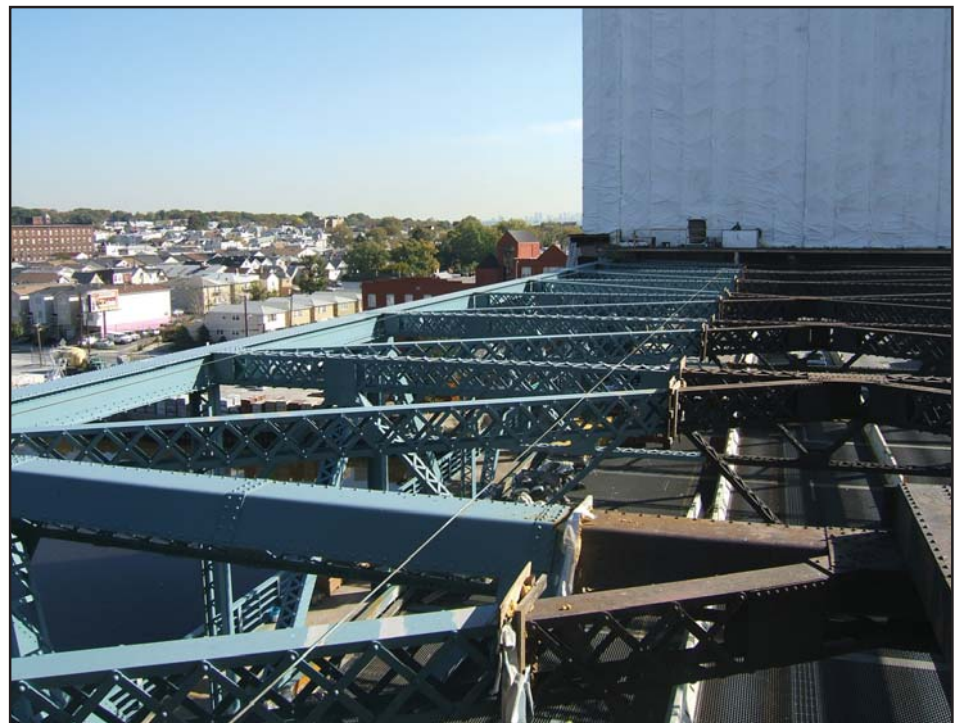
To rehabilitate the approaches and lift span, the roadway/bridge work was divided into thirds. A center median was removed, temporary drainage was installed and rideability was improved to re-route traffic to the center of the span and the eastbound side of the structure as rehab began on the westbound lane. To reconstruct this section of road and bridge, existing decks were sawcut and removed and substructure repairs were completed including the replacing of bearings and critical steel members. On the approaches, IEW installed an Exodermic Deck System which are grid panels that are set in place on steel members. A single mat of rebar was then placed, and six inches of light weight concrete mix, supplied by Eastern Concrete, was placed.

On the lift span, the existing steel grid was removed and a complete support replacement was installed using structural steel. A new steel deck, supplied by Interlocking Deck Systems, Inc., was set in place and secured with concrete.

In early 2007, traffic will be switched to the center section and the new westbound lane. The rehabilitation activities will then be repeated on the eastbound lane. Once



New structural steel members set in place for a portion of the Stickel Bridge rehabilitation.



A section of the Stickel Bridge lift span supports which were painted.

the eastbound lane is completed, the center section of the structure will be reconstructed.

IEW has enlisted the services of many subcontractors on this project, including Corcon for all bridge painting, Delta Line Construction for all electrical work and White Marine for mechanical construction. Simpson & Brown completed pile and fender repairs, Tilcon provided milling and paving services and Highway Safety Systems installed signs.

American Bridge Manufacturing furnished 200 tons of structural steel, RJ Watson supplied bearings and finger joints, Link Control Systems supplied the new control system to operate the bridge and Welfab supplied metal railing and traditional deck joints.

Representing the NJDOT on this project are Eric Neu, field manager, and Felix Fuster, resident engineer. Leading the activities for IEW are Chad O'Connor, project manager, and Joe Accurso, project superintendent. Construction should be completed by December 2007.



The placement of a light weight concrete mix on the Exodermic Deck system that was installed.