

BRIDGE REHABILITATION I-95 OVER WEST RIVER, NEW HAVEN, CT

OWNER: CONNECTICUT DEPARTMENT OF TRANSPORTATION



PROJECT DETAILS

- Temporary roadway crossing ramp constructed to provide crossing where vehicular access over a pipeline is required.
- The entire replacement of this bridge and associated improvements is expected to be completed by November 2018.
- Bridges founded on 82,500 LF of precast piles.
- Over 82,000 LM of Preformed Vertical drains (wick drains) installed in 6 different locations for soil consolidation with pre-loads that stayed in place for up to one year.
- To address unsuitable soils, 25,000 CY of lightweight fill will be installed.
- Over 150,000 CY of material excavated.
- 144,000 SF of deck demolished.
- Project Value: \$131M

This project consists of the replacement of the I-95 over West River Bridge, a 348m long, 28m wide, 12-span structure and one of the longest and most heavily traveled bridges in the state. The current bridge handles approximately 135,000 cars per day. The bridge will be widened to 43.2m to accommodate a 1.8m median, a 4.8m inside shoulder and three 3.6m lanes in each direction, a 3.6m outside shoulder in the northbound direction and a 4.2m acceleration lane and 2.4m shoulder in the southbound direction. The I-95 Southbound to Kimberly Avenue Ramp Bridge will be demolished. The I-95 over Ella T. Grasso Boulevard Bridge, a 37.8m long, 36.5m wide three span bridge, will be replaced with a 31m long, 40.2m wide single span bridge. The project also includes the reconstruction of 1,420m of Interstate 95 from the I-95 over the Amtrak Bridge to the west, to east of the Howard Avenue structure over I-95.

SCOPE OF WORK

- Construction of temporary trestles in the West River for access to pile supported pier locations, erection of structural steel, and demolition of the existing bridge
- Temporary highway construction to accommodate traffic shifts
- Reconstructing highway approaches and exit ramps to access Ella Grasso Blvd. and Kimberly Ave.
- Construction of the new West River bridge piers and superstructure
- Demolition of the existing West River Bridge
- Replacement of the I-95 Bridge over Ella T. Grasso Blvd.
- Construction of drainage improvements

UNIQUE CHALLENGES

- Maintaining the waterway at all times for use by recreational boaters.
- Because borings were not taken in the river, piles had to be driven much deeper than anticipated in order to achieve bearing.

