

VDOT 11 Bridges

Richmond, VA

Work / Activity 1
Concrete Repairs and Corrosion
Mitigation Treatment

Work / Activity 2
Supply and Install Post-Tensioning



Bridge Concrete Piers

Description of the work

Eleven of the bridges that support interstate I-95 across Virginia's state capital, Richmond, from Hermitage Rd. on the north to Lombardy St. on the south were showing signs of significant concrete deterioration both on the superstructure and the substructure. The Virginia Department of Transportation designed a repair program in which the superstructure; railing, decks and bearings are being replaced and the substructure; Pier caps, columns, wing walls abutments and slope walls are being repaired. The decks are being replaced by precast post-tensioned deck panels. All the bearings for all the structures have to be replaced. Only night closures are allowed to perform superstructures work. All deteriorated concrete is being repaired. Two structures are receiving an electrochemical chloride extraction treatment while the other nine are being treated with galvanic protection.

Freyssinet Mission

Freyssinet is supplying and installing the post-tensioning required for the precast deck panels to be used to replace the deck. Freyssinet also presented a program to the contractor in which by working from under the deck, the replacement of the bearings was taken out of the critical path. An all inclusive package for the substructures repairs was also offered, reducing the quantity of subcontractors on the job and ensuring the quality of the concrete repairs did not adversely affect the performance of the corrosion mitigation treatments. Freyssinet is also performing all the corrosion mitigation treatments in this project.

General Contractor : Archer Western Contractors Ltd.
Owner : Virginia Department of Transportation

Subsidiaries : Freyssinet, Inc.

Beginning of works : Nov. 2010
End of works : July 2014



Galvanic Cathodic Protection