

Lesner Bridge

Virginia Beach, VA

Project Description

The new Lesner Bridge is composed of twin precast segmental structures 1575' long that will handle six lanes of traffic. The new bridge replaces an existing low level causeway and will provide a signature structure that increases the vertical clearance above mean high water and horizontal clearance at the navigation channel.

Owner

City of Virginia Beach

Contractor

McLean Contracting Co.

Designer

FIGG

Our Role

McNary Bergeron provided construction engineering services including: integrated shop drawings for precast superstructure segments, independent review of the segment erection launching gantry, construction analysis of the superstructure and substructure for the proposed erection sequence, step-by-step erection procedures, geometry control system, including segment casting software and erection geometry, development and design of temporary support systems for the launching gantry.

Total Contract Value

\$84 million

Timeline

2014 - 2017

Construction Method and Specifications

The bridges consist of 9 spans, each 150' long, built in the span-by-span construction method, and a 225' main span built in the balanced cantilever construction method. The contractor is using a specially fabricated overhead launching gantry that can accommodate both types of segment erection. Challenges on this project include incorporating both span-by-span and balanced cantilever post-tensioning details in the segments along with designing an erection system that can handle both systems.

