MCNARYBERGERON.COM



Washington Bypass Bridge

Beaufort County, NC

Project Description

This project involves construction of a three mile bridge over the Pamlico-Tar River. The contractor utilized a new top-down construction technique to ensure minimal disturbance to the surrounding environment. The span-by-span construction method uses the previously constructed spans for personnel access and material deliveries. The process consists of self-contained erection gantries capable of performing all tasks associated with the bridge construction, including driving the precast piles, building the precast bent caps, erecting the 120-foot-long precast girders, and pouring the deck. All of these operations were performed without the use of temporary access trestles, thus significantly reducing environmental disturbances.

Owner

North Carolina Department of Transportation

Contractor

Flatiron Construction Corp. / United JV

Designer

Earth Tech

Our Role

McNary Bergeron provided peer review of the erection gantry design, peer review of construction loads on the structure during construction, and assistance with developing the erection manual.

Total Contract Value

\$196 million

Timeline

2006-2010

Construction Method and Specifications

The contractor utilized a new top-down construction technique to ensure minimal disturbance to the surrounding environment. The span-by-span construction method uses the previously constructed spans for personnel access and material deliveries. The process consists of self-contained erection gantries capable of performing all tasks associated with the bridge construction, including driving the precast piles, building the precast bent caps, erecting the 120-footlong precast girders, and pouring the deck. All of these operations were performed without the use of temporary access trestles, thus significantly reducing environmental disturbances.





