

Sherman Industries Helps Get Crucial Highway Back in Business in Birmingham



The intense heat of a diesel fuel fire caused this bridge to warp and buckle, closing the highway entirely.

When a speeding tanker carrying 9000 gallons of diesel fuel crashed and exploded underneath a bridge on I-20 in Birmingham, the resulting chaos threatened to shut down Alabama's busiest interstate interchange for days and force detours for months. At an estimated 100,000 vehicles daily, the interchange is at the heart of the interstate system for Alabama's largest city.

The fire's heat, estimated at 1700° F., was so severe that the bridge's steel girders twisted and stretched, forcing the concrete to buckle in waves. Some of the burning fuel ran along the interstate, destroying concrete columns supporting the 64' by 413' bridge. The driver survived with only scrapes and bruises.

Alabama DOT officials were able to complete construction documents for a replacement structure six days after the accident and awarded contracts just two days later.

The general contracting consortium of The Morris Group, Inc. and Brasfield and Gorrie LLC, each of Birmingham, began construction on October 30, 2004, with contractual incentives of \$50,000 a day for completing the project ahead of the December 31 deadline. Conversely, there was to be a \$50,000 a day penalty for exceeding the deadline.

The tight schedule and stringent concrete specifications determined that the ready mix and girders had to be supplied by recognized industry leaders, known for reliability and quality. Sherman Industries Inc., a Lehigh company, was chosen because of its dependability for on time delivery, attention to quality, and experience dealing with demanding conditions and specifications.



For this Birmingham bridge reconstruction, Sherman provided the longest prestressed girders ever used in Alabama.



Sherman's high quality pre-stress girders helped get Alabama rolling again in record time.

Almost immediately Sherman's Concrete Group began pouring columns and precast components. Sixteen days after contracts were let the first of 36 prestressed concrete girders were delivered to the site and were placed over a three day period. Some of the girders were more than 163 feet long, making them the longest ever used in Alabama. These massive girders were shipped on 13-axle trucks, requiring four-car state trooper escorts from the plant.

The entire project, including demolition, was completed in 36 days. During the even briefer period of concrete placement, Sherman poured 2,200 cubic yards in rain, in cold, and during all hours of the day. When the bridge opened on December 3 the contractors had

earned a \$1,350,000 bonus—the largest ever awarded in Alabama.

Contractor: The Morris Group, Inc. and Brasfield and Gorrie LLC