

Milton Madison Bridge

Madison, IN / Milton, KY



In April 2014, a new half-mile Milton Madison bridge became the longest bridge to be slid laterally into place. This replaced the original bridge that was built in 1929 that carried US 421 across the Ohio River. Due to age and deterioration, the original bridge was found to be functionally obsolete and structurally deficient, restricting truck traffic from crossing. The bridge is critical for the 11,000 vehicles that travel the bridge each day, the only crossing on a 72-mile stretch of the Ohio River.

Construction for the new bridge began in the fall of 2010, with the old bridge remaining open during work on the piers. The new bridge used innovative bidding, design and construction methods. Superstructure replacement involved building a new steel truss atop the existing piers, which will be brought up to modern standards, and the deck, which included epoxy-coated reinforcing steel (ECR rebar).

The design-build contract called for the bridge to be closed for a maximum of 10 days. Walsh chose to move the 2,427-foot-long truss along steel rails and plates and “slide” it 55 feet into place atop the existing piers. This method of construction made it the fastest modern-day bridge built across the Ohio River.

The bridge includes a wider steel-truss superstructure, scour mitigation for the existing piers and an ADA compliant pedestrian walkway.

Team

Owner:

Indiana Department of Transportation (INDOT) in a partnership with the Kentucky Transportation Cabinet (KYTC)

Engineer:

Burgess & Niple Engineers and Buckland and Taylor Ltd

General Contractor:

Walsh Construction Company

Design Criteria:

- Replace structurally and functionally obsolete bridge.
- Minimize closure of crossing to a maximum of 10 days.
- Provide scour mitigation and ADA compliant walkway.
- Design to last 75 to 100 years.

Total Project Cost: \$103 million

Total Size:

LENGTH: 2427 ft

WIDTH: 45 ft

Epoxy-coated Reinforcing Steel:

484 tons

Photography:

miltonmadisonbridge.com