



Acrow Bridge Restores Critical Route for Louisiana Residents Impacted by Hurricane Ida

Rapid modular steel bridge installation to replace a damaged bridge in Jefferson Parish

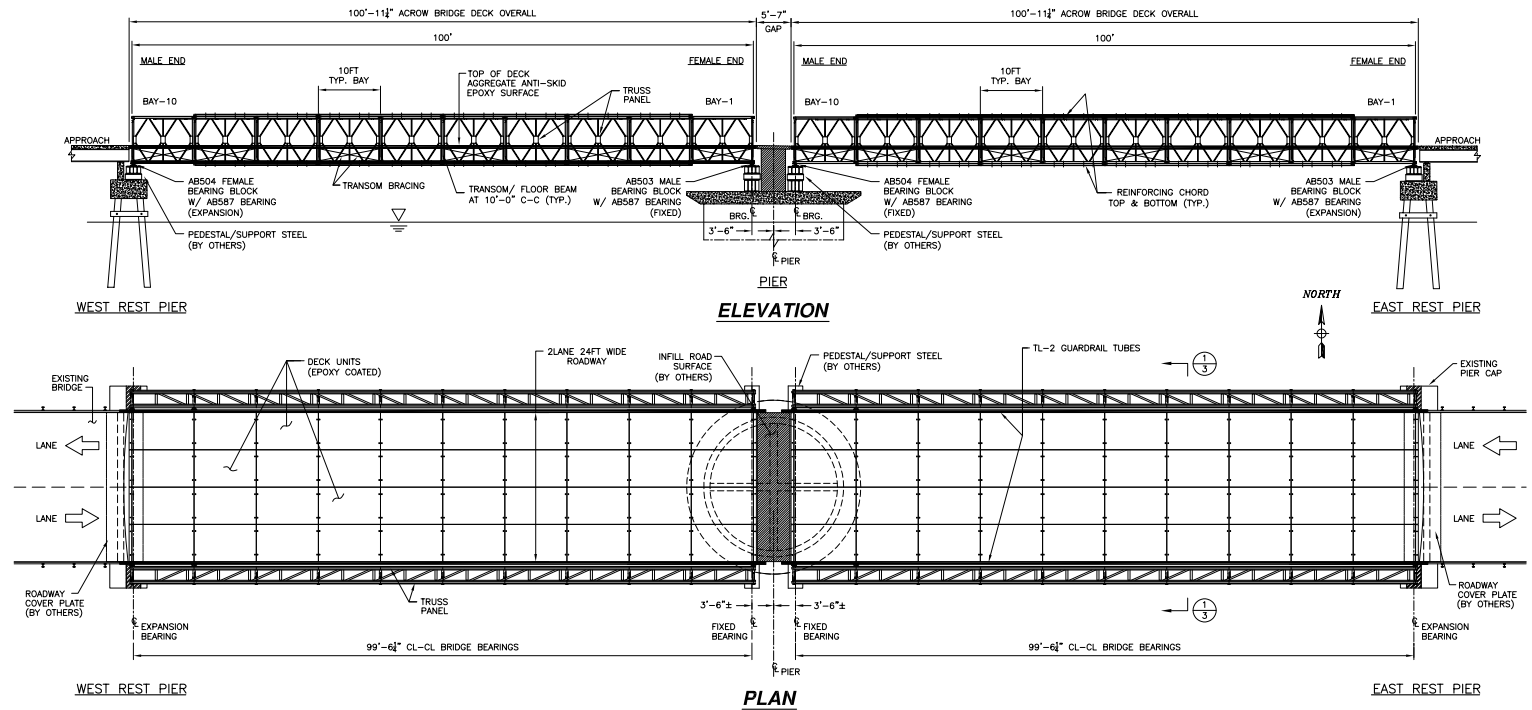
Hurricane Ida was a destructive Category 4 storm that made U.S. landfall in Louisiana at the end of August 2021 and caused widespread damage and loss of life across numerous states as far north as Connecticut. Southeastern portions of Louisiana were hit particularly hard by catastrophic rain and wind. In Jefferson Parish, residents of the Barrier Island became isolated by the destruction of the Kerner Swing Bridge, their only vehicular access to the mainland, leaving them without access to emergency services.

A temporary single-lane floating bridge, quickly installed by the National Guard several miles away from the crossing, enabled access for first responders and residents but did not offer the capacity needed for a long-term temporary solution. Ultimately, the contractor, C.E.C., Inc. and the State, selected a two-lane modular steel structure designed and supplied by Acrow, given Acrow's extensive experience restoring damaged infrastructure in emergency conditions globally.

Shipped from an extensive inventory, the bridge consists of two 100-foot-long spans (30.48m), each with a roadway width of 24 feet (7.35m). Through close coordination between C.E.C., Inc and Acrow engineers, the two simple span bridges were developed with unique foundation solutions to replace the damaged swing bridge, utilizing lift-in spans to expedite construction.

The bridge ends and backwalls for the damaged swing bridge were curved to accommodate the swinging motion when opening the bridge. End-of-bridge deck plates were used to make the transition from the straight ends of the Acrow bridge to the curved abutment backwalls. The bridge and end-of-bridge deck plates utilized a factory-applied epoxy aggregate anti-skid deck and all bridge components were supplied over a two-week period.

The bridge opened to traffic less than six weeks after the hurricane hit, and will keep the route connected until a permanent swing bridge is constructed.



Specifications

Bridge length:

Two 100' (30.48m) spans

Roadway width:

24' (7.35m)

Guide rails:

TL-2

Deck surface:

Epoxy aggregate

Bridge erection method:

Crane lift in (barge)

Design load:

HL-93

Standard Acrow bridge finish:

- All major components galvanized to AASHTO M111-ASTM A123
- All bolts are hot-dip galvanized
- All pins are electrogalvanized

Standard Acrow bridge specification:

- Panel chords, diagonals, verticals, reinforcing chords, rakers to AASHTO M223 GD 65
- Raker braces, transoms, top chord braces, swaybraces, transom braces, diagonal chord braces, decking to AASHTO M223 GD 50
- Panel pins to ASTM A 193 GD B7
- Bolts to AASHTO M164M - A325