



Modular Steel Detour Bridge Minimizes Impact of U.S. Highway Upgrades in Rural Oklahoma

Economical rental solution from Acrow provides reliable, safe route during bridge reconstruction

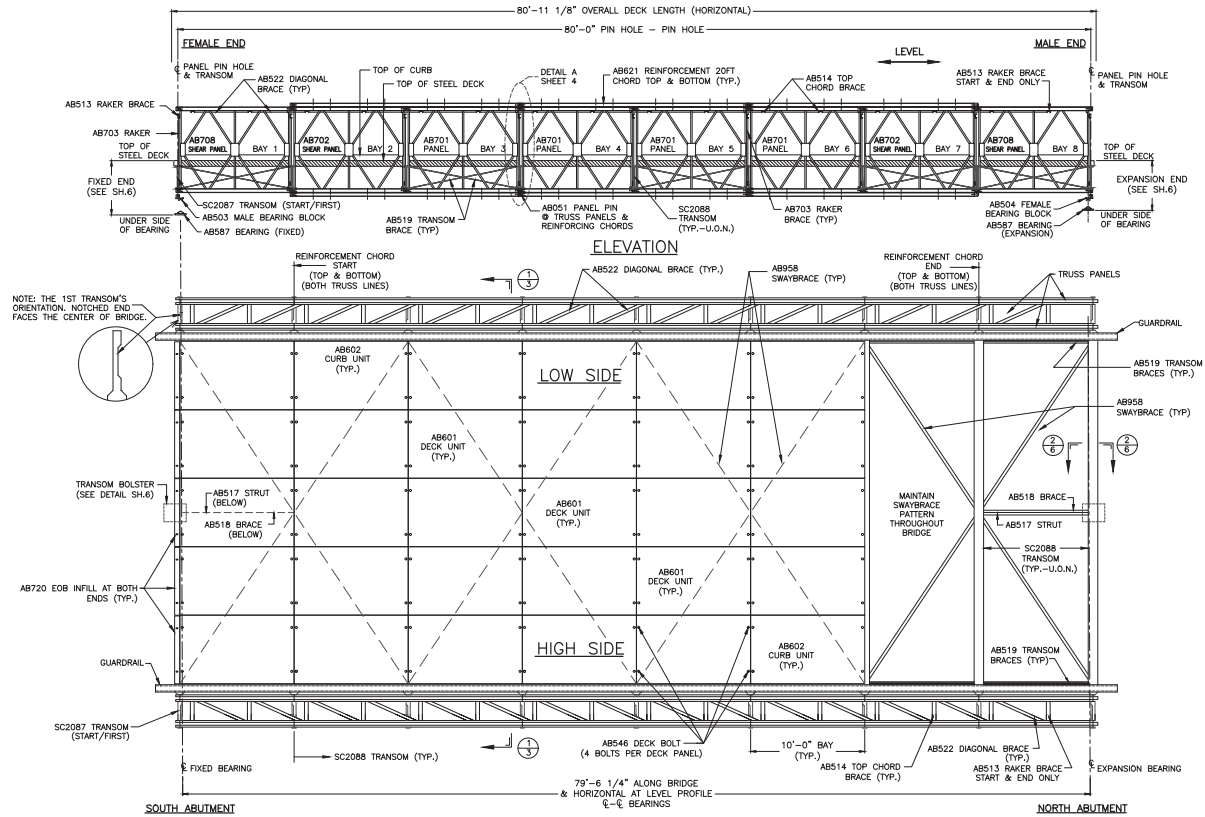
While planning the replacement of a structurally deficient bridge on U.S. Route 75 in Okfuskee County, the Oklahoma Department of Transportation (ODOT) required a temporary detour bridge to avoid traffic disruptions during construction. In addition to replacing the old structure, the project also included widening the roadway to accommodate an increasing volume of traffic in the area.

ODOT awarded the contract to Wyatt Contracting Inc./Central Bridge Company, a joint venture between the two Oklahoma firms. Although initial plans specified a temporary bridge of different design, prior successful projects with Acrow led the project team to submit a value engineering proposal to ODOT demonstrating the Acrow panel bridge would be more economical, could be constructed more quickly, and would allow for more water flow during a potential flood event.

The new detour bridge was constructed and opened

to traffic in October 2023. The two-lane bridge is 80 feet (24.38m) long and has a curb-to-curb width of 30 feet (9.15m). Designed to AASHTO HS20-44, it has a two-inch thick asphalt overlay and was installed with a crane-assisted launch. Owing to concerns about stormwater accumulating on the bridge, a 2% cross-slope was required, which Acrow addressed by providing a super-elevated transom. Rented to Wyatt Contracting Inc./Central Bridge Company, Acrow's bridge will be in service until the new permanent structure is complete.

Acrow's modular steel detour bridges are available for rent or purchase. In addition to making work sites safer for workers and the traveling public, Acrow's cost-effective, customizable modular detour bridging can help minimize work zone impacts to travelers and local commerce, and ensure projects stay on or ahead of schedule.



Specifications

Bridge length:

80' (24.38m)

Roadway width:

30' (9.15m)

Guide Rails:

TL-3

Deck surface:

Asphalt overlay

Bridge erection method:

Crane-assisted launch

Design load:

HS20-44

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:

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