



Modular Steel Detour Maintains Traffic Flow During Bridge Replacement Project in Hastings-on-Hudson, NY

Cost-effective, temporary Acrow bridge solution eases construction inconvenience in congested suburban location

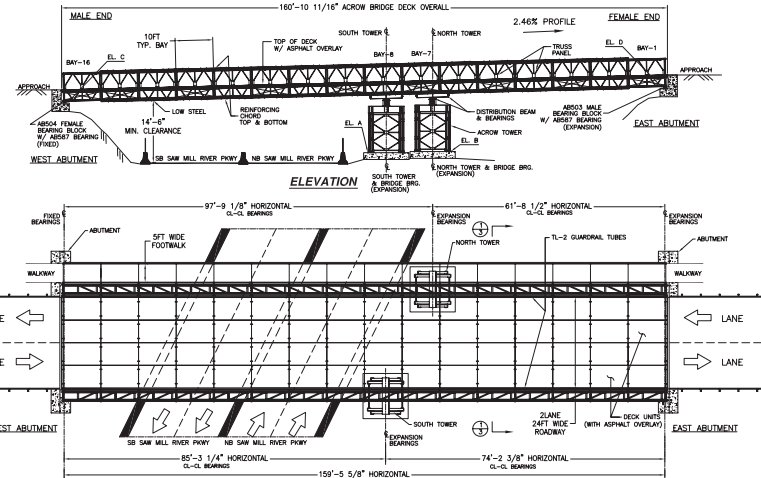
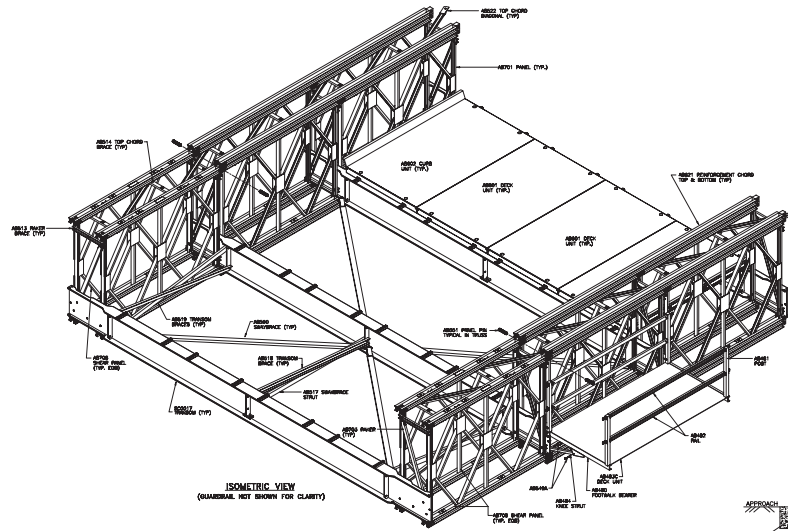
In use since 1936, the Ravensdale Bridge in the Village of Hastings-on-Hudson in Westchester County, New York, was sanctioned for replacement in 2018. Rehabilitation was an option, but this would not have addressed some of the underlying deficiencies of the structure, including vertical clearance.

ECCO III Enterprises, Inc. was selected as contractor for the project and chose a temporary Acrow bridge to serve as an on-site detour for the duration of the construction, providing reliable access for residents and first responders and avoiding excessive traffic diversion to local streets.

Acrow's solution is a two-span bridge supported on two Acrow shoring towers, with an overall length of 160 feet

(48.77m) and a width of 24 feet (7.35m) to accommodate two lanes of traffic, plus a 5 foot (1.5m) footwalk. Acrow's structure is ideally suited to the tight build area; the bridge was assembled and installed with minimal heavy equipment utilizing a full cantilever launch. The route opened to traffic in August 2020 and remained in service until July 2021.

Whether used for rehabilitation projects or new infrastructure installations, durable and reliable modular steel detour structures are excellent choices to consider over phased construction. In addition to enabling Accelerated Bridge Construction, they are cost-effective ways to enhance safety and minimize work zone consequences.



Specifications

Bridge length:

Two spans of 70' (21.34m) and 90' (27.43m) for an overall length of 160' (48.77m)

Roadway width:

24' (7.35m) plus 5' (1.5m) footwalk

Guide rails:

TL-2 Structural Tube

Deck surface:

Asphalt overlay

Bridge erection method:

Full cantilever 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:

- Panel chords, diagonals, verticals, reinforcing chords, rakers to AASHTO M223 GD 65
- Raker 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