

Acrow's Modular Steel Bridge Selected as Infrastructure Solution in an Award-Winning Project

Named as a 2016 'Project of the Year' by Ontario Public Works Association



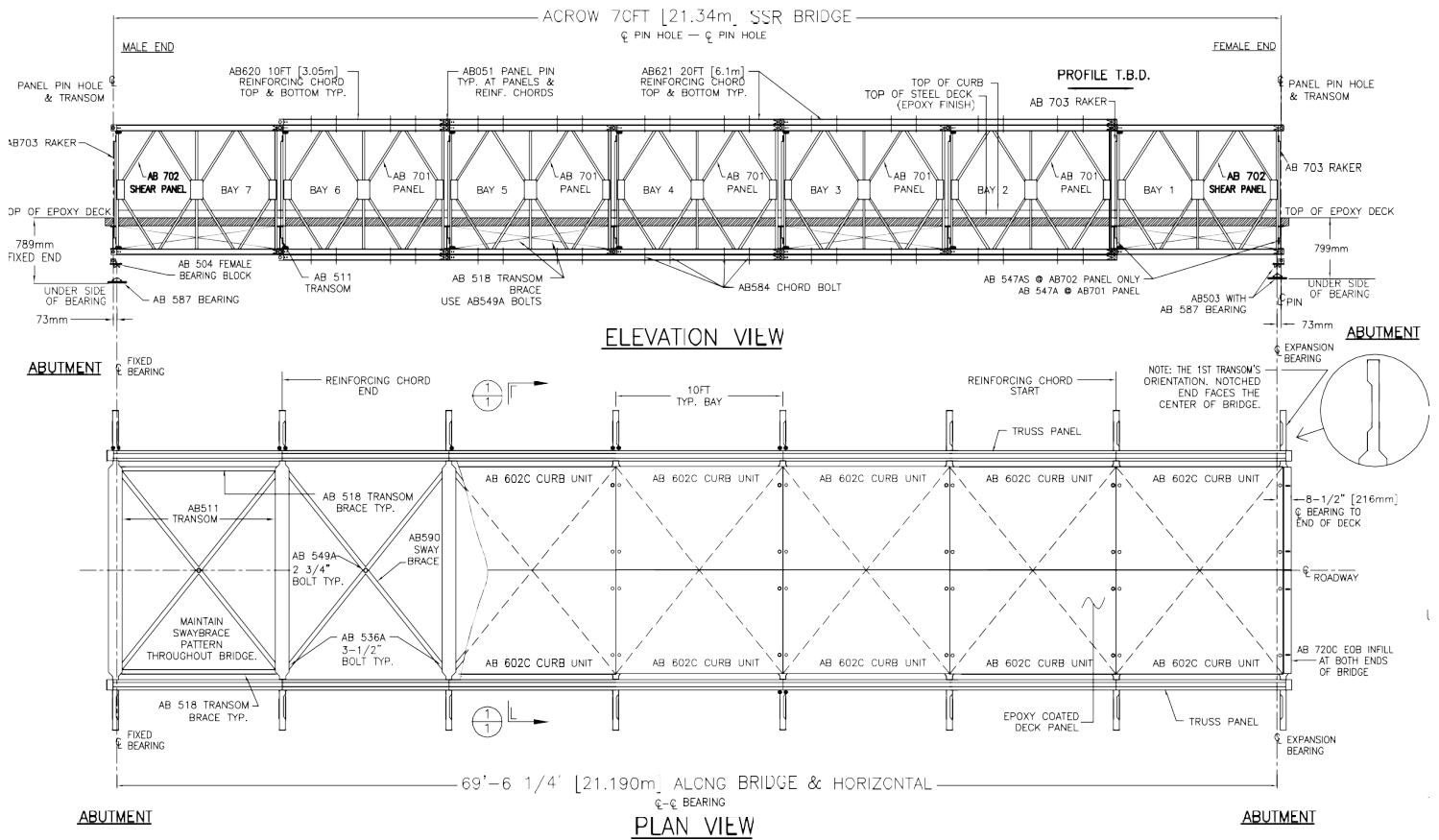
Because the 95-year-old concrete bridge on King Vaughan Road spanning the Humber River had been under-capacity for normal truck traffic for years, it was necessary for heavy vehicles, including fire equipment, to travel a longer route. But after an inspection revealed the guide rail on the bridge's south side had deteriorated and posed a safety hazard, the structure was immediately closed to all traffic. With a rapid solution needed, a modular steel structure from Acrow was selected by the City of Vaughan as a long-term, temporary solution while a new permanent two lane bridge is created.

The 21.3-meter-long by 3.6-meter-wide single lane bridge was selected in part because of Acrow's ability to design and deliver the structure in a tight time frame. The project was completed in a two week window in December 2015 and is currently in place. This was made possible by using components available from stock and because it was a typical configuration created by Acrow. Interesting aspects of the project were that the temporary structure was able to be placed over the existing abutments and the bridge could be converted to a permanent two lane structure by adding new components which would reduce project costs.

The Ontario Public Works Association presented the Project of the Year Award to the City of Vaughan in the category Disaster/Emergency Construction/Repair, Less than \$2 Million.

"It was a pleasure working with Acrow Bridge on this project," said Jack Graziosi, Director of Infrastructure Delivery, Vaughan. "The staff were very cooperative and provided excellent technical support throughout the procurement and the installation of the bridge."

"Acrow is pleased that the City of Vaughan has recognized the structural integrity and utility of this much-needed solution for a serious municipal infrastructure issue," said Ken Scott, President of Acrow Limited. "All Acrow bridges are galvanized steel and engineered to support heavy loads and frequent use, and are practically maintenance-free under even the most rugged conditions. Built to last, our bridges can be installed as permanent or long-term temporary structures, depending on the customer's needs."



Specifications

Bridge length:

21.3 meters (69.8 feet)

Bridge width:

3.6 meters (11.8 feet)

Deck surface:

Epoxy aggregate anti-skid coating on orthotropic steel decks

Live load:

CL625 ONT Truck (63 metric tonnes) in accordance with the Canadian Highway Bridge Code

Bridge finish:

- All major components galvanized to AASHTO M111 – ASTM A 123
- All bolts are hot dipped galvanized
- All pins are electro galvanized

Bridge erection:

Lift in

Bridge design:

- Panel chords, diagonals, verticals, panel reinforcing chords, rakers to AASHTO M223 GD 65
- Raker brace, transom, top chord brace, swaybrace, transom brace, diagonal chord brace to AASHTO GD 50
- Panel pins to ASTM A 193 GD b7
- Bolts to AASHTO M164M – A325