



Long-Span Modular Steel Structure From Acrow Replaces Aging Bridge in Ontario

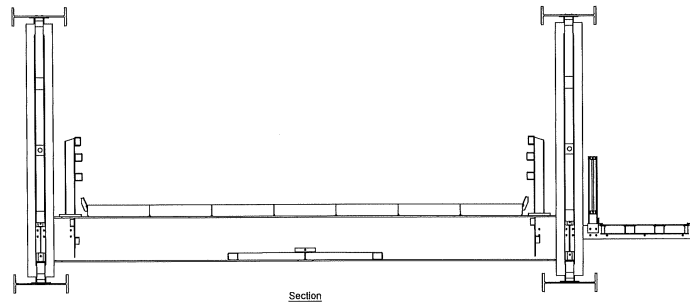
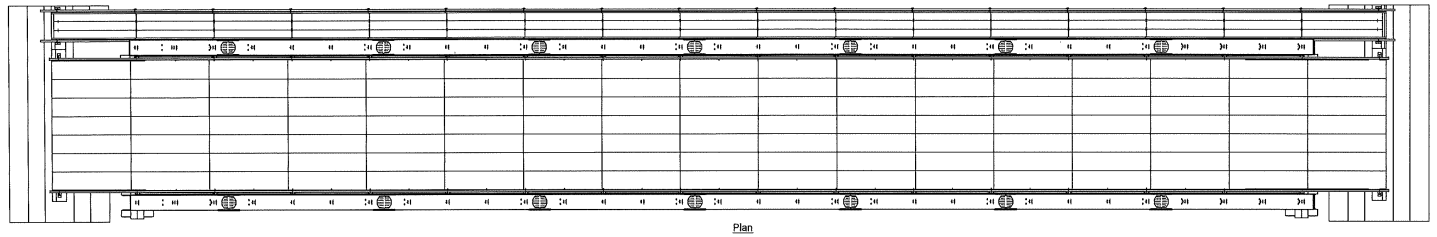
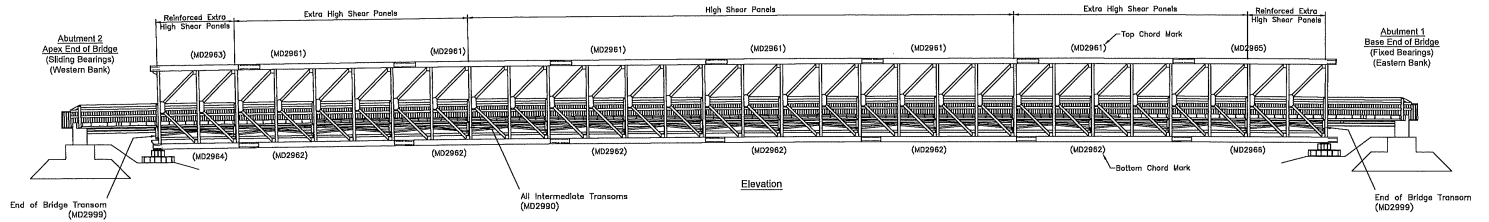
Rapid installation lessens detour time for first responders in remote township

The single-lane bridge over the Thessalon River on Highway 638 in Rydal Bank, Ontario, had reached the end of its service life and required replacement. The Ontario Ministry of Transportation (MTO) requested a wider structure to accommodate two lanes of traffic and ultimately selected a long-span modular steel Delta™ bridge from Acrow through project contractor The Miller Group.

Acrow's rapidly installed structure was an ideal solution to the unique challenges that the project posed. As the bridge provides access for emergency vehicles, a short construction time was critical, with a maximum 15-day closure of the bridge permitted. In addition, the work site had an extremely limited footprint. Steep slopes on both sides of the east bridge approach prohibited its use as a temporary laydown area, so components

were shipped to a nearby quarry pit where, after sorting, they were transported by truck to the construction site. Because timing was so vital, a fleet of 22 trucks was used to ensure a coordinated, efficient offloading of bridging materials.

The two-lane Delta bridge has a length of 221.5 feet (67.51m), a curb-to-curb width of 24 feet (7.35m), plus a cantilevered footwalk on one side. After site preparation including earthworks, foundation, unloading and preassembly of the Delta truss panels, the old bridge was removed, and assembly of the new bridge began on June 21. It was installed seven days later using a full cantilever launch, and jacked down onto its bearings, from a height of more than two meters, on June 30, opening to traffic on July 2.



Specifications

Bridge length:

221.5' (67.51m)

Guide rails:

TL-2

Bridge erection method:

Full cantilever launch

Roadway width:

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

Deck surface:

Customer-supplied asphalt overlay

Design load:

Two lanes of standard CL-625-ONT (64 metric tonnes) and pedestrian loading