



November 25, 2020

Algonquin's well-balanced, temporary detour bridge rolls into place near Drumheller, Alberta

As part of Alberta Transportation's \$2 billion Capital Maintenance and Renewal Program for 2020-21, a bridge-replacement project on Highway 10X near Drumheller required a temporary detour bridge. A rented Algonquin Modular Panel Bridge system was the chosen solution.



Project at a glance:

Project Name: Rosebud River Detour Bridge

Location: Near Drumheller, Alberta

Owner: Alberta Transportation

Consultant: LEX3 Engineering

Detour Design: GeoMetrix Group Engineering

Contractor : Alberco Construction Ltd.

Sector: Transportation

Application: Detour Bridge

Product: Algonquin Modular Panel Bridge

Dimensions: Span 30.48 m, Deck Width 4.2 m

Installation Time: Five days

Rental bridge is a modern version of the classic “Bailey Bridge” design

Algonquin Bridge maintains an inventory of Modular Panel Bridge Systems to rent for both short-term and long-term applications. These pre-engineered bridge systems — modern versions of the classic “Bailey Bridge” design — can be assembled on-site by local teams with minimal experience. Once assembled, they can be either crane-lifted into place or cantilever launched (pushed) from one side.

Due to the weight restrictions on the bridges leading up to the site, Alberco Construction Ltd. planned to cantilever launch the bridge into place. This would require a minimal amount of equipment for the assembly and pushing of the bridge.

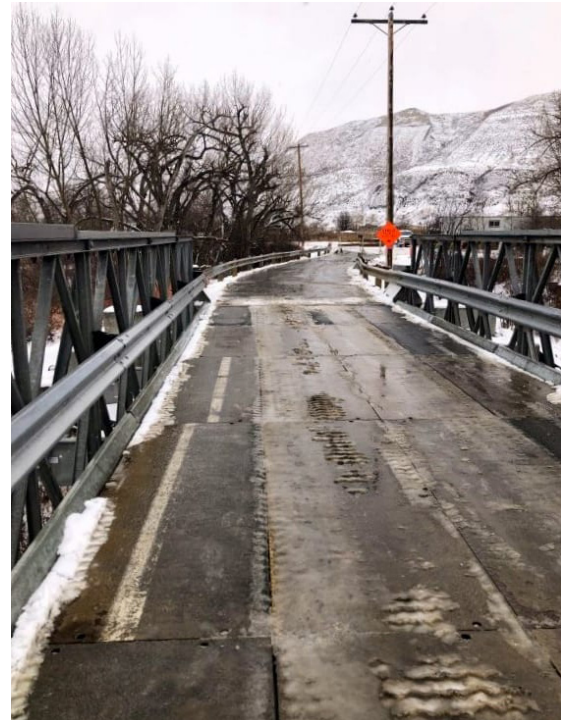
Challenge at detour bridge site required adjustments to roller positions and counterweight

A challenge was noted on-site with the design of the abutments and the location of the rollers, requiring the rollers to be set farther apart than expected. Algonquin’s Engineering team analyzed the site conditions and recommended additional counterweight to make the launch possible.

Alberco assembled the bridge using only a 4.5-ton excavator to lift the components into place and a 5-ton compact track loader to pull it across the river.

We’re not just building bridges, we’re building relationships

The AIL Group has worked with Alberco in the past on a variety of projects — retaining walls and pedestrian bridges — but this was Algonquin’s first project directly with them and the first panel bridge installation for Alberco. Clear and timely communications from both parties ensured a successful project outcome. Follow-up discussions confirmed this and we hope to collaborate on more projects in the near future.



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