



Acrow Connects Manitoba with a Permanent Transport Route for the Winter

13 panel bridges improve access throughout the Manitoba Winter Road Network

Acrow bridges have been commissioned by the Province of Manitoba to substantially improve road access to communities on the Manitoba Winter Road Network. The network covers many miles and comprises seasonal ice roads. Once built across land and frozen lakes, it offers a lifeline to local communities, otherwise isolated for much of the year except for costly air travel options. The network takes time to prepare and, in a typical year, is open from mid-January until March – weather permitting. It has to accommodate heavy transport trucks which haul vital supplies and equipment along the route.

12 of the bridges installed are permanent structures. The Wanipigow bridge was a temporary structure that acted as a detour route and has since been dismantled and reused at another location.

The main challenge was mobilizing the bridge components and substructure works to remote sites. On-site, the structures were assembled and cantilever launched with a launching nose.

Although varying in the number of spans, widths and overall length, most have a timber deck surface and all use Acrow's high-grade steel components, built by specialist local contractors, to withstand the rigours of the landscape and the harsh climate.

The improved, vast road and bridge network provides a vital link for essential truck freight to several remote communities during the winter months.

Specifications

Bridge lengths and roadway widths:

In total 13 bridges were supplied with the following dimensions and performance:

Bridge ref.	Bridge name	Length	Width	Deck surface
1	Cochrane	240' (73.15m) comprising 3 spans: 40' (12.2m), 160' (48.77m), 40' (12.2m)	13' 6" (4.12m)	Timber deck
2	Echamamish	210' (64m)	13' 6" (4.12m)	Timber deck
3	God's River	370' (112.78m) comprising 3 spans: 100' (30.48m), 210' (64m), 60' (18.29m)	13' 6" (4.12m)	Timber deck
4	God's Lake Narrows	440' (134.11m) comprising 3 spans: 80' (24.38m), 250' (76.2m), 110' (33.53m)	15' 8" (4.78m)	Timber deck
5	English Brook	150' (45.72m)	24' (7.35m)	Epoxy aggregate
6	Steep Rock	80' (24.38m)	24' (7.35m)	Epoxy aggregate
7	Wanipigow Detour (temporary)	200' (60.96m)	15' 8" (4.78m)	Timber deck
8	Redsucker	200' (60.96m)	15' 8" (4.78m)	Timber deck
9	Feather Rapids	200' (60.96m)	15' 8" (4.78m)	Timber deck
10	Mainland River	280' (85.34m) comprising 3 spans: 40' (12.2m), 200' (60.96m), 40' (12.2m)	15' 8" (4.78m)	Timber deck
11	Panko Narrows	200' (60.96m)	15' 8" (4.78m)	Timber deck
12	Hayes R.	180' (54.86m)	15' 8" (4.78m)	Timber deck
13	Laidlaw	180' (54.86m)	15' 8" (4.78m)	Timber deck

Bridge erection method:

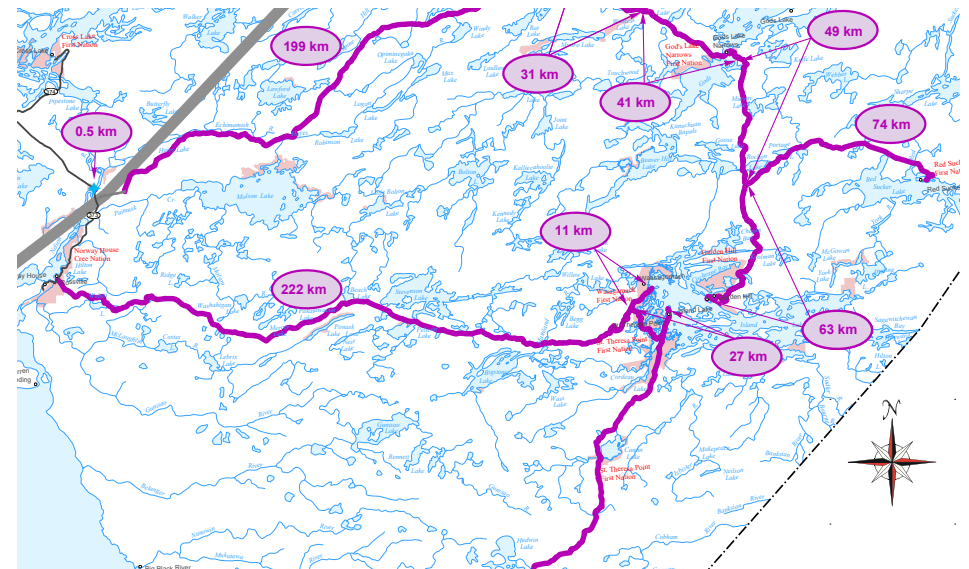
Full cantilever launch

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



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