

PROJECT PROFILE



March 18, 2021

Super-Cor Box Culvert replaces failing concrete structure on TCH near Port aux Basques, NL

Buried metal bridge installs over active streambed

The Newfoundland and Labrador Department of Transportation and Infrastructure (NL DTI) needed to replace an older concrete bridge at John's Brook on the Trans-Canada Highway near Port aux Basques. The 10 m span concrete bridge was originally built in 1967 and was most recently rehabilitated in 2001.

Super•Cor/Best•Kote/Box Culvert option ticked all of their boxes

NL DTI needed a 10 m span structure that would last longer than the old concrete bridge, meet hydraulic requirements and still have a low enough rise to maintain the existing road grade. They decided that AIL's Super•Cor Box Culvert with 75-Year Best•Kote Polymer Coating would tick all of their boxes.

Project at a glance:

Name: John's Brook Bridge Replacement

Location: Route 1, Trans-Canada Highway, near Port aux Basques

Owner /Engineer: NL Transportation and Infrastructure

Contractor: Marine Contractors Inc.

Sector: Transportation

Application: Stream Crossing

Products: Super-Cor Box Culvert with Best-Kote and MSE Precast Panel Wing Walls

Arch Dimensions: Span 10 m, Rise 2.3 m

Installation Time: Four days for box assembly, four days for wingwalls and backfilling



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Buried metal bridge structure installed over live stream bed

A temporary detour, consisting of three Corrugated Steel Pipe culverts — also supplied by AIL — had to be constructed before the demolition of the existing bridge, site excavation and preparation of the foundation soils and concrete footings could take place.

The new buried metal bridge was able to be installed over the running stream bed. Once the footings were in place, the structural plate assembly took four days, while the wingwall construction and backfilling took another four days to complete.

Despite pandemic restrictions, good project communication prevailed

Communication throughout this project was more challenging than normal because of Covid-19 restrictions. Face-to-face meetings were not possible so most communication, with the exception of the installation site assistance, was done through screen meetings and phone calls.

We worked with NL DTI during the design stages and gave them a good idea of a budget and supply timelines. Post-project follow-up provided positive feedback. They were happy with the end result and we will continue to work with them on future bridge replacement designs. We also made sure we had good communication with Marine Contractors so they could successfully plan their construction schedule.

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View a 360° drone-video tour of this project.





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