



Atlantic Industries Limited

PROJECT PROFILE



October 2, 2026

Large-sized Bolt-A-Plate Round provides deep-cover, washout-resilient solution for BC's Highway

A large-sized AIL Bolt-A-Plate Round with Best-Kote Polymer Coating replaced a temporary structure at Gladwin Creek on Highway 1, east of Lytton, BC, providing a durable, long-term, deep-cover solution designed to withstand future extreme weather events.



Project at a glance:

Project Name: Gladwin Culvert Replacement

Location: Hwy 1, 10 km east of Lytton, BC

Owner: British Columbia Ministry of Transportation and Transit

Consultant: McElhanney

Contractor: Windley Contracting

Sector: Transportation

Application: Overpasses & Underpasses

Products: Bolt-A-Plate culvert with Best-Kote Polymer Coating

Dimensions: Diameter 3990 mm

Installation Time: Approximately 16 weeks



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The temporary culvert had been installed in November 2021 after a historic atmospheric river brought unprecedented rainfall to southwestern British Columbia, devastating the Fraser-Thompson Corridor and completely severing Highway 1 at 18 separate locations. At Gladwin Creek, it caused a catastrophic pipe and culvert failure.

The intense rainfall fell onto mountain snowpacks and areas heavily scarred by the summer 2021 wildfires, including the nearby Lytton Creek wildfire. With the soil unable to absorb the sheer volume of water, Gladwin Creek was overwhelmed by a combination of water, rocks and mountain debris, breaching the existing drainage infrastructure.

The new Bolt-A-Plate Round is sized to provide additional capacity for future extreme weather events. Its invert features a concrete lining and splash pond, while a concrete collar and debris guard at the inlet provide additional protection from the high flows and debris associated with severe weather. Best-Kote Polymer Coating was also specified to enhance corrosion protection and extend the structure's service life.

Installation on steep slopes can present challenges; on this project, grading inconsistencies along the invert created assembly issues until the slope was corrected. Backfill also required careful attention as material was placed and compacted horizontally and not in line with the structure.

AIL representatives made site visits throughout the installation, helping address challenges as they arose and keeping the project on schedule. As well, an early start to the drawings ensured the plates would be on site in time for the construction to begin.

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