





Quick Bolt-A-Plate culverts keep TCH running through Ontario town

Staged construction, partial detour sequence with very limited installation window

Port Severn, a picturesque town on the shores of Georgian Bay, is home to the Trent-Severn Waterway National Historic Site. The Trans Canada Highway (Hwy 400) shares a narrow isthmus with the town and its lock and dams. Culverts under the four-lane thoroughfare were in dire need of replacement and an all-Bolt-A-Plate solution from AIL was chosen for this MTO project.

Preassembled culverts delivered in sections

Needless to say, any traffic interruption on this busy route would be problematic, so this project had a staged construction and partial detour sequence with very limited time windows to install our preassembled Bolt-A-Plate culverts and cut-off walls.

We worked very closely with the consultant and the contractor to coordinate the delivery of the materials for the precise times they were needed for each stage.

Project at a glance:

Name: MTO 2016-2034 Highway 400 Culvert Replacement

Location: Port Severn, Ontario

Owner: Ministry of Transportation Ontario (MTO)

Engineer: McIntosh Perry

Contractor: Aecon

Sector: Transportation

Application: Stream Crossing Culvert Replacement

Product: Bolt-A-Plate Structural Steel Plate

Dimensions: Diameter 2.3 m, Length 30

Installation Time: 1–2 weeks



PROJECT PROFILE

Best-Kote Polymer Coated for 75+ year service life

Due to the harsh soil/water chemistry in this area, AIL's optional Best-Kote Polymer Coating was specified to provide superior protection and long-term durability. This two-layer system is factoryapplied to the finished plates through an electrostatic-bonding process that ensures 360° protection and extends the service life of our structural steel plate products to over 75 years.

An AIL Technical Sales Representative was on-site at key junctures of the installation. We noticed a discrepancy on the torque bolting and, together with the contractor, advised MTO of the outdated standard in its *Ontario Provincial Standards for Roads and Public Works* guidelines, so it could be updated for current and future projects. Also, during one of the installations, a significant downpour flooded the site and we were able to offer some assistance on remedial measures.

Cut-off wall prevents undermining of backfill

Our versatile Bolt-A-Plate was also used to create a cost-effective cut-off wall to prevent undermining of the backfill surrounding the culverts.

Overall, MTO and Aecon were pleased with the outcome and greatly appreciated that we helped them with any minor issues.

See all Project Profiles on ail.ca





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