



### Project Data

Location	Kitchener, Ontario, Canada
Completion	2021
Project Type	HDD Weld Coating Protection
Products Used	Denso Bore-Wrap®
Contractor or Applied By	NPL Canada

### Project Details

Horizontal directional drilling (HDD) has become commonplace for the installation of buried pipe in urban environments and/or areas where open-cut just isn't feasible. The use of HDD is not new, however, the technology behind it as well as the coatings used to protect the directionally drilled pipe from corrosion have improved dramatically in recent years.

Kitchener Utilities owns and maintains both water and gas infrastructure within the City of Kitchener municipal boundaries. This project involved the installation of approximately 210 m (689 ft) of 300 mm (12") welded steel yellow jacket pipe in two separate pulls. The gas main was located in a low-lying area adjacent to a creek along a pedestrian path. As a result Kitchener Utilities elected to go with HDD to minimize environmental impacts to the area. However, Kitchener Utilities was looking for an alternative product to protect each weld joint.

The yellow jacket pipe sections were welded together, and after the appropriate QA checks on the welds were completed, each joint was covered with bituminous tape as the corrosion protection system, followed by a double layer of the Denso Bore-Wrap. Denso's Bore-Wrap has been specifically designed as a sacrificial abrasion resistant outerwrap (ARO) to protect the anti-corrosion coating at each weld joint from abrasion and gouging during the direction drilling process.

The Bore-Wrap proved its effectiveness when the Contractor ended up pulling a portion of the pipe in the dry because the water they inject into the bore at the drill head temporarily stopped working. The Contractor ended up excavating down to inspect the pipe, and found the Bore-Wrap completely unaffected. The Contractor was impressed with its ease of application and the finished result, as well as the support provided by Denso North America.



Typical weld joint on a 300 mm (12") yellow jacket steel gas main covered with bituminous tape for corrosion protection.



Bore-Wrap finished look with the seams fully fused together. The Contractor removed the Poly-Wrap as the pipe was being pulled.



Image of the 300 mm (12") yellow jacket steel gas main in the process of being pulled.

Date Published: 08/01/2021

Denso North America - Canada (Ontario)  
90 Ironside Crescent, Unit 12 / Toronto, M1X 1M3  
Tel: 416-291-3435 Fax: 416-291-0898  
sales@densona-ca.com

[www.densona.com](http://www.densona.com)  
A Member of Winn & Coales International

Denso North America - USA  
9710 Telge Road / Houston, TX 77095  
Tel: 281-821-3355 Fax: 281-821-0304  
info@densona.com