



Town of Penetanguishene, Ontario

Sample Projects Brief as a Municipality Roster Engineer and the Development Engineering Peer Reviewer **(Since 2018)**



Project Names:	1. Main Street Reconstruction: Engineering Consultant (2018) 2. Water Transmission Main Condition Assessment (2024)
Project Locations:	Town of Penetanguishene, Ontario
Client:	Corporation of the Town of Penetanguishene
Project Timeline:	Main Street Reconstruction: June 2018 – November 2018
Contract Value:	Main Street Reconstruction: \$25 Million
Engineering Fees:	Main Street Reconstruction: \$800,000
Project Details & Relevant Experience	<p>Greenland Consulting Engineers (Greenland) now serves as a Prime Engineering Consultant for the Town of Penetanguishene. In addition, Greenland scored (via a prior RFP process) the highest on the Town of Penetanguishene consultant roster, of four (4) other firms. Since 2018, Greenland has performed numerous projects for the Town of varying sizes and complexities. All construction projects Greenland has served as contract administrator and construction inspection in the Town of Penetanguishene have come in on time and under budget.</p> <p>Some of the projects have included: Fuller Avenue and Robert Street Intersection Improvements Schedule 'B' Class E.A. and Detailed Design , Relocation of Angel Statues (\$500K Heritage Project), Martin Valley Park Re-Habilitation (\$1M Const. Cost), Engineering Peer review services for development from 15 homes to 300 homes, Harriet St. Reconstruction Construction inspection & Contract Admin (\$1.4M Const. Cost), Navy Lane Drainage Improvements Detailed Design and Construction (\$2M Const. Cost) , Water St. Reconstruction Detailed Design, Snow Storage Schedule 'B' Class E.A., Complete Re-Design of Penetanguishene Engineering Standards, Develop Townwide SewerGEMS model, as well as many other smaller projects across all aspects of municipal engineering design.</p> <p>Greenland staff completed a variety of tasks associated with the design and preparation of construction drawings, schematics and specifications for site works and services related to roads, underground services, grading, site storm water management and related infrastructure work.</p>

NOTE:
 Highlighted projects to the right include Town and media website hyperlinks for more details.





In 2018, Greenland was retained by the Town for the **Main Street Reconstruction project**. Greenland provided full-time construction administration and inspection services for this landmark project. The overall project included the complete replacement of sanitary sewers, storm sewers, water mains and associated services, road reconstruction, and boulevard improvements for 1.2 km on Main St. in the heart of the Downtown Core. The project was extremely complex due to the aging existing infrastructure, public disruption, and tight timeline. The project was undertaken by the Town to upgrade the existing Downtown Core with up-to-date servicing and enhance the aesthetic appearance of Main Street.

Based on the tight timeline of the project, Greenland worked efficiently and diligently with Town staff and Contractor to ensure construction-related issues were addressed quickly and no delays were caused. As part of Greenland's scope of work, full-time construction inspection was required from a few inspectors to start and reduced to one (1) inspector towards the end of the project. Greenland also kept accurate records of observed construction methods and quantities which ultimately aided in the success of the project. The project was completed on-time and under the Council approved construction budget. Greenland's Principal-in-Charge was **Jim Hartman, P. Eng.** A letter of acknowledgement from the Town Engineer is also attached for reference.

In November 2024, Greenland (in association with PIA Global) provided the Town **specialized engineering – acoustics technology services** regarding a condition assessment for a +110-year Cast Iron water transmission main. This trunk main, and which is exposed in some locations and segments crossing beneath a marsh area, now services many existing homes but has also been proposed to service new development sites designated within the approved Official Plan.

In late 2005, the project's findings were presented (with other similar Greenland projects) at the CWWA / NWWA national conference in Victoria, B.C. Greenland slides excerpts are attached for reference and which includes an "unsolicited" email acknowledgment from the Town's project manager and who oversees the water supply system.



12 February 2019

Greenland International Consulting Ltd.
120 Hume St.
Collingwood, ON L9Y 1V5
Attention: Jim Hartman, P. Eng.



Re: Main Street Reconstruction Project Consulting Services for the Town of Penetanguishene

Dear Jim:

As Director of Public Works for the Town of Penetanguishene, I would like to extend my appreciation to Greenland Consulting Engineers for providing exemplary contract administration and construction inspection services for the Penetang Main Street Reconstruction Project.

The Main Street reconstruction was a huge undertaking for the Town which consisted of: the full reconstruction of 1.4 km of roadway including widening for improved lane widths, on-street parking, storm sewer replacement, watermain and sanitary sewer replacement, as well as landscaping and lighting improvements to better serve businesses and residents. The project included significant logistical challenges with respect to the coordination of public access for businesses, and providing workable upgrades to existing infrastructure under difficult site constraints and a tight time line.

As the Contract Administrator and on-site Construction Inspector, Greenland always maintained open lines of communication between the Town, Contractor, affected businesses and residents, and promptly responded to all questions and issues raised by the Contractor, the Town and the public. Greenland's attention to detail throughout the assignment helped ensure the project was completed on-time and under budget.

It has been a pleasure for the Town of Penetanguishene to do business with your team and the Town looks forward to working with Greenland again in the future.

On a personal note, I would be pleased to serve as a professional reference when your firm bids on other municipal projects in the future.

Sincerely,

The Corporation of the Town of Penetanguishene
Bryan Murray, P.Eng
Director of Public Works

Town of Penetanguishene: 250 mm CI Main

- Project Details:**
- 1) Age +110 years. Completed November 2024 and 1-day on site.
 - 2) Analysis included over 400 metres across marshy terrain.
 - 3) > 60 m section partially exposed above ground.

Findings: Wall thickness loss: Only 22–31% (☺) original wall thickness.

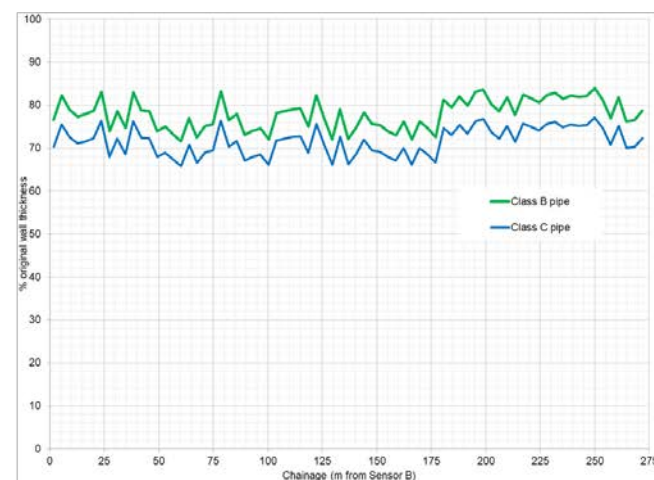
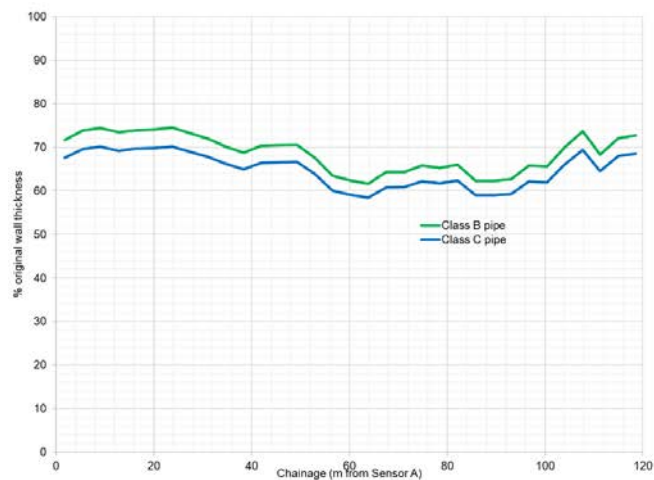
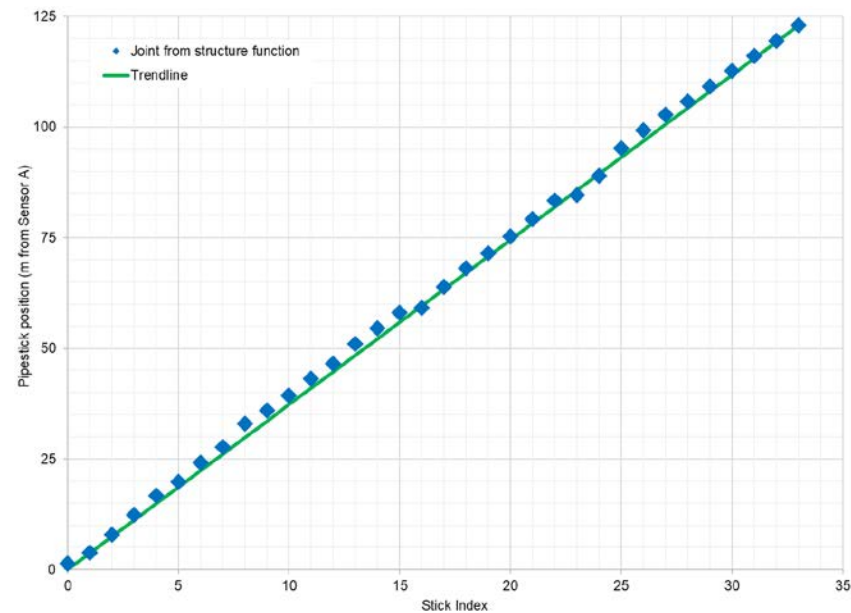
Implications: Over time, continuing reduced transmission operating pressure.

Recommendations:

- 1) Initiate entire replacement via 2026/27 capital budgeting & planning process.
- 2) In the interim, conduct monitoring (with leak checks) on vulnerable segments.



Town of Penetanguishene: 250 mm CI Main





Town of Penetanguishene: 250 mm CI Main



From: Alain Roy
Sent: December 9, 2024 9:24 AM
To: Mark Palmer
Cc:
Subject: RE: Draft Report (Greenland Penetang Watermain Assessment)

Hello All,

Thank you very much to everyone who was involved in making this happen. The report is very clear, precise, and informative. I'm pleasantly surprised at the results which have eased some of my concerns regarding this pipe.

We will be conducting the engineering for the replacement of this pipe in 2025, however it will likely be a few years before it gets replaced. My only question would be regarding the installation of a permanent acoustic device to monitor the pipe until it gets replaced. This was a recommendation in the report. Is this something you guys could help initiate?

Thanks again. Much appreciated.



Alain Roy

Water Distribution Operator

Town of Penetanguishene

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