Welcome to the

Erin Wastewater System Pre-Construction Stage Public Information Centre

7:00 PM to 9:00 PM

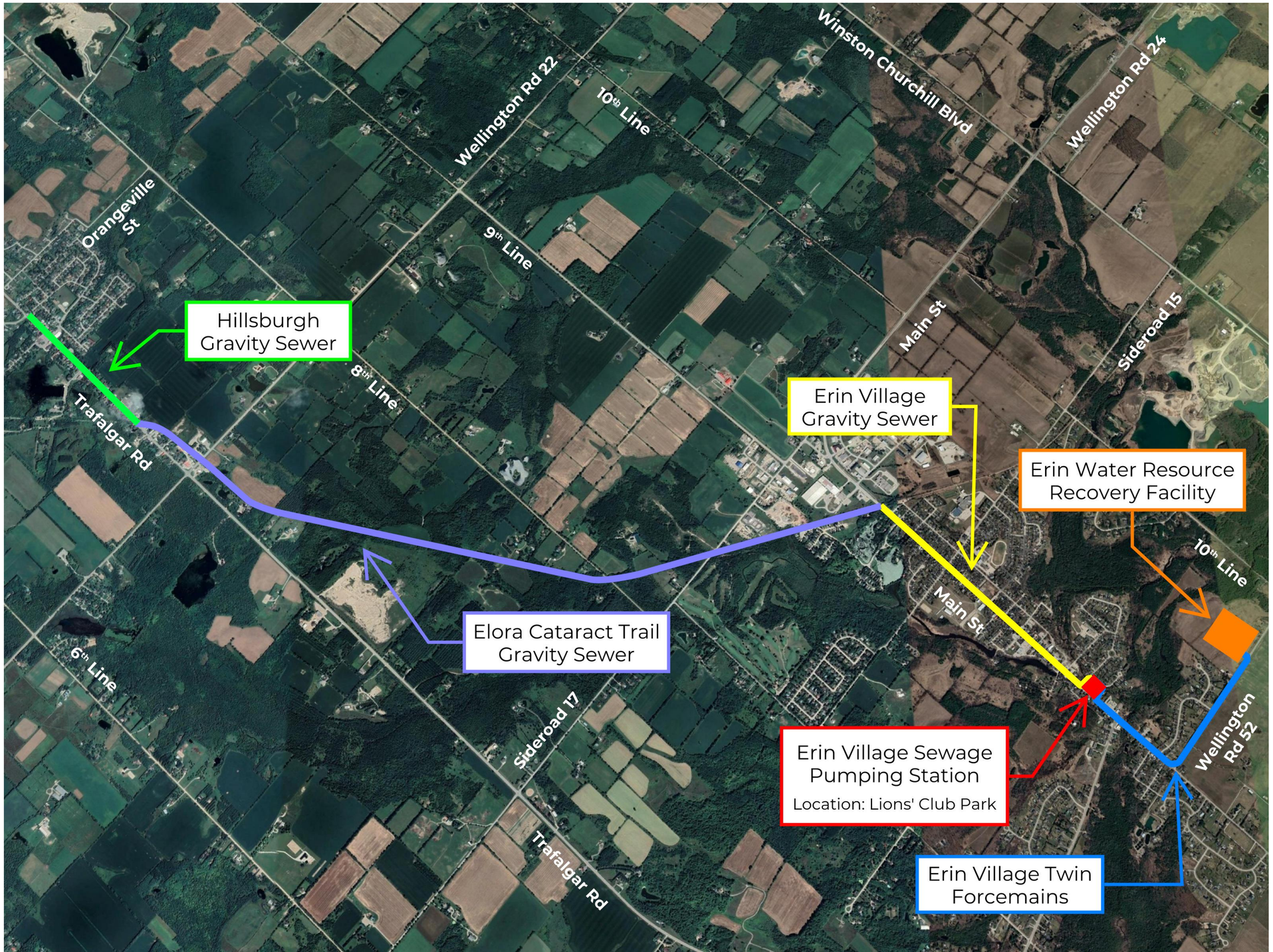
Purpose of the Public Information Centre

This Public Information Centre has been coordinated to provide local residents with information pertaining to upcoming **construction activities**.

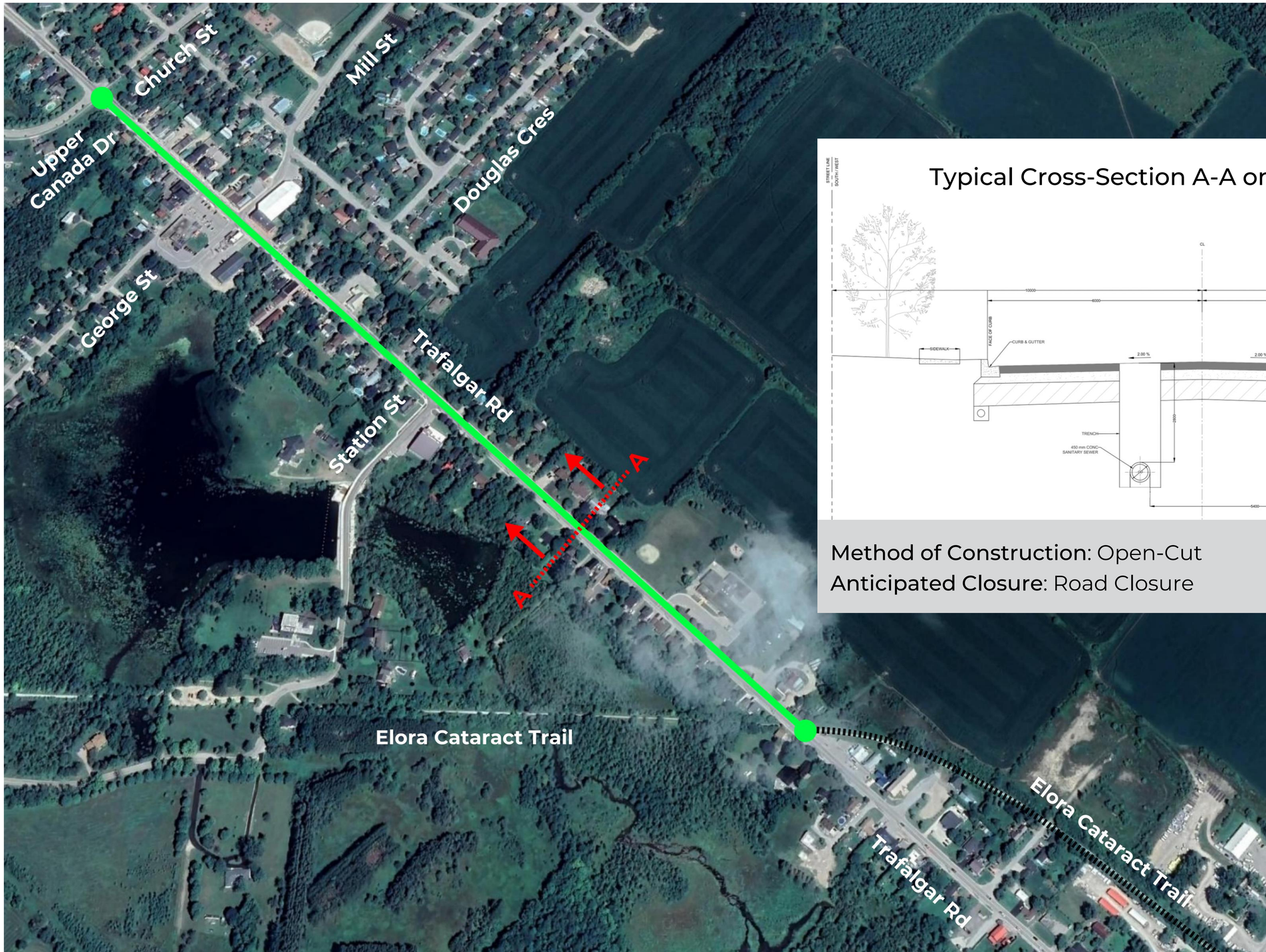
Our team members are wearing name tags, please approach them to ask questions.

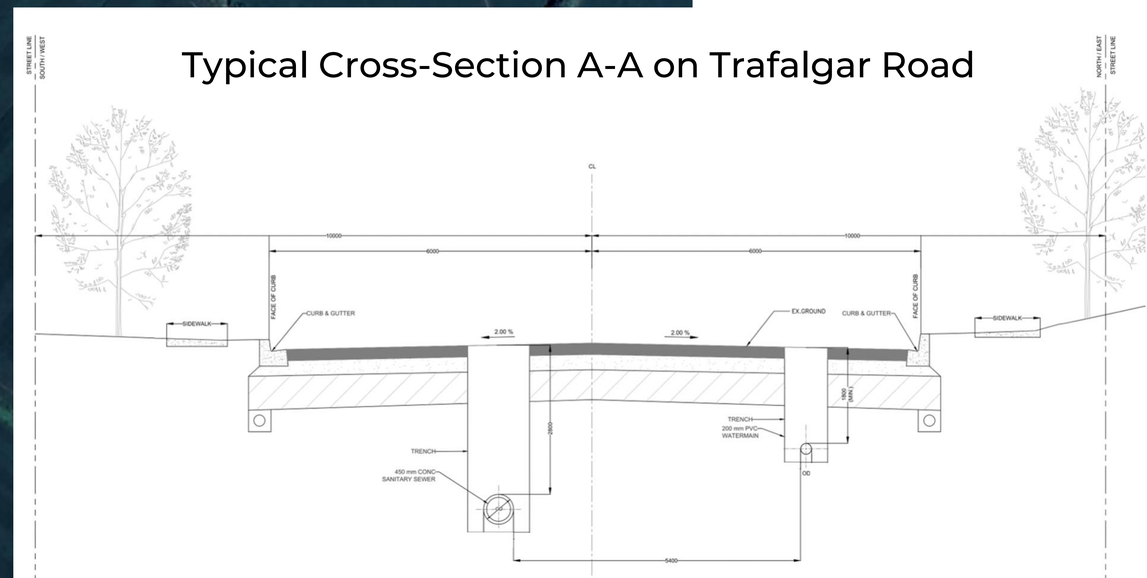
If you're with the media, **please acknowledge yourself** at sign-in so we can provide you with a media identification tag.

Wastewater System Plan Overview



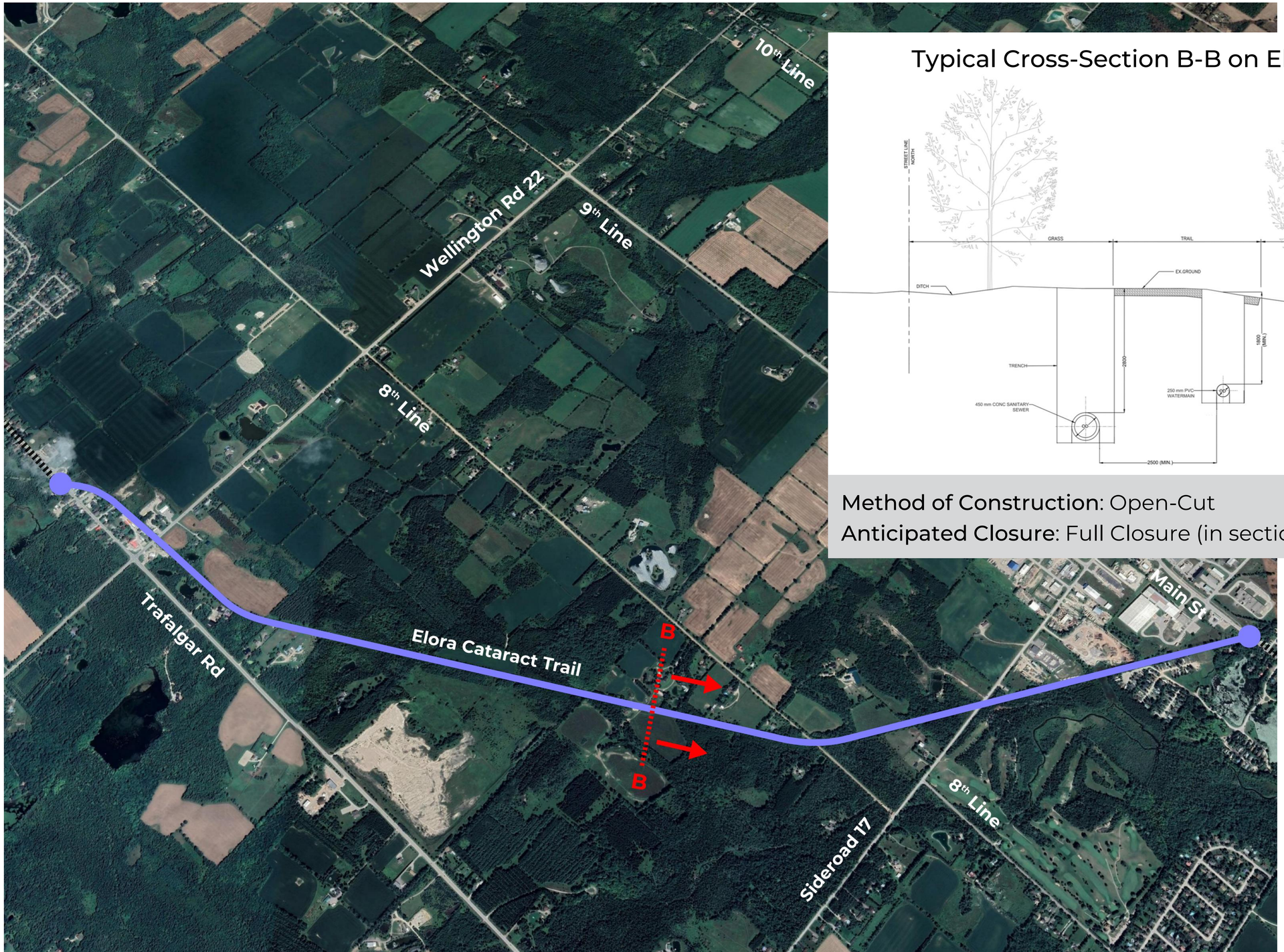
Hillsburgh Gravity Sewer



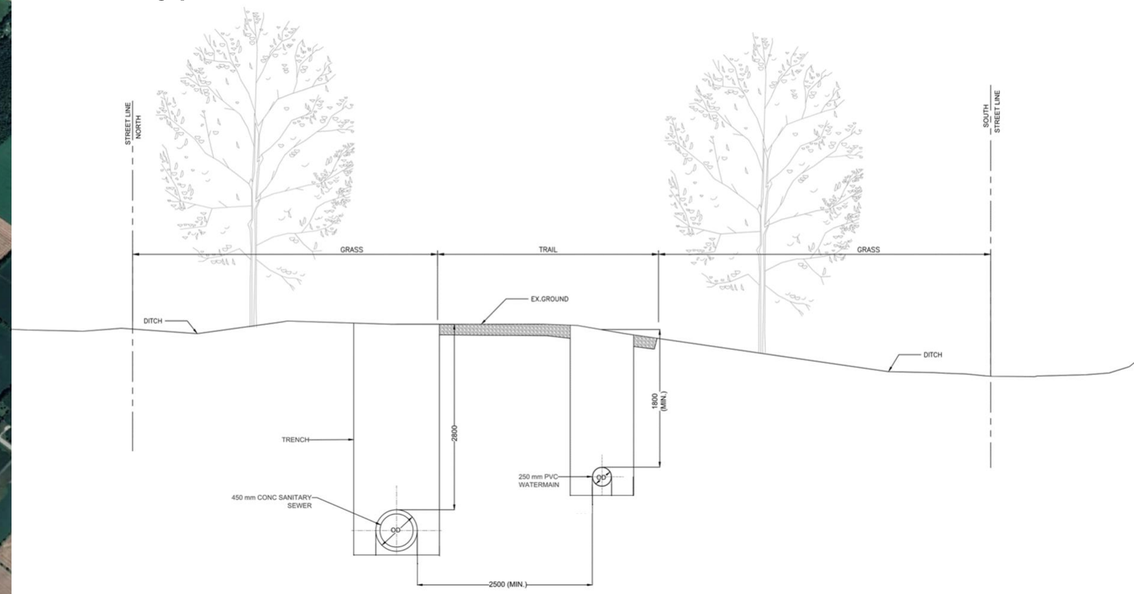


Method of Construction: Open-Cut
Anticipated Closure: Road Closure

Elora Cataract Trail Gravity Sewer

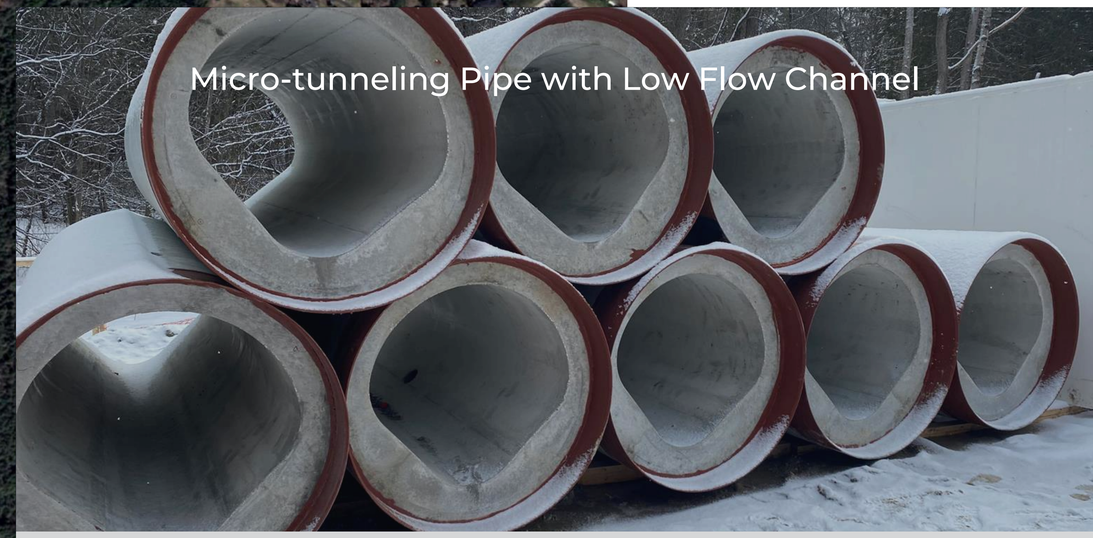


Typical Cross-Section B-B on Elora Cataract Trail



Method of Construction: Open-Cut
Anticipated Closure: Full Closure (in sections)

Erin Village Gravity Sewer



Method of Construction: Micro-tunneling
Anticipated Closure: Lane Closure

Elora Cataract Trail
Dundas St E
Main St
Scotch St
Main St
Dundas St W
Erin Village Sewage Pumping Station
Location: Lions' Club Park
Millwood St
Water St
Lion's Park Ave
Main St

Legend

Proposed Shaft Location on Main Street/Water Street

Erin Village Sewage Pumping Station

Plan View – Lions' Club Park

Location: Lions' Club Park
Anticipated Closure: Limited park access during construction

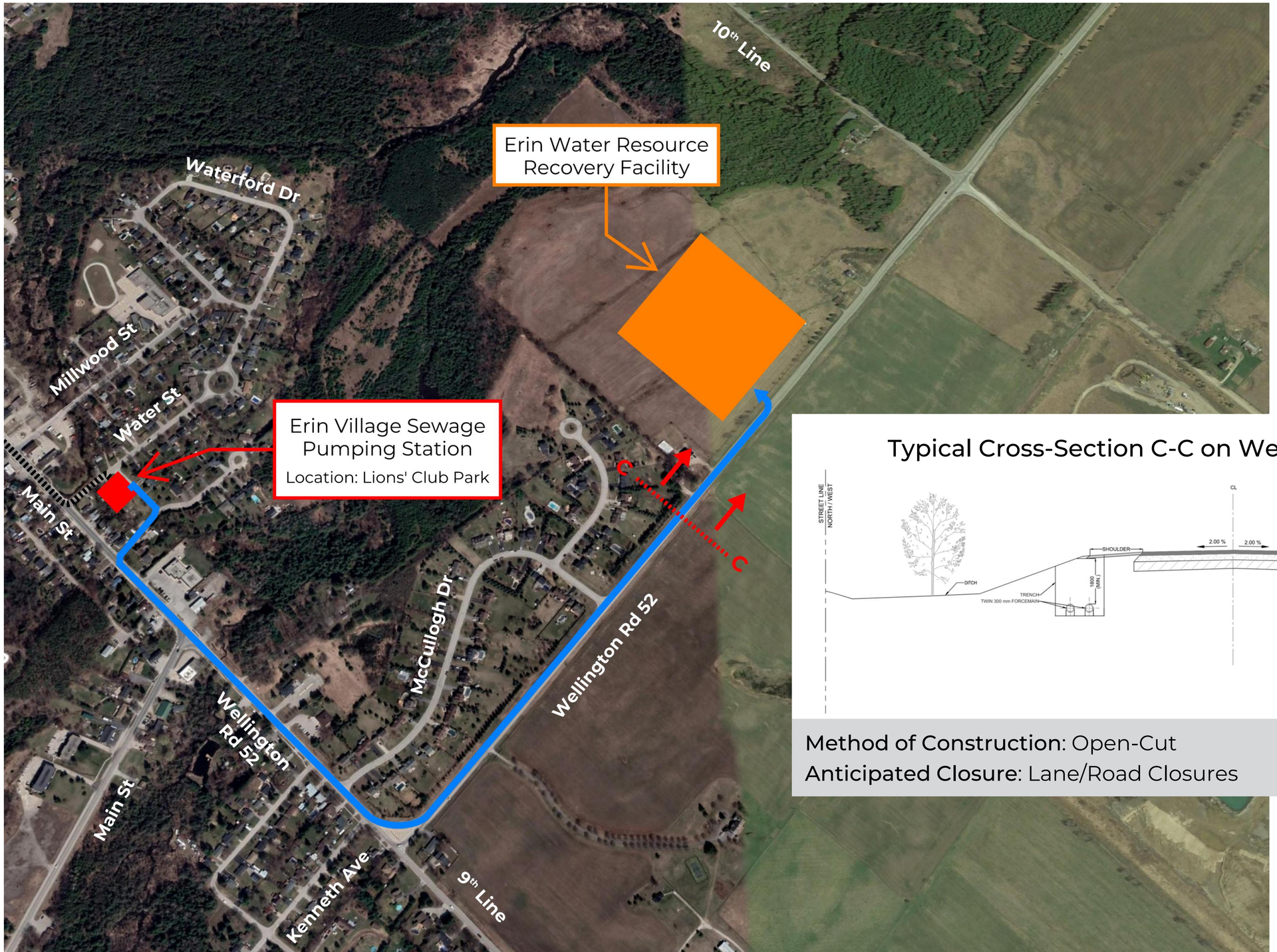
Want to know more? Check out our fly-by, aerial-perspective video of the sewage pumping station.
Please ask one of our team members to direct you to the appropriate TV/video station, if unsure.

Erin Village Sewage Pumping Station

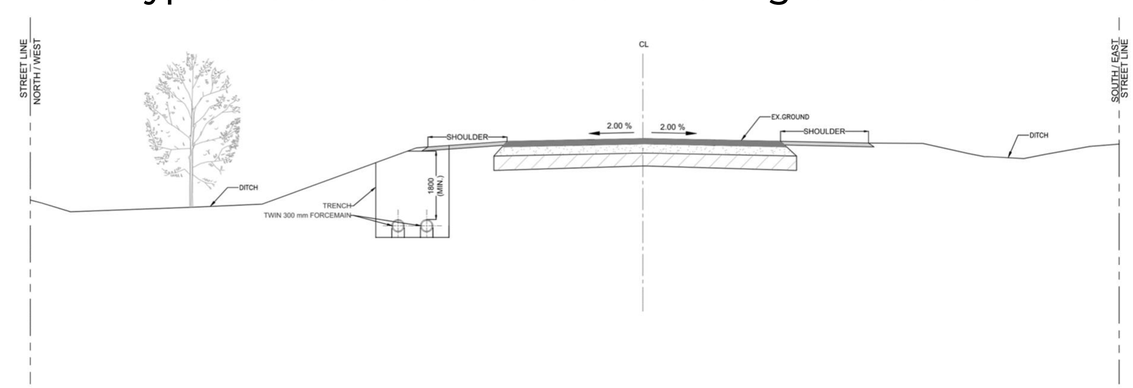
3D Conceptual View – Lions' Club Park

View of Erin Village Sewage Pumping Station from Water Street

Erin Village Twin Forcemains



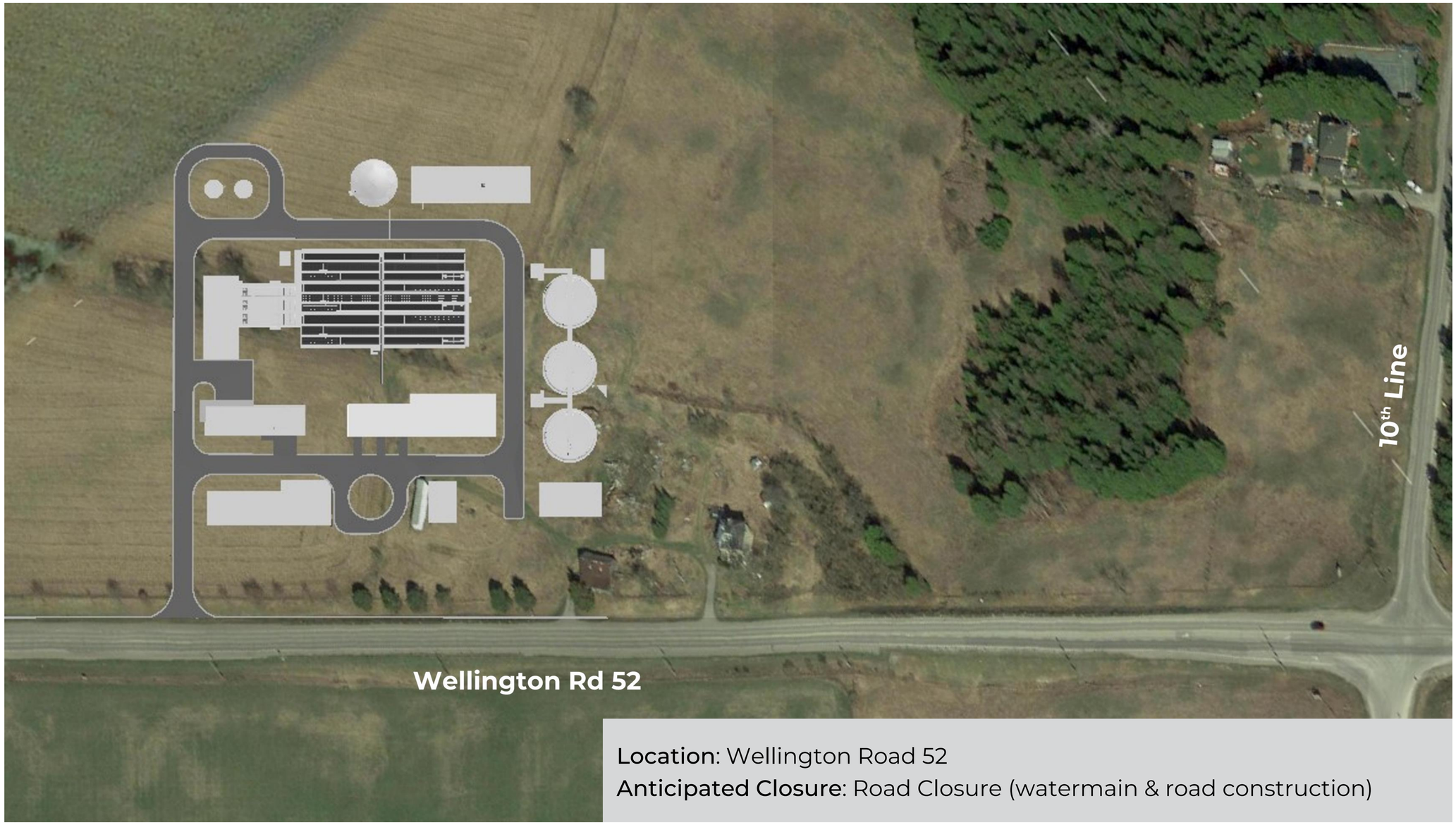
Typical Cross-Section C-C on Wellington Road 52



Method of Construction: Open-Cut
Anticipated Closure: Lane/Road Closures

Erin Water Resource Recovery Facility

Plan View



Location: Wellington Road 52
Anticipated Closure: Road Closure (watermain & road construction)

Want to know more? Check out our fly-by, aerial-perspective video of the facility.
Please ask one of our team members to direct you to the appropriate TV/video station, if unsure.

Erin Water Resource Recovery Facility

Environmental Protection & Sustainability

Potential Reuse of Wastewater

- A portion of the final treated effluent water **will be chlorinated** as needed and used for hose wash down and screen flushes.
- The effluent pumping station has been designed with reserve capacity for a **direct fire truck connection**. This will help reduce the need to use potable water.

Recycling of Certain Contaminants & Recovery of Sustainable Energy

- The biosolids will be treated to create a **certified Class A fertilizer** that will have the potential for generating revenue for the Town of Erin.
- The Class A product will also be used as the **energy source** for the biological nitrogen removal process.
- Any **residual biogas** that is released during the winter on-site storage of the fertilizer will be captured, compressed, and used in the feed to the dual-fuel boiler.

Minimized Odour

- Specialized ionizers will not only control the odour, but also **reduce power consumption** to 13 kW compared to nearly 100 kW for a conventional system, leading to significant cost savings.

Protection of Water Quality & Receiving Environment

- Designed to produce **one the strictest effluent discharge requirements in North America** due to the final discharge point into a designated, local "cold water" river which is one of the key breeding grounds for the Brook Trout in Southern Ontario.
- The Bardenpho process of wastewater treatment will be implemented to **produce better quality treated water** through the biological removal of nitrogen. Chemical precipitation & ultrafiltration will also be employed to remove phosphorus from the treated water. The removal of both nitrogen & phosphorus is essential to protect the waterways.
- Temperature upstream and downstream of the effluent mixing zone will be monitored and, in summer months, the **effluent will be cooled to 19°C**, which is suitable for the Brook Trout.
- To meet the **discharge requirement for dissolved oxygen**, the natural gradient of the site will be used to include hydraulic steps between process units, which draws in air during each step fall.

Trenchless Pipe Installation

Micro-tunneling Method

- **Micro-tunneling is a trenchless tunnel construction method that is widely used for the installation of sewer, water and gas pipelines, and telecommunications cables.**
- Micro-tunnel boring machines use **laser-guided remote control** and therefore best suited for pipelines that require precise grades, such as gravity sewers.
- Micro-tunneling involves constructing shafts and tunneling from shaft to shaft. The shafts are constructed without open excavation.
- In comparison to the traditional open-cut pipe installation method, micro-tunneling is **less disruptive** in nature and has a **lower carbon footprint**.

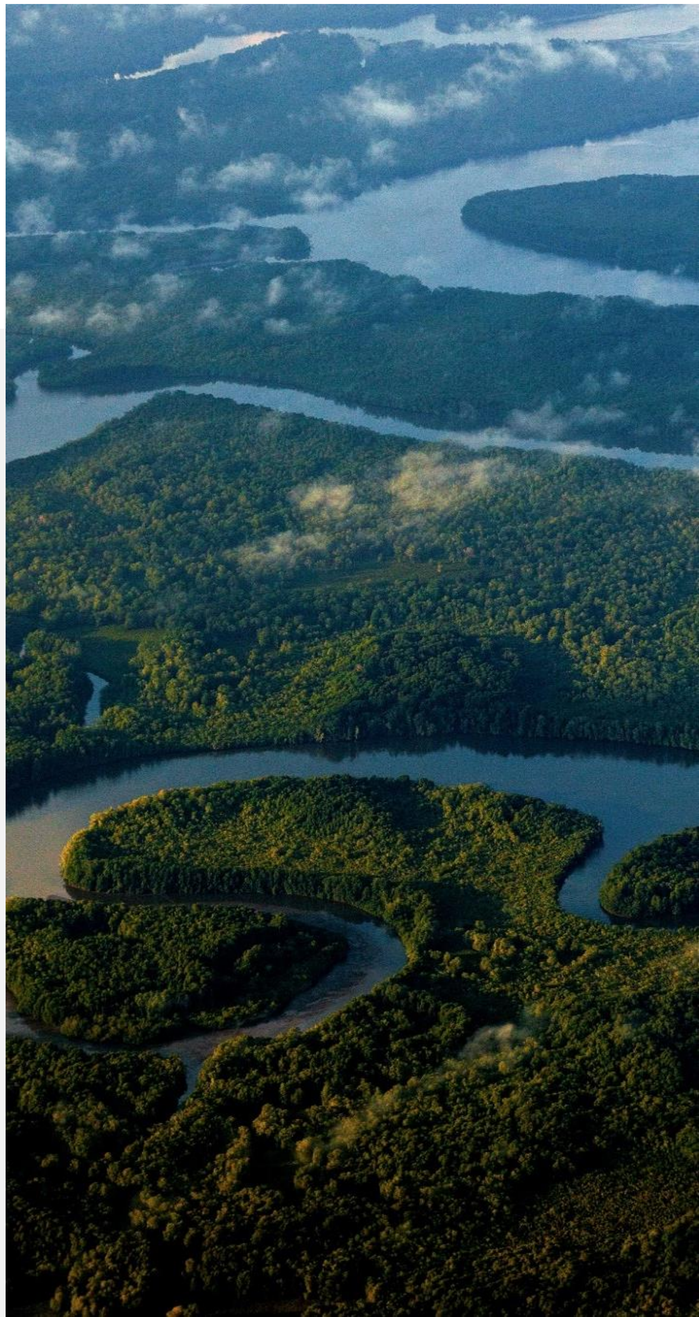
Want to know more? Check out our short video on how micro-tunneling shafts are constructed.

If the TV/video station is not immediately visible, please ask one of our team members to direct you to the appropriate area.

Mitigation of Environmental Impacts
from Construction Activities

Environmental considerations related to construction activities have been at the forefront of attention throughout the project planning phase.

Sustainable planning and conservation have been embedded into the design of the Erin Wastewater System project.



Tree Protection Plan

Preserve and protect healthy trees where possible, and offset impacts by planting multiple trees for each tree removed.

Trenchless Pipe Installation

Less disturbance to the surrounding environment and lower carbon footprint than traditional open-cut installation.

Trail Restoration

Following pipe installation, the Elora Cataract Trail will be restored to its original condition or better.

Recycled Construction Materials

Existing native materials such as soil will be used during the restoration phase of construction works.

Erosion and Sediment Controls

Multi-barrier approach employing various controls to protect natural features from erosion and/or sediment accumulation.

Limited In-Water Work

When possible, trenchless pipe installation will be applied at creek crossings to reduce or eliminate the need for in-water work.

Anticipated Community Impacts
due to Construction Activities

Various measures will be implemented to limit the impact of disruptions caused by construction activities on the community.

1. Routine road cleaning to minimize dust and air emissions
2. Construction activities will be planned in accordance with noise bylaw requirements
3. Required closures will planned to minimize disruptions to traffic flow and recreational activities

The closures proposed below are anticipated based on current construction plans but may be subject to change.

Full Closures

- Trafalgar Road, Hillsburgh
- Elora Cataract Trail (in sections)
- Wellington Road 52, Erin Village

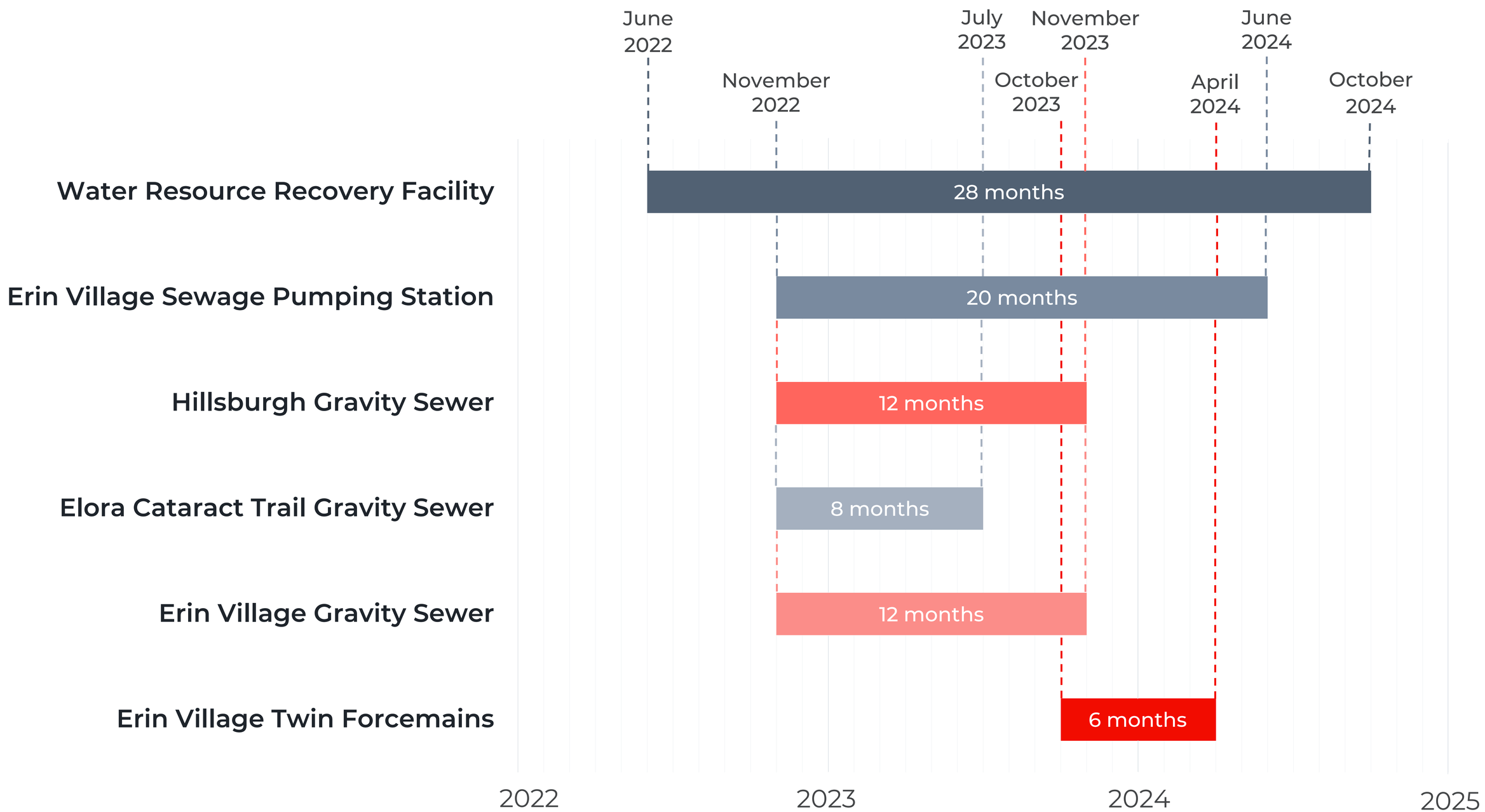
Lane Closures

- Main Street, Erin Village

Restricted Access

- Lions' Club Park, Erin Village

Anticipated Construction Schedule



Questions asked from Previous Public Information Centres

...if not answered in the presentation

1

When can residents expect to connect to the wastewater system?

The earliest resident connections will occur approximately in 2028, following the installation of the local sewers.

2

How do residents find contractors to do the plumbing work in the house, septic tank decommissioning and the connection to the property line?

The Town of Erin will provide a preferred list of local contractors that can perform this work for homeowners.

3

Will a building permit be required to complete the work needed to connect to the wastewater system?

The Town of Erin will provide residents with all the requirements needed to connect to the wastewater system closer to the date the connections can be made.

4

Will residents have access to their properties during construction?

Contractors are required to maintain access to private property during construction but there will be times where it would be unavoidable, but only last 1 to 2 days.

5

What is the depth of the sewer?

The depth of the gravity sewers range from 3m to 11m deep. At these depths, sewage can easily be drained from the properties to the wastewater system.

6

What is the criteria for prioritizing service to the existing neighbourhoods?

The Town of Erin will work with the communities to determine the phasing of local servicing. Due to the installation of sewers along Trafalgar Road in Hillsburgh and Main St. in Erin Village, those fronting properties will be able to connect first.

Thank you for attending

If you have additional questions, please contact us at:

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(519) 855-4407
erin.ca