



Town of Newmarket

Agenda

Council Workshop

Date: Monday, April 29, 2019
Time: 9:00 AM
Location: Council Chambers
Municipal Offices
395 Mulock Drive
Newmarket, ON L3Y 4X7

Pages

1. Notice

In accordance with the Town's Procedure By-law, no decisions are to be made but rather this meeting is an opportunity for Council to have informal discussion regarding various matters.

2. Additions & Corrections to the Agenda

3. Declarations of Pecuniary Interest

4. Items

4.1 York Region YDSS Forcemain Twinning Project

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Note: The following individuals from York Region's Capital Planning and Delivery, Environmental Services Commission will be in attendance to provide a presentation on this matter:

- Mike Rabeau, Director
- Shu He, Manager, Engineering
- Jose Manalo, Project Manager
- Lauren Stephanoff, Design Technologist

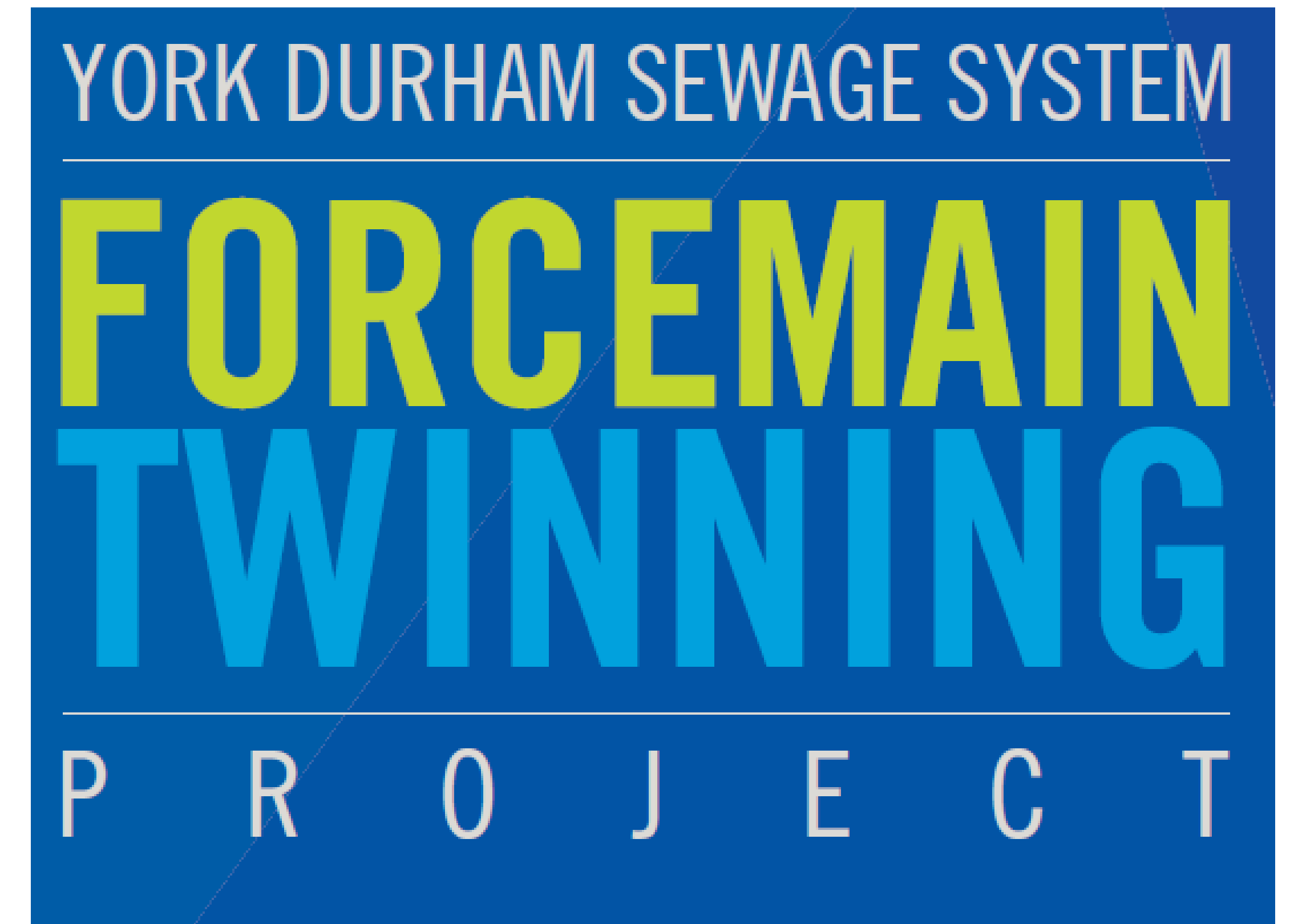
5. Adjournment

Public Open House

Presentation of Draft Display Boards

Town of Newmarket

April 29, 2019



The Project

York Region is making improvements to the York Durham Sewage System. Work will occur through the Town of Newmarket and include construction of a new forcemain parallel to the existing forcemain, known as forcemain twinning.

The work will improve the York Durham Sewage System resiliency, protect the natural environment from the risk of forcemain breaks and allow for maintenance to the existing forcemain.

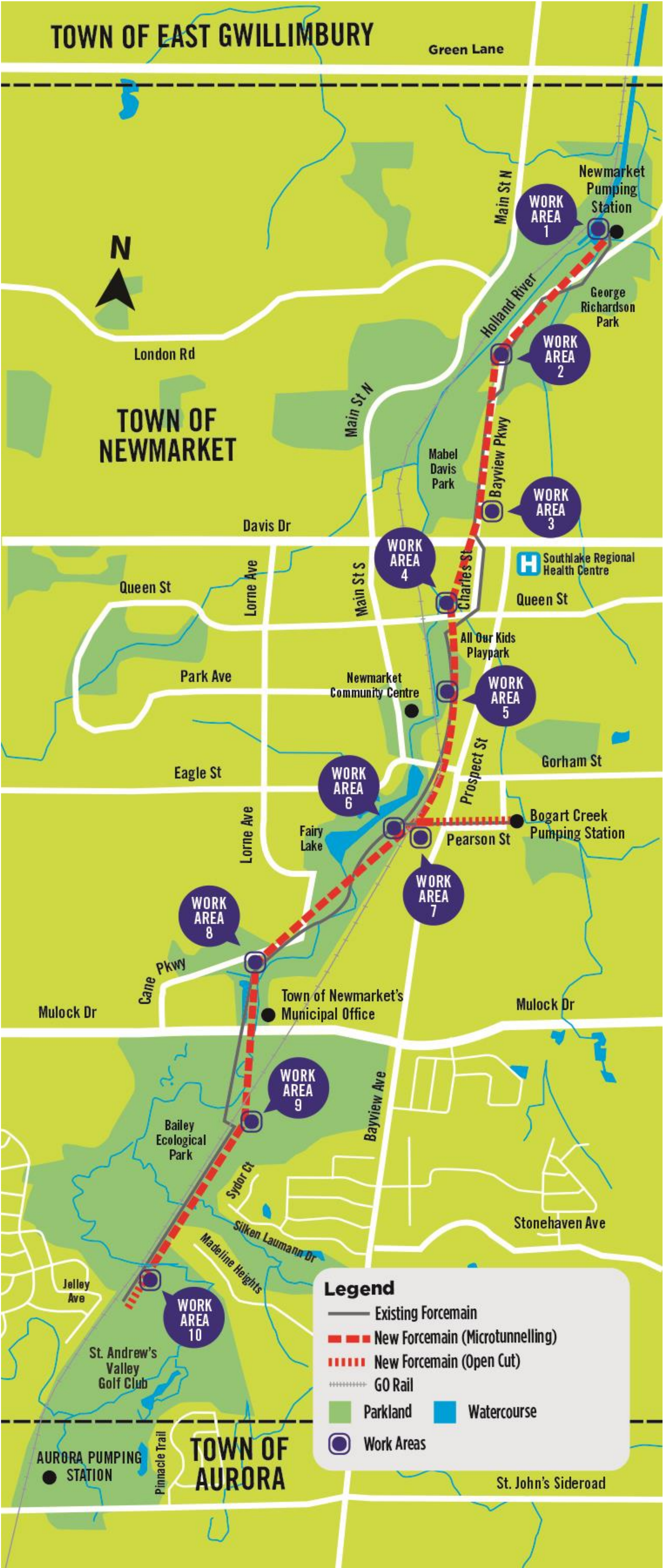
The Project Includes:

- Building a new twinned forcemain to move wastewater from the Newmarket Pumping Station to the Aurora Pumping Station.
- Building a new twinned forcemain to move wastewater from the Bogart Creek Pumping Station to the new forcemain.
- Modifications to the Newmarket and Bogart Creek Pumping Stations for connections of the new twinned forcemains.



Original Forcemain
Construction Photos
August 1983

Forcemain Alignment and Work Areas



Project Features

The Region is adopting state-of-the-art microtunneling technology and best construction practices to minimize disruptions to the public and natural environment.

- 95% of construction will be completed through microtunneling.
- Work areas were strategically located to protect the natural environment and avoid close proximity to residential homes and businesses.
- Work areas will be enclosed with 3 metre high solid fencing to limit disturbances, protect the public and minimize noise.
- Dedicated trucking routes have been identified to minimize impacts to local roads.
- Flag staff and paid-duty officers will be on-site
- Full restoration of work areas will be completed after construction.
- **Noise and Vibration will be measured prior to construction and continuously during construction**



Project Benefits

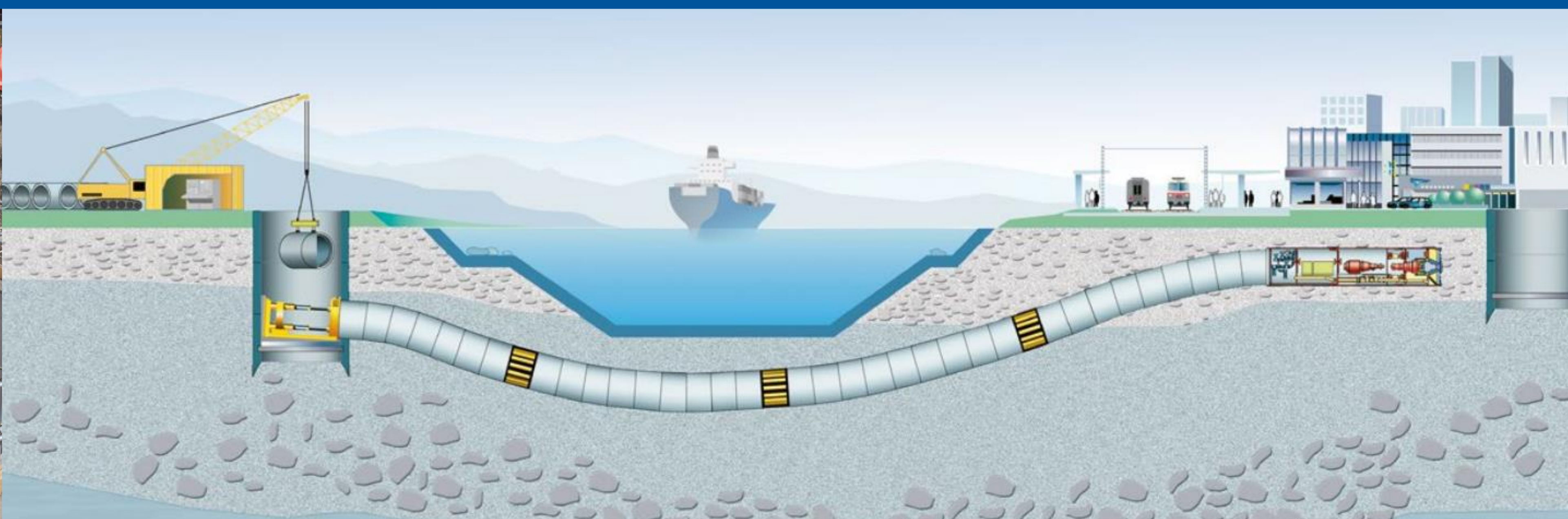
Environmentally Friendly Construction by installing the forcemain under forested areas, streets, environmentally sensitive areas, rivers and creeks.

Minimal Impacts to Surrounding Communities using microtunneling reduces noise, dust, and vibration by tunneling underground and confining construction to work areas.

Minimal Disruption to Road Traffic and Trail System by microtunneling under roads, sidewalks and trails, preventing the need for full road closures.

Minimal Disruption to Local Businesses using microtunneling eliminates cutting and excavating in front of commercial driveways and access to businesses.

No Utility Service Disruptions by microtunneling under existing utilities using a laser guidance system with +/- 1" accuracy.





Microtunneling

Microtunneling is a type of trenchless technology that uses a laser guided remote controlled tunneling machine to install pipe with minimal disruption at ground surface. 95% of forcemain will be installed using microtunneling.

Pros

- Minimal disruption to environment
- Reduced road closures
- Less disruption to traffic
- Extremely accurate with +/- 1" tolerance

Cons

- Relatively higher cost than open cut
- High skillset required
- Extensive ground investigations required



Open Cut Construction

This traditional construction technique involves excavating a trench in the ground to install a pipe. The trench is backfilled with granular material and the pavement is restored.

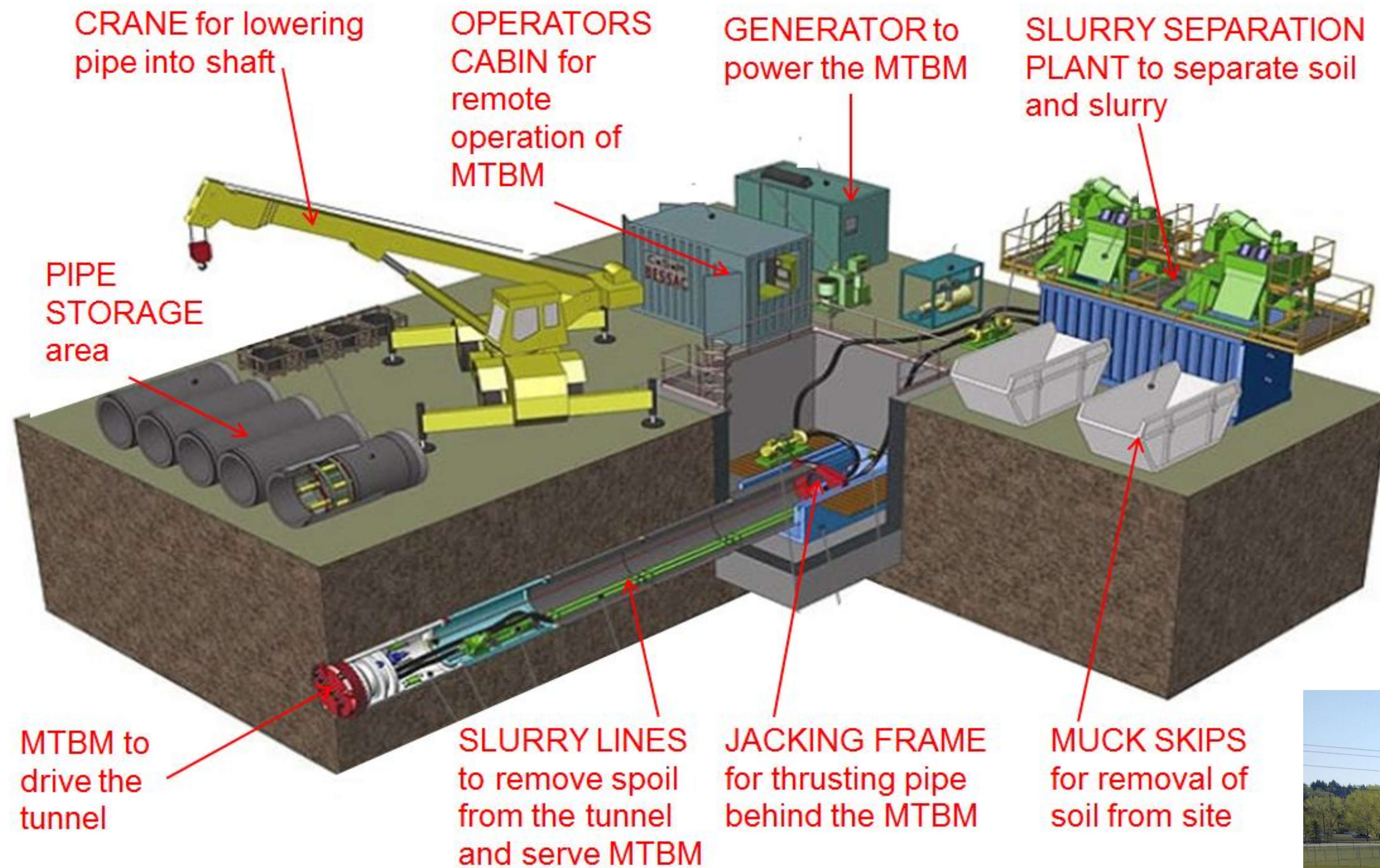
Pros

- Relatively lower cost than microtunneling
- Easier to install

Cons

- Road closures required
- Tree removals required
- Dewatering of streams and rivers required
- More surface area disturbance

Typical Microtunneling Compound



Event Management and Communications

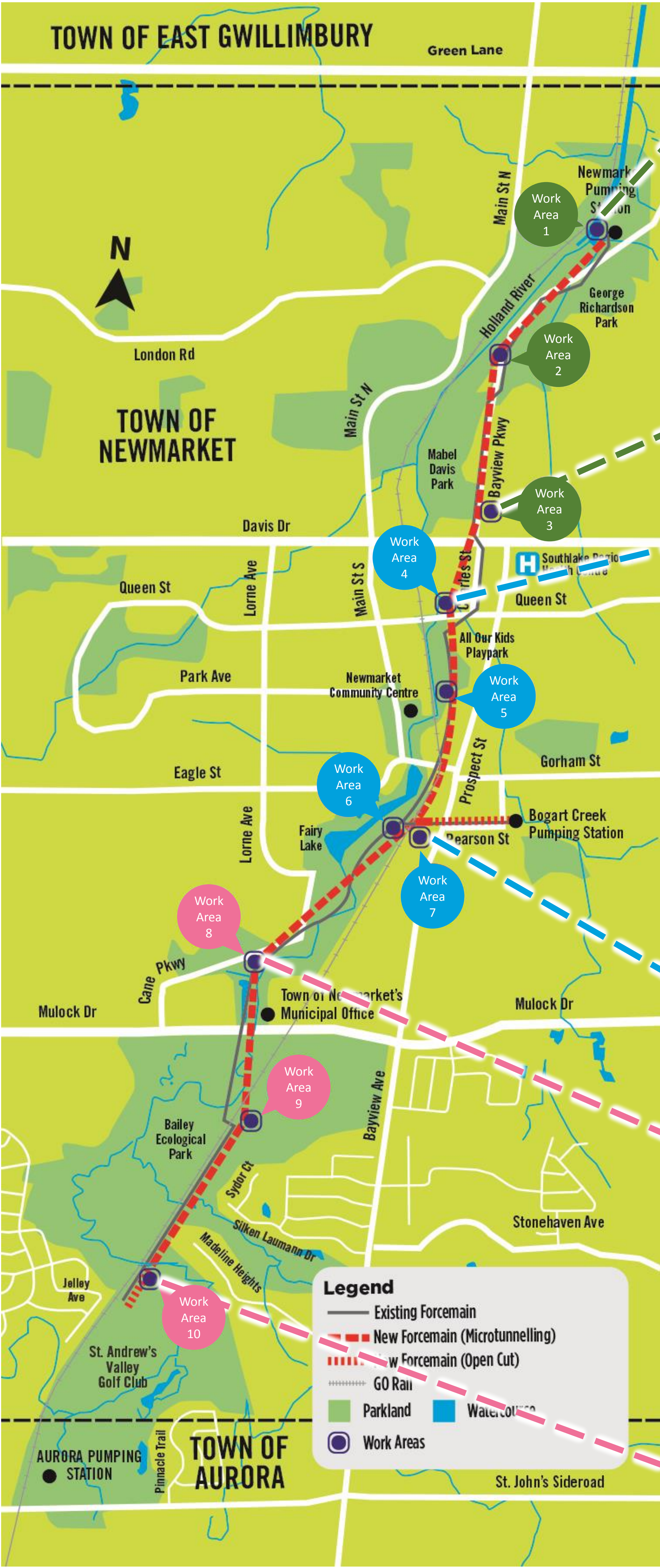
York Region and the Town of Newmarket have a dedicated event management and communication team to ensure impacts to events are minimized.

Throughout the project, York Region will:

- Continue to build relationships with local organizations, residents and businesses
- Provide digital updates through social media
- Deliver mailed notifications to the residents
- Install signage to inform the public of progress and disruptions
- Provide construction notice in the newspaper
- Have a project dedicated 1-800 number available 24/7
- Have a dedicated project website york.ca/forcemaintwinning



Construction Staging



- Work Area 1
- Work Area 2
- Work Area 3
- Work Area 4
- Work Area 5
- Work Area 6
- Work Area 7
- Work Area 8
- Work Area 9
- Work Area 10

Work Area Construction:
Winter 2019

Tunneling Operation:
Fall 2020 – Spring 2021

Restoration:
Fall 2021

Work Area Construction:
Fall 2019

Tunneling Operation:
Spring – Fall 2020

Restoration:
Fall 2021

Work Area Construction:
Summer 2019

Tunneling Operation:
Fall 2019 – Spring 2020

Restoration:
Fall 2021

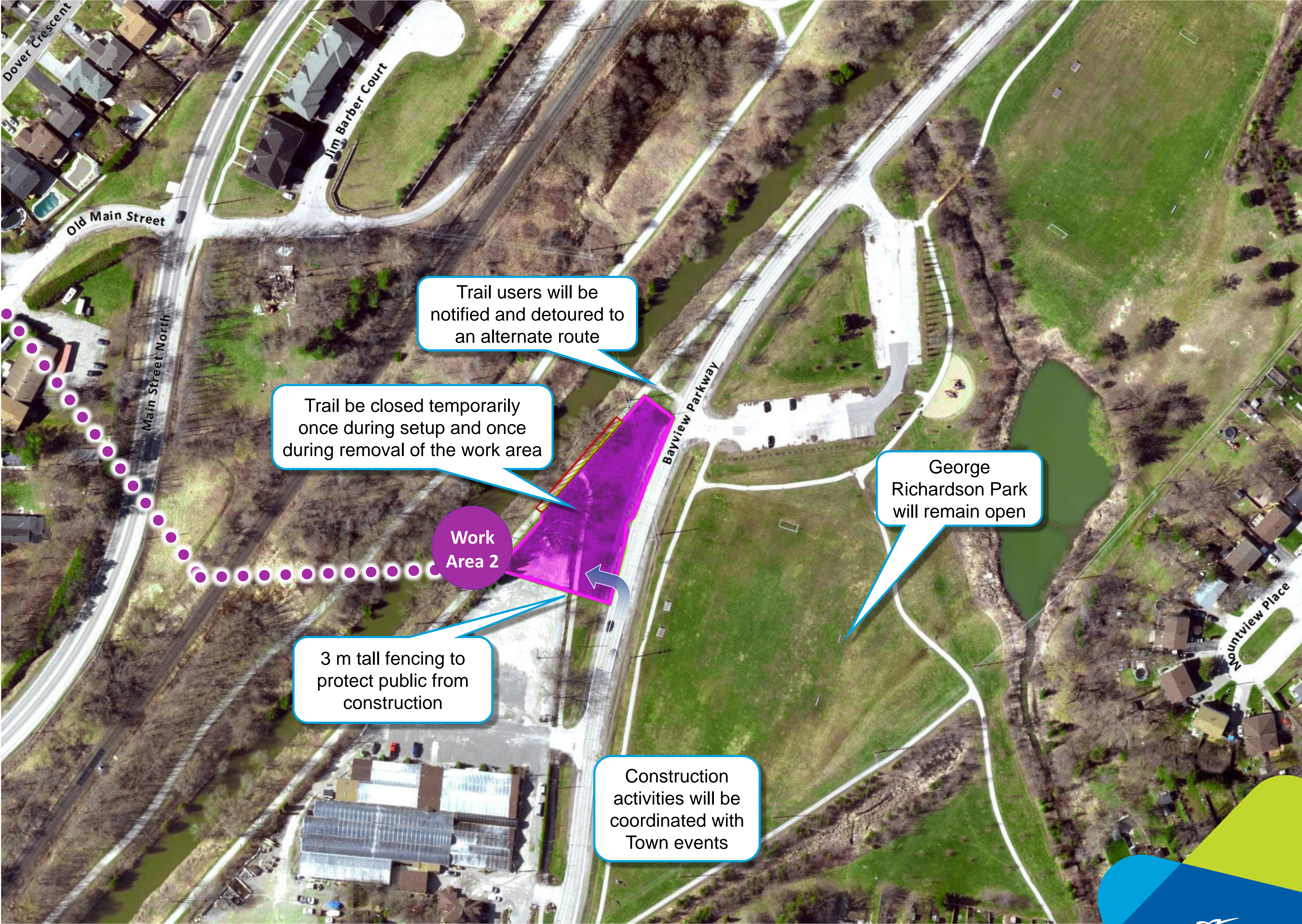
*As with all construction projects, some work may need to be rescheduled due to weather and other factors.

Bayview Parkway and Elgin Street – Work Area 1

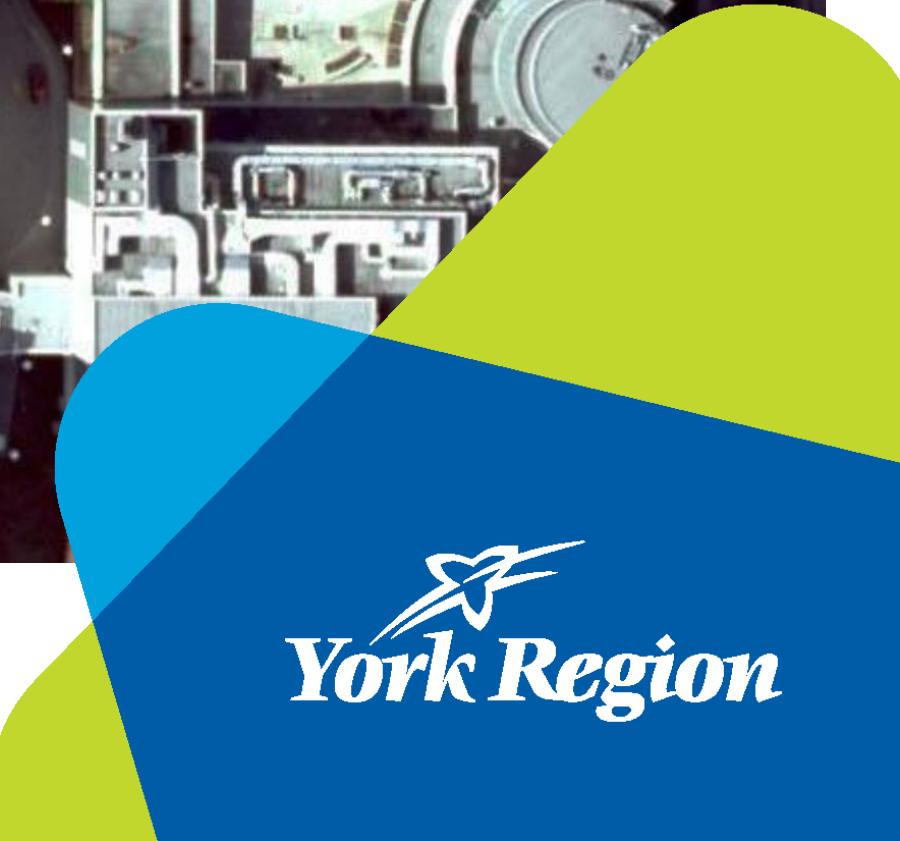


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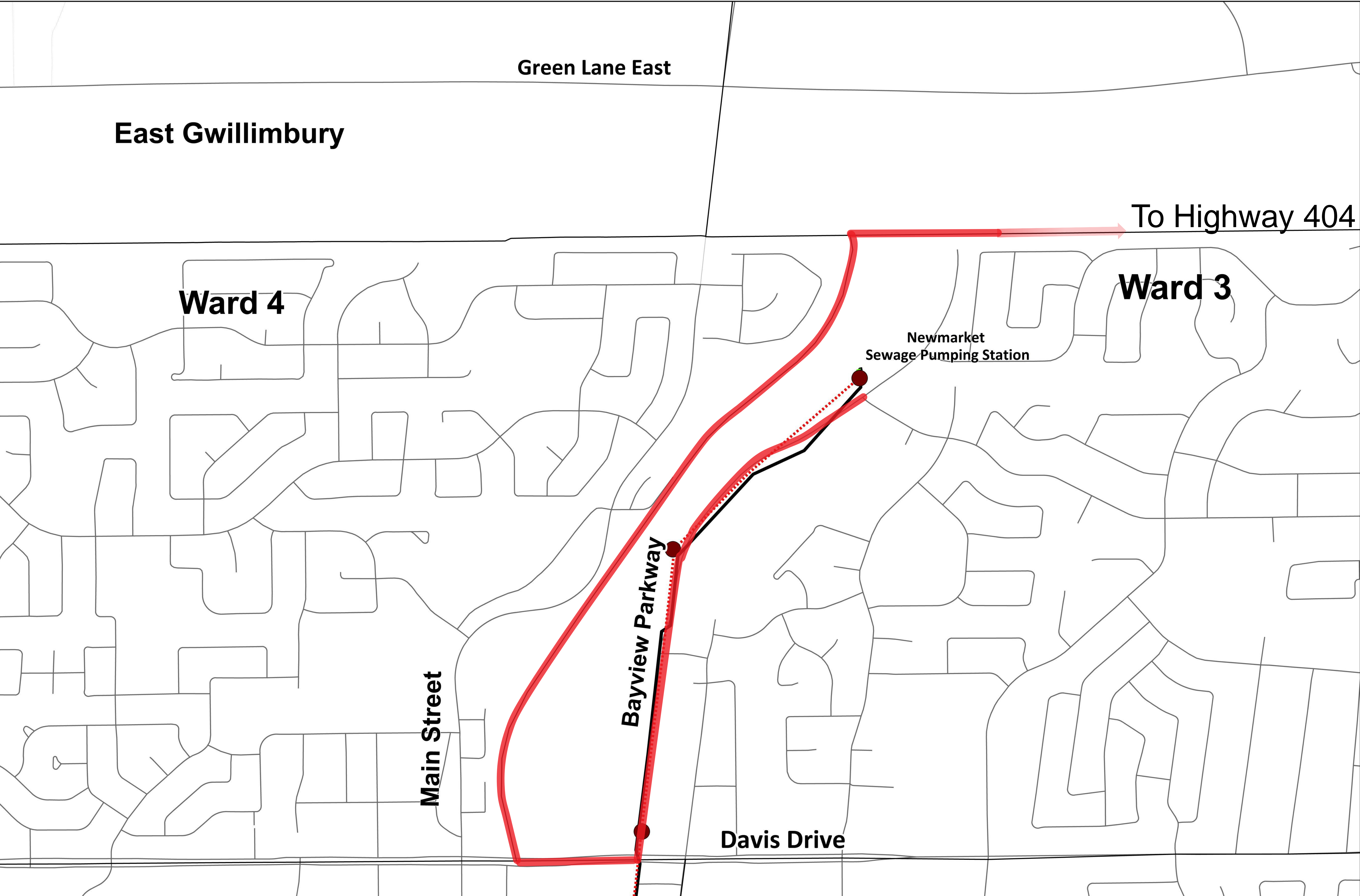
Madsen's Green house on Bayview Parkway – Work Area 2



Davis Drive and Bayview Parkway – Work Area 3



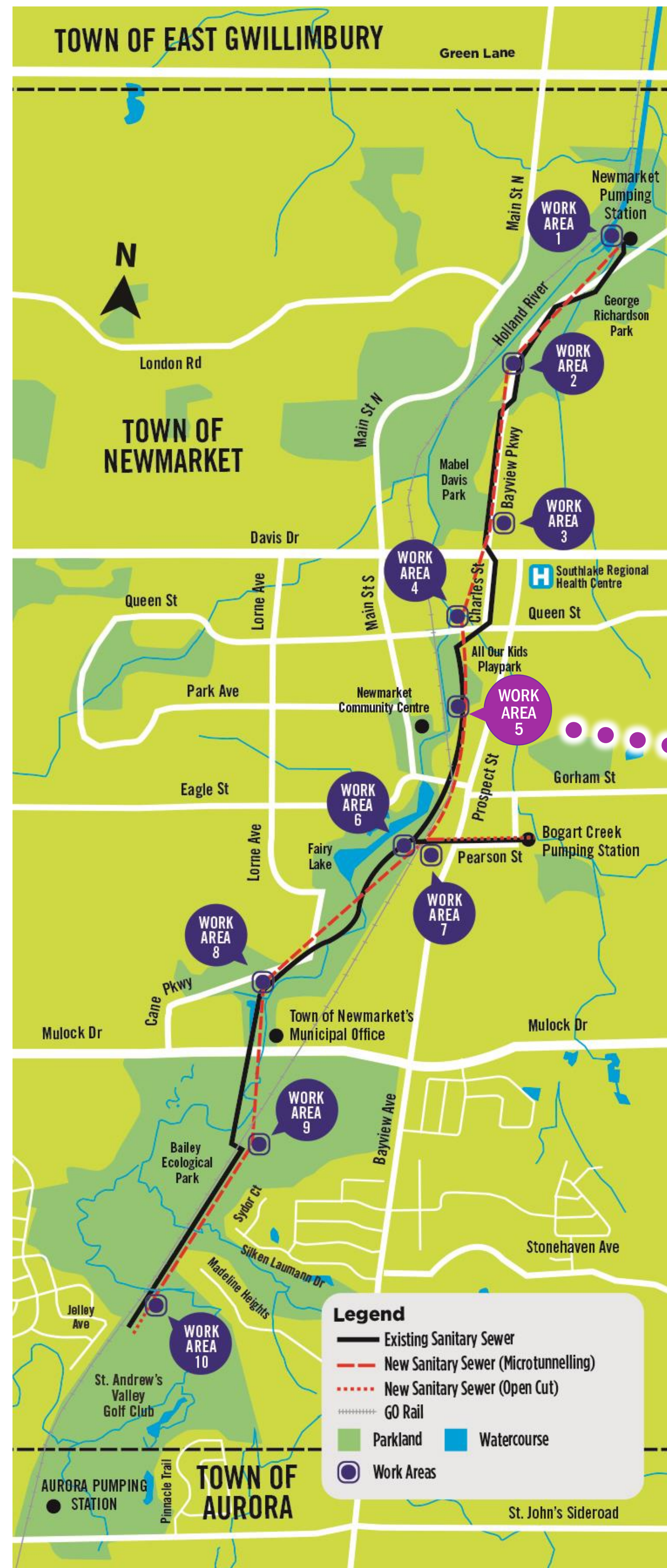
Trucking Routes – North of Davis Drive



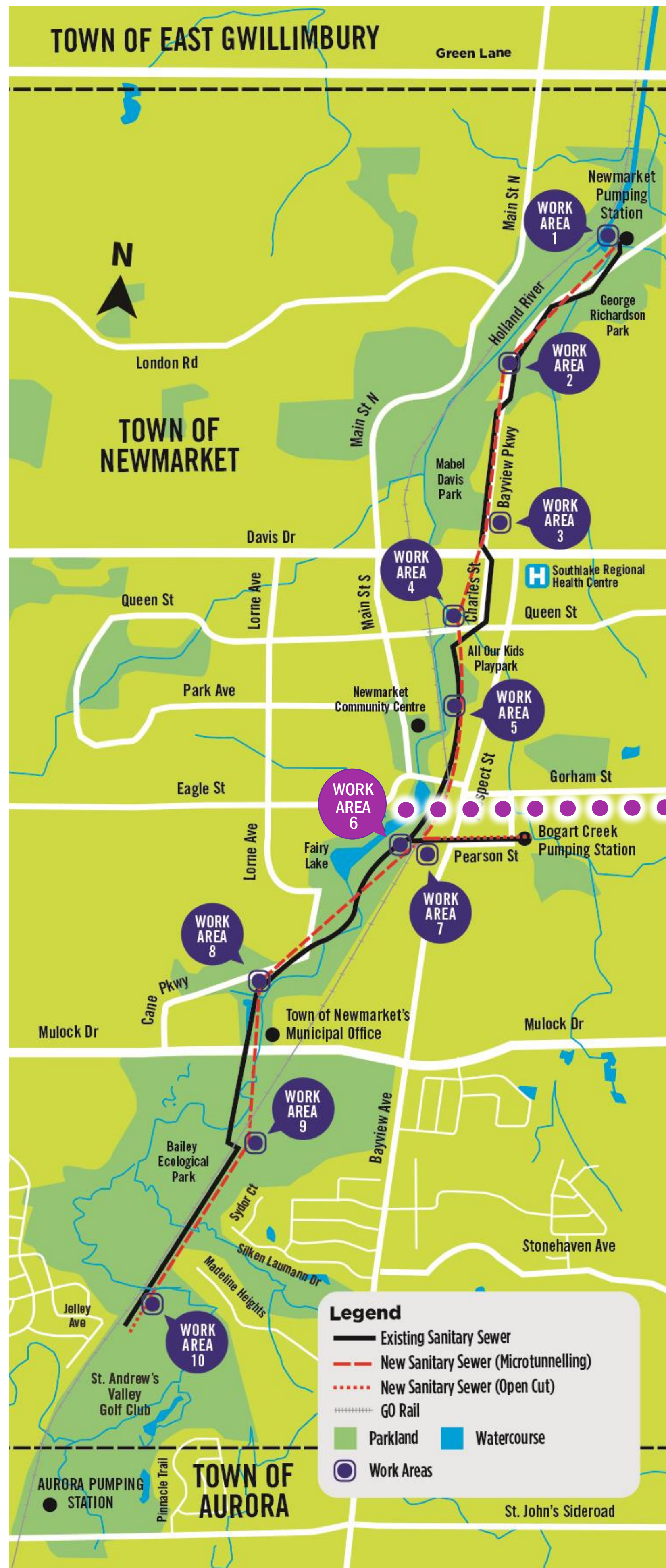
Queen Street and Charles Street – Work Area 4



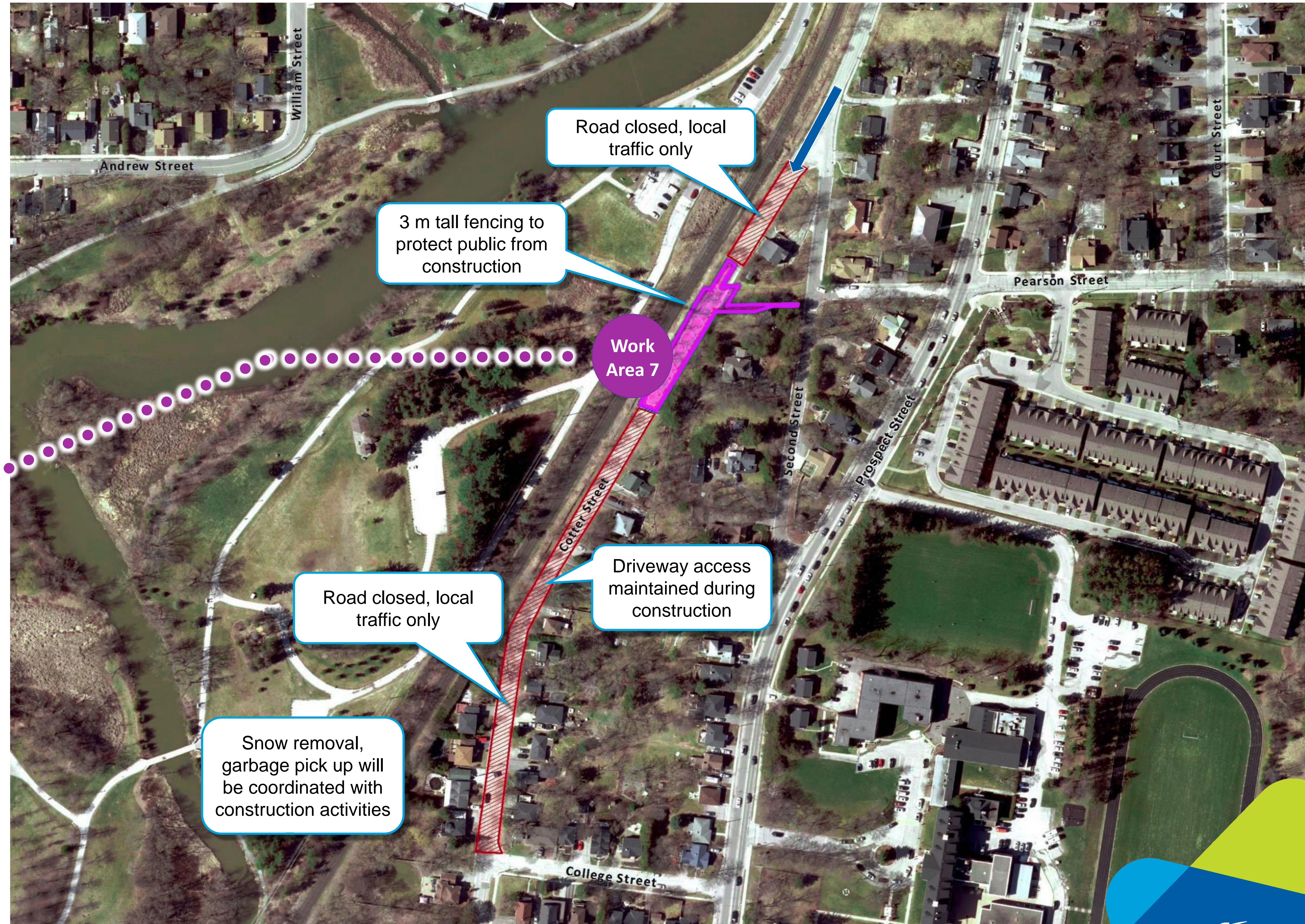
All our Kids Playpark – Work Area 5



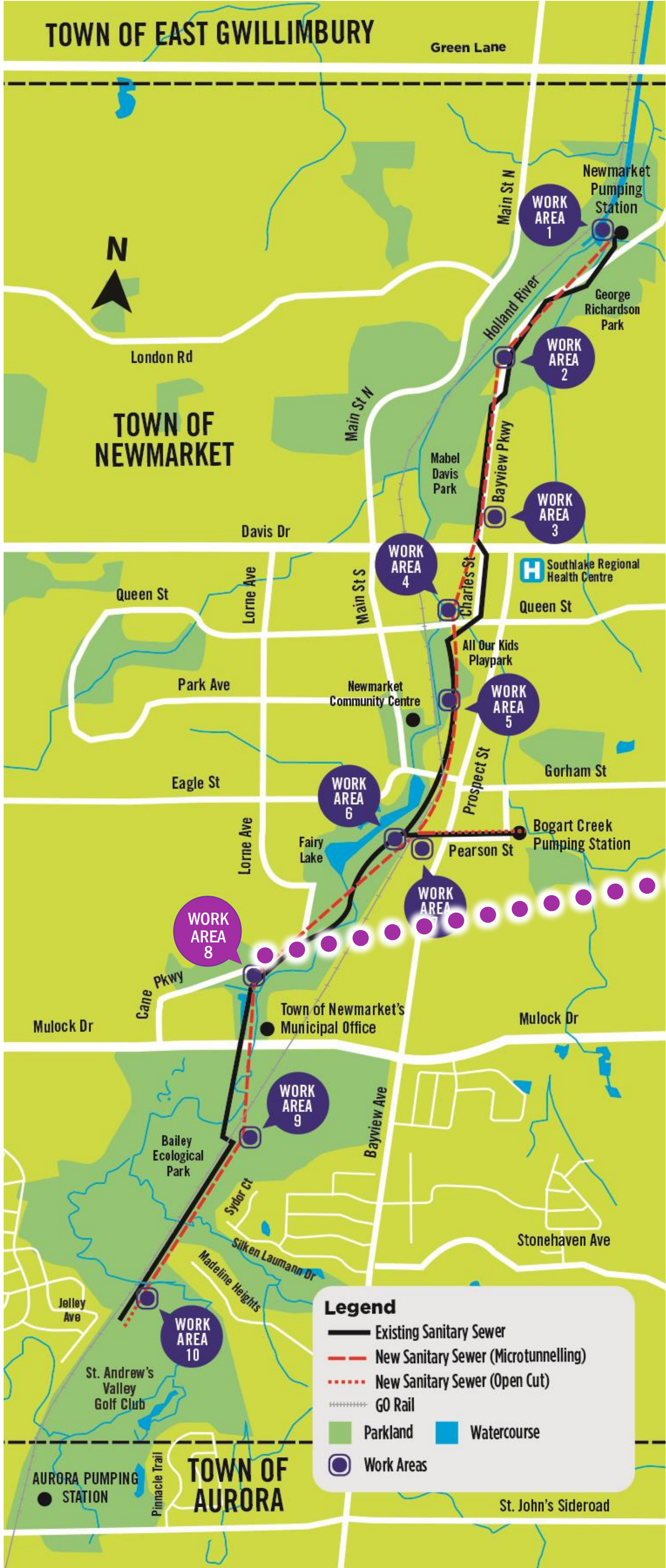
Fairy Lake – Work Area 6



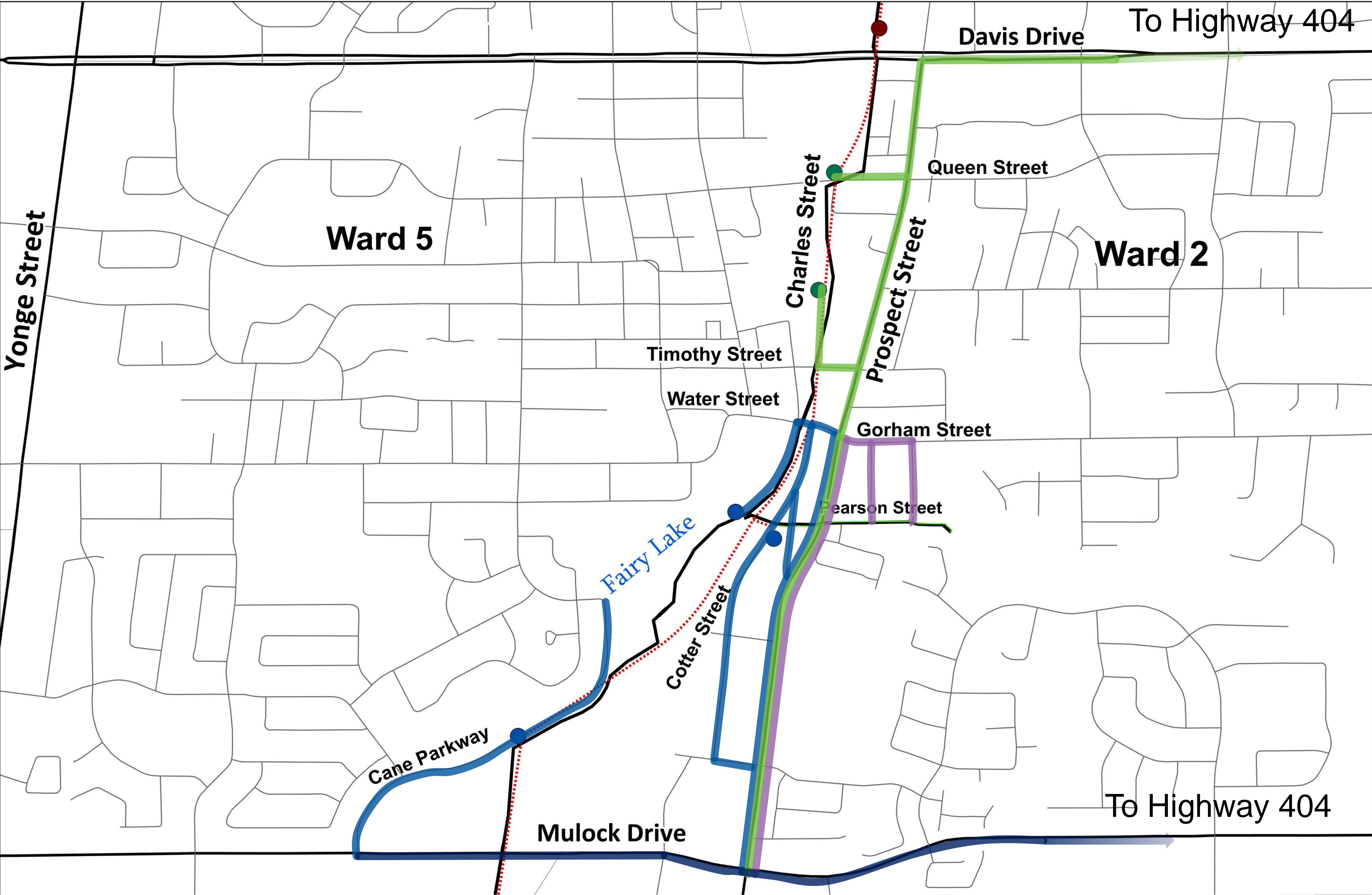
Cotter Street – Work Area 7



Cane Parkway – Work Area 8



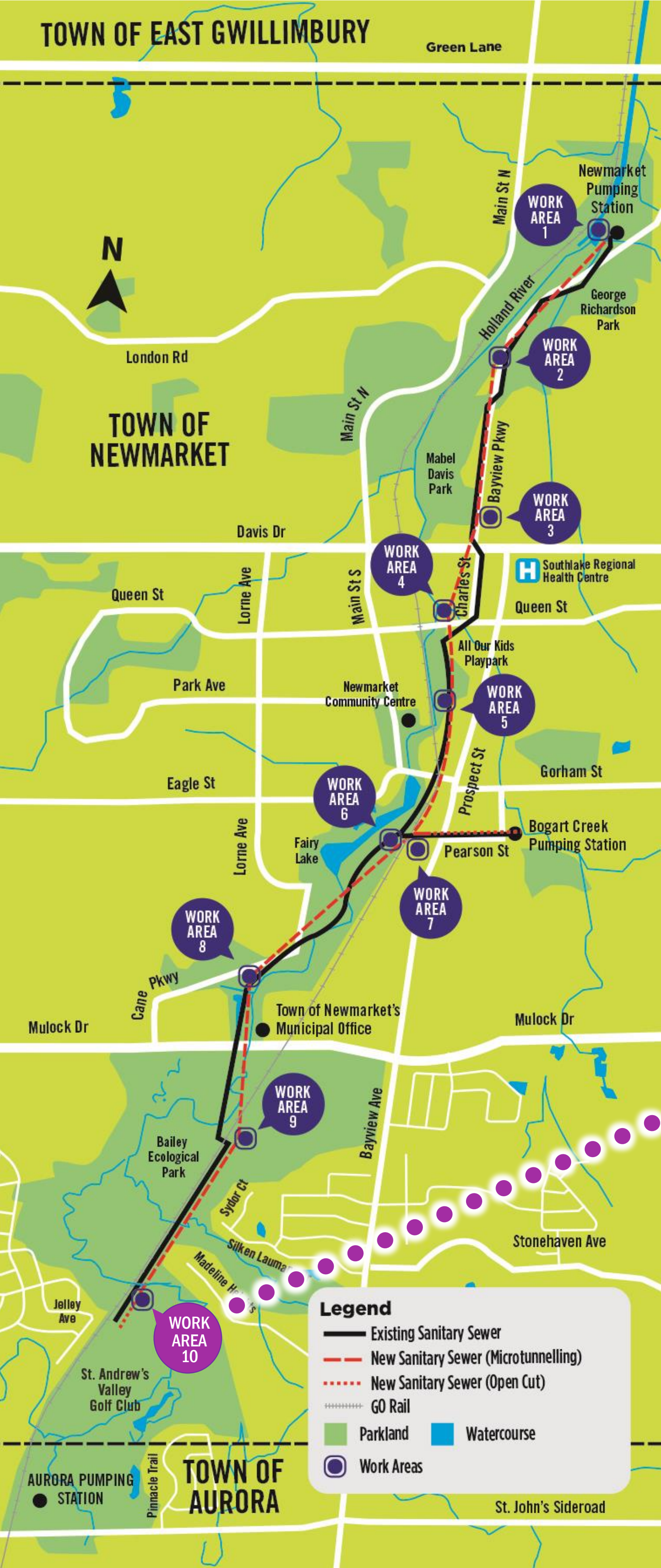
Trucking Routes – Between Davis Drive and Mulock Drive



South of Mulock Drive – Work Area 9

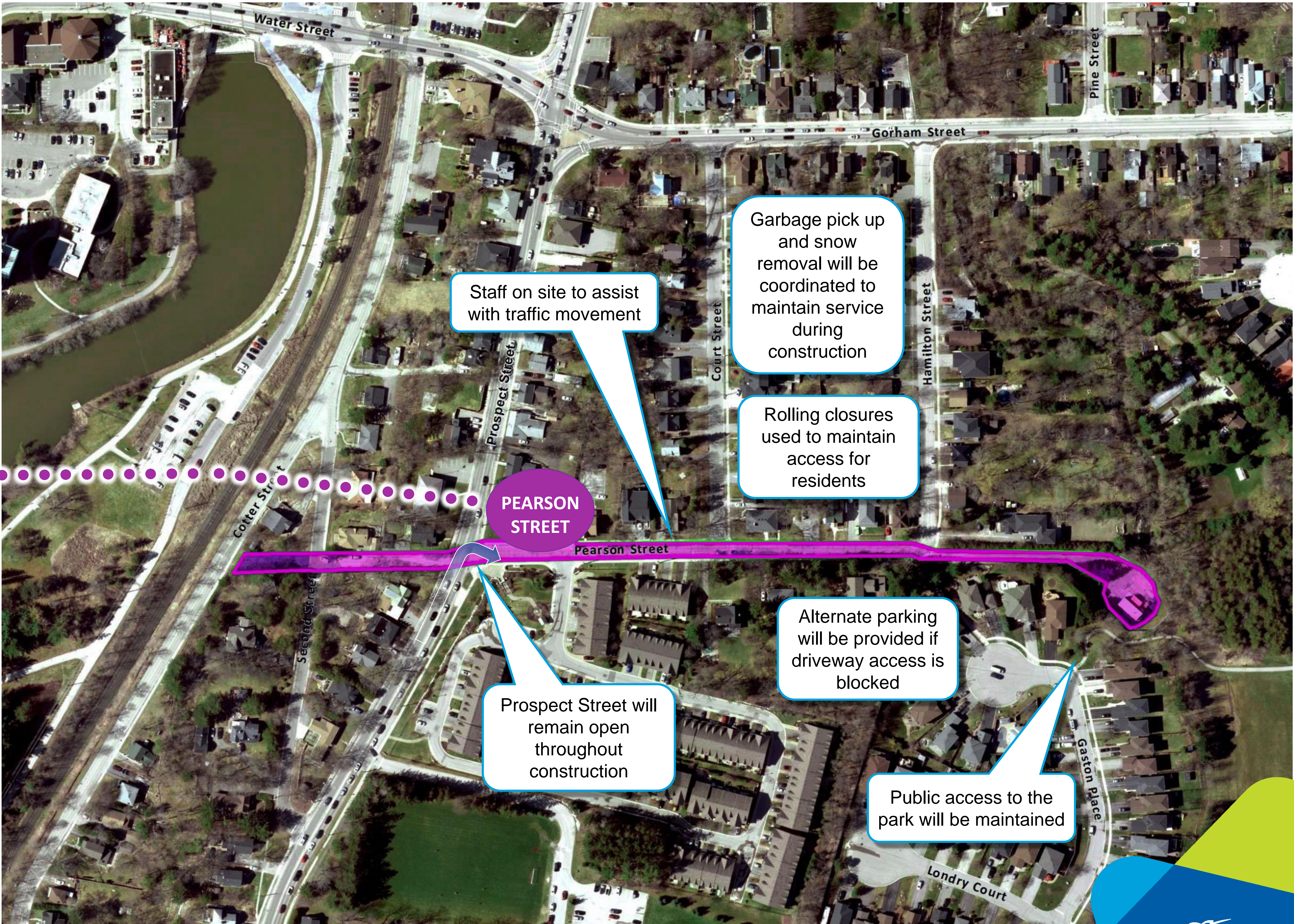


St. Andrew's Valley Golf Club – Work Area 10



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Pearson Street



Trucking Routes – South of Mulock Drive

