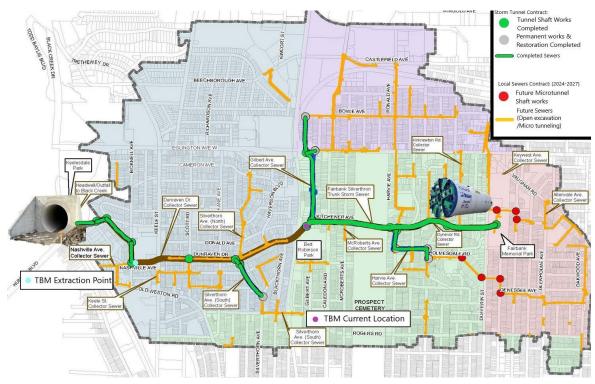
# Fairbank-Silverthorn Storm Trunk Sewer System

### Newsletter Issue 2, 2024



Fairbank Storm Trunk Sewer Progress and Future Local Collector Sewers

#### Overview

In the fall of 2021, the City of Toronto initiated the construction of the new storm sewer system that will collect, store and move stormwater (rain and melted snow) from the Fairbank-Silverthorn area to Black Creek, to help reduce the risk of basement flooding. The project area is more than 140 hectares and addresses a long history of severe and chronic flooding.

The project involves three important infrastructure improvements:

- Construction of a large storm tunnel (also known as a trunk sewer) that will receive stormwater from
  the new local storm sewers and transport it from the Fairbank-Silverthorn area to Black Creek. The
  large capacity of the trunk sewer will allow it to temporarily store stormwater during significant rain
  events.
- 2. Installation of new local storm sewers (also known as storm collector sewers) to collect stormwater from local roads through catch basins.
- 3. Installation of approximately 330 inlet control devices (ICDs) to help manage the rate at which stormwater enters the existing combined sewer system through catch basins.





#### How it works

The existing drainage system combines stormwater and sanitary functions into a single sewer system. This leads to sewer surcharging during periods of increased rainfall and snowmelt, leading to basement flooding and occasional surface flooding.

The construction of the new storm sewers will enable separation of sanitary and stormwater from the existing combined sewer systems in key areas. Where new storm sewers are installed, the existing catch basins (drainage points for stormwater from the surface into the sewers) will be disconnected from the combined sewer system and reconnected to the new storm system. This separation ensures that wastewater is directed to a treatment plant, while stormwater enters the newly constructed local sewers and storm tunnel, and is gradually released into Black Creek.

In areas where new storm sewers are not being installed, ICDs will be installed at selected catch basins to manage the rate at which stormwater enters the system during heavy rain events. The new storm sewers and ICDs will reduce pressure on the existing combined sewer system helping alleviate sewer backups and reduce basement flooding for more than 4,600 homes in your area.

## The City's most extensive basement flooding project to date

This is the City of Toronto's most extensive initiative to address basement flooding to date. The total construction cost is estimated at \$380 million. The Government of Canada is contributing \$73.2 million through the Disaster Mitigation and Adaptation Fund, while the City is funding the remaining approximately \$306.8 million.

### **Construction impacts**

Due to the extensive scope of this infrastructure project, we acknowledge the ongoing construction-related disruptions and traffic challenges of constructing this new storm sewer system in your neighbourhood. Your patience and support during this work is very much appreciated.



A micro-tunneling shaft during construction (September 2022)



Tunnel boring machine prior to launch from the Fairbank Memorial Park (May 2023)



Photo of sewer pipe pushed behind the microtunneling machine (June 2023)



Picture of a maintenance hole in construction after micro-tunneling (October 2023)

# **Construction Contracts and Construction Timing**

Construction work is being delivered through multiple construction contracts due to different construction techniques and the large size of the project.

Contract	Timing	Construction
Contract 1	Completed 2022	Focused on smaller initiatives including the installation of inlet control devices (ICDs) on 67 catch basins.
Contract 2	2021-2025 (Brown lines on map)	<ul> <li>Involves constructing a 3-kilometre long, 4.5-metre diameter new storm trunk sewer by tunnelling, and 1.4 kilometres of storm collector sewers.</li> <li>Key accomplishments to date include: <ul> <li>Completion of all 20 construction shafts, with restoration of 10 shaft sites.</li> <li>Completion of micro-tunneling and construction of sewers along Gilbert Avenue, Silverthorn Avenue, Croham Road, Eglinton Avenue, Harvie Avenue, Chudleigh Road, Ennerdale Road, Bicknell Avenue, Westbury Crescent.</li> <li>The tunnel boring machine (TBM), with a diameter of 5.2 metres, was launched through the shaft at the Fairbank Memorial Park in May 2023.</li> <li>The TBM has completed approximately 40 percent of its planned tunnel route as of May 2024.</li> </ul> </li> </ul>
Contracts 3 and 4	2024 – 2027 (Yellow lines on map)	These contracts will see the construction of approximately 16 kilometres of new collector storm sewers, ICD installation and other improvements.  This phase will involve constructing the new local storm sewers and connecting them to the existing catch basins to channel stormwater to the large trunk sewer and eventually to Black Creek.

### **Maintaining key services**

In active construction areas, contractors will be responsible for snow-clearing services. If waste or garbage cannot be collected from the front of your property, contractors will relocate garbage, recycling and organic waste bins for pick-up, and return the bins at the end of the day. Households should label their bins.

### **Access**

Access to properties will be maintained by constructing temporary walkways. Additional illumination will be provided to improve visibility, as required. If you plan to move or have major deliveries, you can reach out in advance for coordination with the construction team. The contact information is provided below.

### **Emergency Services**

Emergency Services will continue to serve all properties at all times. Toronto Police Service, Fire Services and Paramedic Services have been informed of the ongoing construction work. Fire Services staff regularly conduct site walks with the construction team to ensure that their services are not impacted and access to hydrants is maintained. Paramedic Services have confirmed that a temporary walkway is sufficient to maintain their services.



Picture of main storm sewer tunnel in construction (December 2023)



2 Chudleigh Road restored after maintenance hole completion (December 2023)

### **Contact Us**

If you have suggestions and questions related to the project, please reach out:

### Shakha Vasdani, Field Ambassador

Email: fairbanksewer@toronto.ca

Phone: 416-338-5497

TTY Hearing Impaired Service 416-338-0889 (7 days/week, 8 a.m. – 5 p.m., closed holidays)

General Inquiries please call 3-1-1

Project Website: www.toronto.ca/fairbank