# Region of Queens Municipality Special Council
# Thursday, April 28, 2025
# 6:00 p.m.

## Agenda

**1.0 Call to Order and Land Acknowledgement**

**2.0 Approval of the Agenda**

**3.0 Declaration of Conflict of Interests**

**4.0 Budget Discussion**

- 4.1 Revenue/Taxation
- 4.2 Council and general government
- 4.3 Administration and Finance
- 4.4 Police, Fire, Emergency Management
- 4.5 Land use planning, building inspection, & by-law enforcement
- 4.6 Economic & Community development
- 4.7 Recreation, culture, parks and Queens Place
- 4.8 Hillsview Acres Home for Special Care

**5.0 Adjournment**

# Region of Queens Municipality
# Staff Report

**To:** Mayor and Council

**From:** Adam Grant, P.Eng., Director of Infrastructure

**Date:** April 25, 2025

**Re:** Sidewalk Expansion Costs

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## Background

At the April 24, 2025, Special Council meeting, it was requested that staff return with information that could put the cost of expanding sidewalks into perspective.

## Details

As discussed during the meeting, it is challenging to single out the cost of sidewalk expansion as an individual cost by the linear meter. Constructing a sidewalk to standard is dependent on numerous factors:

- Existing site conditions
    - Is road bed widening required?
    - Are their excessive fills, cuts or retaining walls required?
    - Is the property owned and under municipal authority?
- Storm Water Management
    - Elevated sidewalks require storm water provisions to remove water from the road surface and neighboring property that is intersected
- Details of construction
    - Width of surface and finish details
    - Will the slab be loaded by vehicles and require additional thickening or reinforcing?

The Department of Infrastructure uses an elemental approach to building budgetary cost estimates that include the following major cost elements:

- Initiation – mobilization, traffic control, excavation and disposal, rock and traffic control
- Sanitary – supply and install of sanitary sewer mains and laterals, manholes and pump stations
- Water - supply and installation of water mains and laterals, fire hydrants and control valves
- Storm - supply and install of storm sewer mains and laterals, catch basins, manholes and outfalls
- Reinstatement – sidewalk creation, finish, curb, gutter and asphalt, driveway, walkway and lawn reinstatement

When these elements are combined into a large rehabilitation project the cost of an individual factor is substantially minimized. An example could be a 200m street rehabilitation with a total project estimate of $1.75M that includes a new sidewalk at an elemental expense of $30k or $150 per meter. What is not included in the $30k expense is the cost of mobilization, excavation, traffic control, aggregate, and many other factors that being incidental. Removing the infrastructure components of sewer and water to estimate a project that creates a new sidewalk would still have the same mobilization, aggregate, traffic control, storm water management, and reinstatement factors would have a cost of $2300 per meter of sidewalk.

Staff engaged with other municipal units to gather information on their expenses for this work to be contracted out entirely. Results from tendered project in 2023 at another south shore municipal unit, for the sole purpose of establishing an active transportation network with concrete sidewalk surfacing had prices that ranged on the proposed segments from $2375 per meter to $3075 per meter varying due to the additional effort required.

# Region of Queens Municipality
# Staff Report

**To:** Mayor and Council

**From:** Adam Grant, P.Eng., Director of Infrastructure

**Date:** April 25, 2025

**Re:** Mount Pleasant Service Exchange Progression

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## Background

The Region of Queens Municipality provides municipal services to areas of Queens County in what is known as a 'serviceable boundary'. This service provision provides both drinking water to the communities of Liverpool and Brooklyn, and also wastewater collection to the communities of Caledonia, Milton, Liverpool and Brooklyn. The serviceable boundary is an imaginary polygon that defines where service provisions are included and excluded.

## Details

### Dauphinee Farms

During the summer of 2022, Municipal staff were approached by a local developer who requested that a project being created which would see the serviceable boundary extended into the Mount Pleasant area, south of Liverpool to provide water and wastewater services for residential development known as Dauphinee Farms. A presentation to Council was made on November 8, 2022, requesting an extension of roughly 200m of water and wastewater infrastructure, in turn the developer proposed to build 87 units in 2 phases over an 11-year period. This presentation also proposed a cost to the Municipality of $725,000 for the expansion work.

### The Point

On December 13, 2022, a presentation to Council was made by another developer who was seeking the extension of municipal water services to a parcel of land further south of the previous proposition. This request specifically sought a 800m water main extension, with a proposed capital cost of $1.485M. The presentation also included a cost to provide both water and wastewater at a cost of $4.362M. This multi-phase development would see the creation of 124 residential dwellings over a 5-year period. For clarity, the development group was only requesting water provision. Additional discussion with the developer did clarify that the provision of wastewater services would benefit their development and was desired, but they felt only the provision of water services were critical to advancing their development.

**Birch and Curve**

On June 13, 2022, a presentation to Council was made by the same group who had earlier presented The Point development entitled 'Birch and Curve' which was envisioned as abutting developments for affordable housing and quality townhomes providing an additional 114 housing units.

**Feasibility Study**

At the February 14, 2023, Council meeting, staff presented a report to Council to request funding of $21,500 for a 'Servicing Feasibility Study' for the proposed developments. The intent of this 3rd party study was to investigate current water and wastewater system's capacity and abilities for expansion of water and wastewater in this corridor along with high-level opinion of probable cost for the required work. This study was approved by Council and CBCL was engaged to complete the work.

On June 27, 2023, Staff and Council gathered for a workshop to discuss progress on the study as well as develop some guidance for the remaining study work.

On November 28, 2023, Staff presented a report to Council outlining the results of the study including CBCL's report and bring recently announced provincial funding to Council's attention. Details of CBCL's findings:

Growth Projections:

- New developments – 325 units, anticipating 1083 persons

- Service to existing properties – 72 units, anticipating 297 persons (including the Daycare)
- Calculated serviced population (at that time) 2546 persons
- Growth Project of 54%

Water Distribution System:

- Existing system can support added domestic demand as proposed BUT does require the Transmission Main project to reach Wolfe St.
- System wide fire flow deficiencies due to low pressure in elevated service areas
- Multiple upgrade options to achieve higher levels of fire flow. Potential system upgrades ranging from $1.82M to $10.7M
- Fire flow requirements are burdened by the style of developer and can limit the density of building (ie. Single family vs multi-unit highrise) or place additional fire mitigation requirements on the construction.

Wastewater Collection System:

- Identified noteworthy wet weather influence on the wastewater collection system in the impact area
- Impact area beginning from the development corridor by gravity to Cross Street Lift Station (north end of School Street). Forcemain and gravity to Town Bridge Lift Station (west end of Henry Hensey Drive). Forcemain and gravity to Hank Snow Lift Station (west end of Hank Snow Drive). Finally, forcemain to the South Queens Wastewater Treatment Facility 144 Hank Snow Drive, Liverpool.
- Desktop analysis of the gravity components confirmed capacity
- Field level analysis of lift stations identified:
    - Under performing pumps
    - Periodic overflows due to equipment failure or power loss
    - Infiltration & Inflow (I&I) impacts
- Desktop analysis of the forcemain components identified one segment from Cross Street station would not accommodate additional flow rates without upgrade.
- Opinion of Probable Cost (OPC) for upgrades at these three stations and the forcemain segment was proposed as $2.4M and assumed that the existing wet well would accommodate the upgrades and standby power would not be incorporated.

System Extensions:

- OPC for water and wastewater service extensions:
    1. 325m to Dauphinee Farms - $1.8M
    2. 950m to Birch and Curve - $5.25M
    3. 200m to The Point - $0.58M for water only. Cost for water and wasterwater extrapolated to $1.11M

**Municipal Capital Growth Plan (MCGP)**

In November of 2023, the Provincial Government announced the MCGP as a one-time program delivered by the Department of Municipal Affairs and Housing to support municipal investment in capital infrastructure programs that targeted population growth. For application, the municipality was required to provide a detailed cost estimate in addition to a resolution of Council supporting the project for application before December 13, 2023. The terms of program would see a 50% investment by the province in an approved project.

On December 12, 2023, staff presented a report to Council, requesting support of a project titled 'Mount Pleasant Service Extension' (MPSE). The cost estimate at that time was presented as:

- $8.9M for water distribution
- $5.7M for combined sewer separation
- $4.5M for sanitary and storm extensions
- $2.4M for wastewater lift station upgrades

For a project total in the application of $21.5M. Council unanimously approved this application and project.

On April 15, 2024, the MLA for Queens announced approval of the project as proposed, confirming an investment of $10.7M by the province in municipal infrastructure.

**Project Scope Development and Detailed Design**

At a special meeting of Council on April 29, 2024, the following projects related to the MPSE were approved as part of the 5-year Capital Investment Plan:

- 24/25 MPSE Design $0.287M
- 24/25 MPSE Water Transmission Extension $0.535M

- 24/25 MPSE Wastewater Lift Station Upgrading $2.101M
- 24/25 MPSE Extension to Dauphinee Farms $2.678M
- 25/26 MPSE Extension to Birch & Curve $2.317M
- 25/26 MPSE Water Transmission Extension $0.460M
- 26/27 MPSE Main Street – Union St to Brunswick St $1.637M
- 26/27 MPSE Main Street – Mersey Court to Wolfe St $1.277M
- 27/28 MPSE Main Street – Wolfe St to King St $2.204M
- 28/29 MPSE Main Street – Amherst to King St $2.081M
- 28/29 MPSE Waterloo & Bridge to College & Barss $2.946M
- 28/29 MPSE Shore Road Extension $1.648M
- 28/29 MPSE Waterloo to Town Limit $2.008M

For a total planned investment of $22.2M in municipal infrastructure.

Detailed design continues at this time and has revealed additional challenges that were previously not realized or anticipated:

- Structural integrity of the gravity portion of School Street from Waterloo to the Town Limit was assessed and identified as extremely poor condition with signs of failure present.
- Cross Street Lift Station was identified as requiring a full replacement to provide an increased wet well size, elevated to accommodate sea level rise and provided with emergency power supply to eliminate overflows. It was also discovered that municipal wastewater is collected over private land through a collapsed collection segment (repairs are pending). Relocation of the lift station will be required.
- Town Bridge Lift Station was identified as requiring a full replacement to provide an increased wet well size, elevated to accommodate sea level rise and provided with emergency power supply to eliminate overflows. Relocation of the lift station is required which will require a change in the geometry of the Henry Hensey and Market Street intersection. Staff have been working with a transportation engineer to incorporate a comprehensive realignment that will significantly improve pedestrian safety at that intersection.
- Significant material supply escalation
- Geotechnical investigation in the extension area confirmed that subsurface conditions are improved from what was anticipated.

**Summary of Project Components**

Transmission Main Replacement

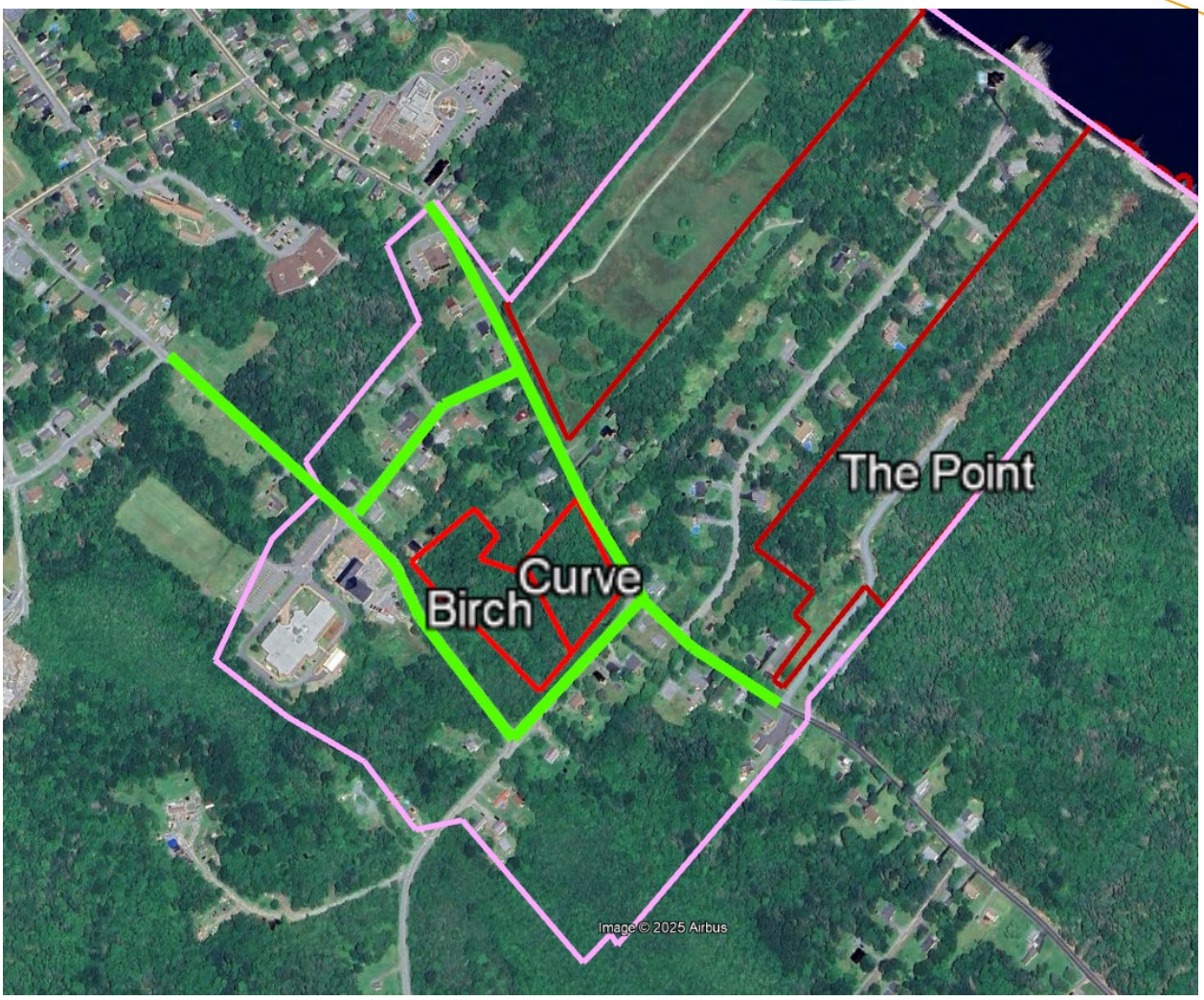
In 2019, Council began investing in the replacement of the two over 100-year-old transmission main from Town Lake to Liverpool. Upon completion, this project will see the current transmission main which crosses under the 103 Highway and through many private properties, including residential homes (literally basements) abandoned in lieu of a new PVC main. This replacement project will improve pressure and flow to all areas and customers of the Utility and eliminate more than 2500m of end-of-life transmission line potentially reducing system losses.

Main Street Infrastructure Rehabilitation – Building on the transmission replacement, replacement of all municipal infrastructure from Union Street to Mersey Court on Main Street will continue the elimination of the two previously mentioned transmission lines connected to infrastructure that was upgraded in 2014 on Main Street. As well this project will replace 100 year old segments of gravity sewer collection which has been confirmed of poor structural integrity, influenced by infiltration and contributing to operational overflows at several wastewater lift stations.

Lift Station Upgrades – Through design research, CBCL has identified that both Cross Street and Town Bridge lift stations are not operating as designed and in need of rehabilitation. Field study of wastewater flows has confirmed that infiltration is a significant issue, overflows are occurring and the stations need to be upgraded to accommodate system evolution since their original design and construction.

School Street Rehabilitation – Again through design research, the segment of School Street from Waterloo to the Town Limit has revealed a sanitary sewer main in poor to failing condition in need of rehabilitation to prevent failure of that collection system.

Serviceable Boundary Extension – Successful extension of municipal services into the Mount Pleasant area the timely completion of the elements provided above, as well as the extension of municipal services as illustrated in the image, in green below:




| Element | Sanitary (m) | Storm (m) | Watermain (m) |
|---|---|---|---|
| Transmission Main | | | 2000 |
| Main & College Streets Rehabilitation | 2085 | 1880 | 1615 |
| Mount Pleasant Extension | 1687 | | 1427 |
| **Total Infrastructure** | **3772** | **1880** | **5042** |