

Toronto City Hall
100 Queen Street West, Suite B31
Toronto, ON M5H 2N2

June 9, 2025

PH22.2 Neighbourhood Intensification Research Bulletin

Dear Councillor Perks, Chair and Members of the Planning and Housing Committee

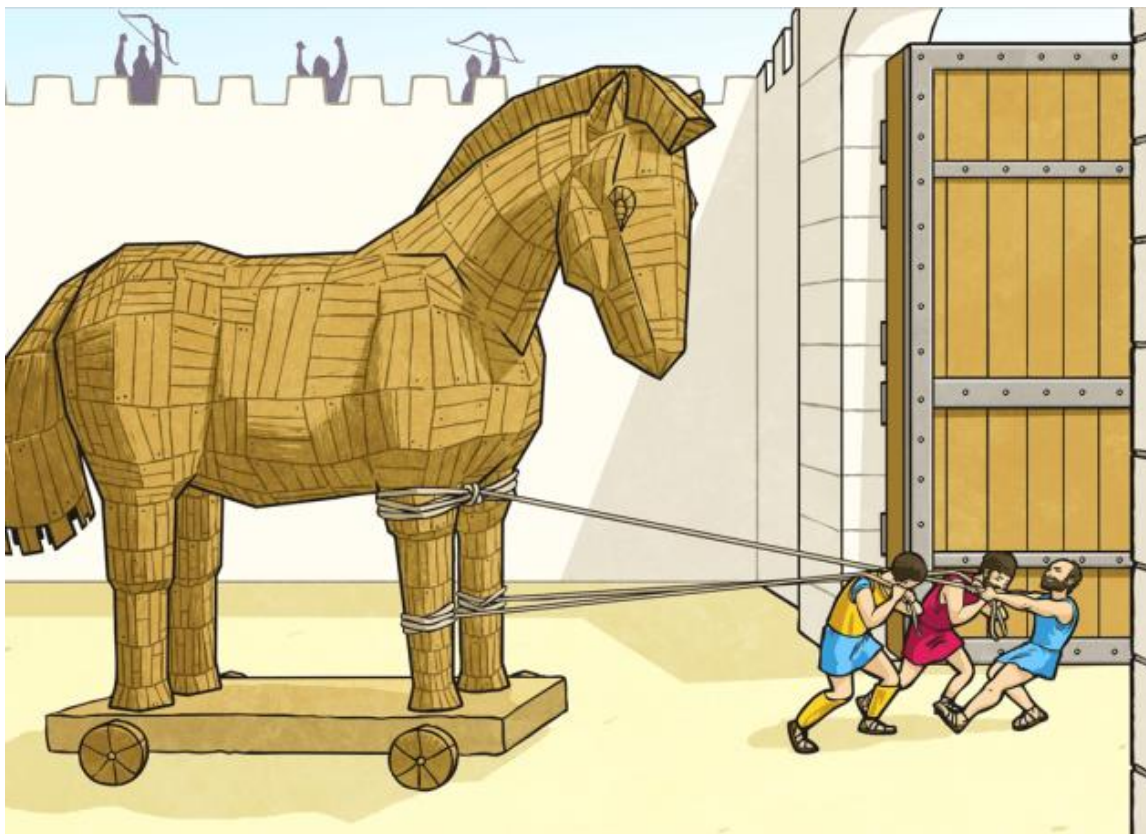
The City of Toronto is forecasted to grow by roughly 380,000 people to a total population of 3.65 million by the year 2051 as per the target in the Official Plan. Toronto is a dynamic, growing city which continues to attract newcomers, with another estimate saying at least 830,000 new Torontonians expected by 2051.

According to Statistics Canada, Toronto's estimated population as of July 1, 2024, was 3,273,119. If the Development Pipeline were fully built out and occupied, Toronto's population could reach 4.31 million, an increase of 1.04 million over the 2024 estimate. Let's use one of the estimates of an increase in the population by 830,000 people by 2051.

The Ontario building code for sewage system design flows uses a figure of 275 liters sewage a day per person which amounts to 228,250,000 MORE liters of sewage per day than what we already have.

The City of Toronto's wastewater treatment plants process approximately 1.3 to 1.5 billion liters of sewage per day. If we use a more conservative number, then 150 liters/person/day =
 $830,000 \text{ people} \times 150 \text{ liters/person/day} = 124,500,000 \text{ liters/day}$

Therefore, adding 830,000 people could increase the daily sewage volume in Toronto by approximately 124.5 million liters.



Garden suites and laneway suites as well as multiplexes are hidden in this trojan horse entering the City of Toronto.

I would welcome seeing the visible presence of representatives from Toronto Water to address the issues that EHON is creating around water/sewage infrastructure. The 7.7 billion dollar upgrade estimates speak volumes about what needs to happen if we are going to ensure these housing projects don't crash our water and sewage infrastructure. Everything I read talks about 'RESPONDING AND INVESTIGATING' but frankly we are smarter than that. We can anticipate the problems by doing calculations in advance to problems happening. 830,000 more people add 124.5 million liters of sewage into the system per day. Water and sewage infrastructure is very politely mentioned on page 21 & 22 of the Multiplex Monitoring Program. How will the City's aging infrastructure absorb all these ambitious housing plans???? In one of your reports you say that infrastructure needs will be addressed in future year budget processes, and in another it says the costs to upgrade storm and sanitary and water systems will be borne by developers. There is no transparency around this. Will I, as a taxpayer, be paying to upgrade the combined sewer system so an investment property can be built in my neighbourhood?

When garden suites were first mentioned in a final report in December 2021, Toronto Water staff reported that they "anticipate that the impact on piped services over the study area as a whole, and within local

areas, will be negligible.” The Neighbourhood Intensification Research Bulletin estimates the uptake of citywide residential units resulting from the EHON initiatives by 2051 at 163,785 units. The estimated uptake is 9,180 Laneway Suite units, 26,388 Garden Suite units, 87,134 Multiplex units and 41,083 units in Major Streets projects. With these new estimates is the impact on piped services still negligible? We knew where we were headed in 2021. Why were piped service impacts quoted as being negligible? I think that was when the Trojan horse first appeared.

8.3.4 Combined Sewer System

A combined sewer system is a sewage collection system which conveys sanitary sewage (domestic, commercial and industrial wastewaters) and stormwater runoff through a single-pipe system to a sewage treatment plant. Combined sewer systems which have been partially separated and in which roof leaders and/or foundation drains contribute stormwater inflow to the sewer system conveying sanitary flows are still defined as combined sewer systems in the ministry Procedure F-5-5, “Determination of Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer Systems”.

21.1.1.2 New Sanitary Connections to Combined Sewer Systems

New developments tributary to combined sewer systems should be avoided until the necessary upgrades to the combined sewer system can be completed. Conditions under which some development will be permitted are specified in Procedure F-5-5.

21.1.1.3 New Storm Connections to Combined Sewer Systems

As stated in Procedure F-5-5, “new storm drainage system should not connect to existing combined sewer systems if that increases the gross area serviced by the combined sewer system except where evaluations indicate that circumstances allow no other practical alternative. The evaluations should be documented as part of a Pollution Prevention and Control Plan.”

Through the City’s Multiplex Monitoring Program, staff evaluated the impact of multiplexes on the City’s sewer system, including the impact on basement flooding. The findings indicate that in areas where combined sewers are located, longer-term concentration of multiplex development has the potential to exacerbate existing constraints to adequate sewer capacity during wet weather flow. This may increase the risk of basement flooding in certain locations. Staff will be reviewing the City’s approval processes (including building permits) as it relates to assessing sewer and water capacity constraints of multiplex development proposals. Where capacity constraints are found, it may be possible to implement site-

specific measures to mitigate incremental impacts from the project. There may also be planned capital infrastructure upgrades to the sewer system that would address the capacity issue which would have to be completed to allow for incremental inflows. These matters will continue to be monitored in collaboration with Toronto Water. Any additional infrastructure needs will be addressed in future year budget processes. Please forgive me when I reply that this is saying a whole lot of nothing. We know it will cost billions of dollars to upgrade our system, but how does this specifically tie into each neighbourhoods needs? We are ploughing ahead with builds before we even address our sewage issues.

During the development process, developers must provide reports related to storm, sanitary and water systems and capacity to ensure that the development can be properly serviced. These reports are reviewed by Engineering and Construction Services. Where appropriate Engineering and Construction Services will recommend upgrades to storm and sanitary and water systems, the costs of which will be borne by the developer, before the development is permitted to proceed. Is this true?

However, the Ontario Building Code Act does not require building permit applications to be reviewed for servicing capacity for the proposed use. **This is a loophole that must be closed.**

To estimate peak sewage flows, the average domestic flow rate (sewage flows from residential sources) should be multiplied by the Harmon factor, then the peak extraneous flows should be added. Industrial and commercial sewage flow rates should be calculated separately and added to the above sewage flow rates. (Section 5.5.2 - Design Sewage Flows).

The existing combined sewers along Danforth Avenue range in size from 225 millimeters to 2,550 millimeters diameter. There are a variety of combined, sanitary, and storm sewer systems to the north and south of Danforth Avenue. I remain concerned about how multiplexes, Avenue builds and garden suites will impact the 4.5 meter wide street where I live. Please once again review the opinion of a professional (letter below) regarding how subdivisions are planned and what increased densification might mean if pipes are not properly sized for the increased volumes flowing through them.



In the final report: Expanding Housing Options in Neighbourhoods -Multiplex – Monitoring Program it states that “Specific to the sanitary sewer system upgrades, approximately 310 projects were identified throughout the city, at an estimated capital cost over \$1.3 billion. In addition, approximately 50 BFPP projects that increase the capacity of the combined sewer system have been identified throughout the city, with an estimated capital cost over \$6.4 billion. The adverse effect of “clustering trends” of multiplexes was mentioned. Are we going to just plough ahead and then deal with the flooding when it happens or are we going to be smart about it? A combined sewer overflow means a discharge to the environment from a combined sewer system. We have a combined sewer system on Craven Road. Porous pavements reduce runoff by allowing stormwater to drain through the pavement to the underlying soil. Porous pavements, most commonly used in parking lots, require skill and care in installation and maintenance to ensure that the pores in the pavement do not become plugged. The impact of greater building footprint or other design features that could reduce permeable surface area has not been assessed. The reduction of permeable area can lead to less rain infiltration and therefore greater runoff, which could increase loading on the storm system.

Sincerely

Claudia Aenishanslin

<https://www.ontario.ca/document/design-guidelines-sewage-works/control-and-treatment-combined-sewer-overflows>

<https://www.toronto.ca/wp-content/uploads/2021/07/96e4-ecs-specs-dcm-sewer-capacity-assessment-guidelines-July2021.pdf>

<https://www.ontario.ca/page/f-6-1-procedures-govern-separation-sewers-and-watermains>

Figure A.1 – Projection of extreme WWF I&I from flow monitoring data

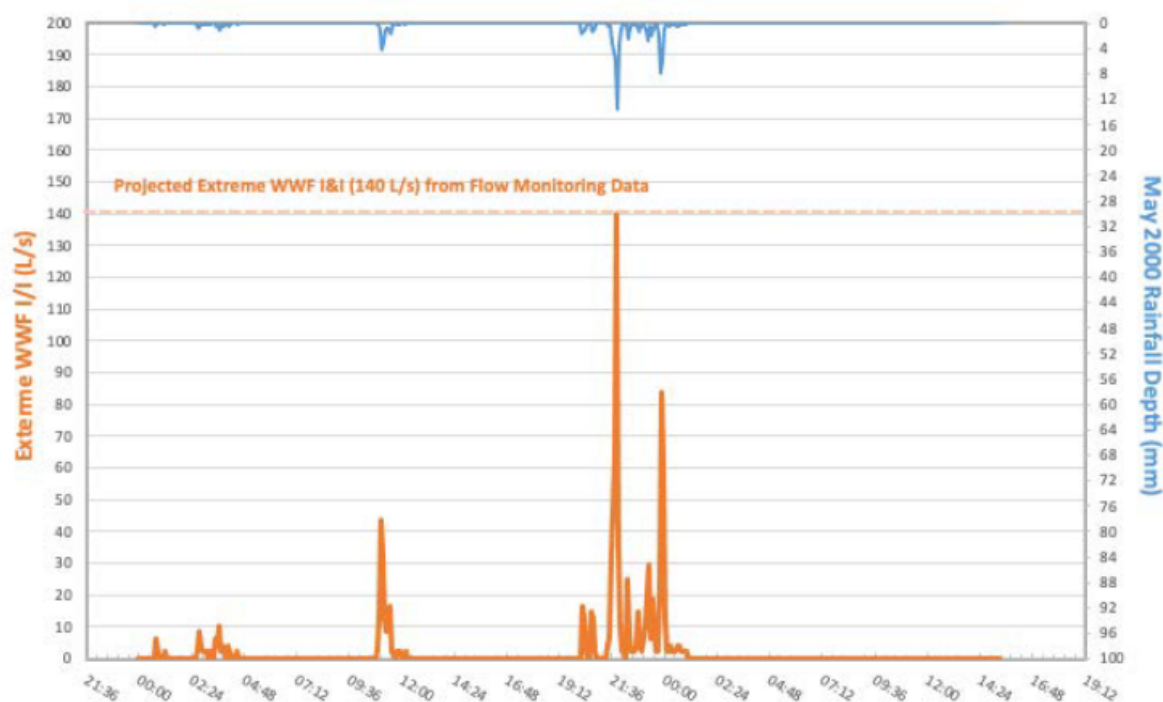


Figure A.2 – Estimation of extreme WWF I&I pattern based on May 12, 2000 storm event

The recommended minimum diameters of piping for various purposes are shown in Table 8-4.

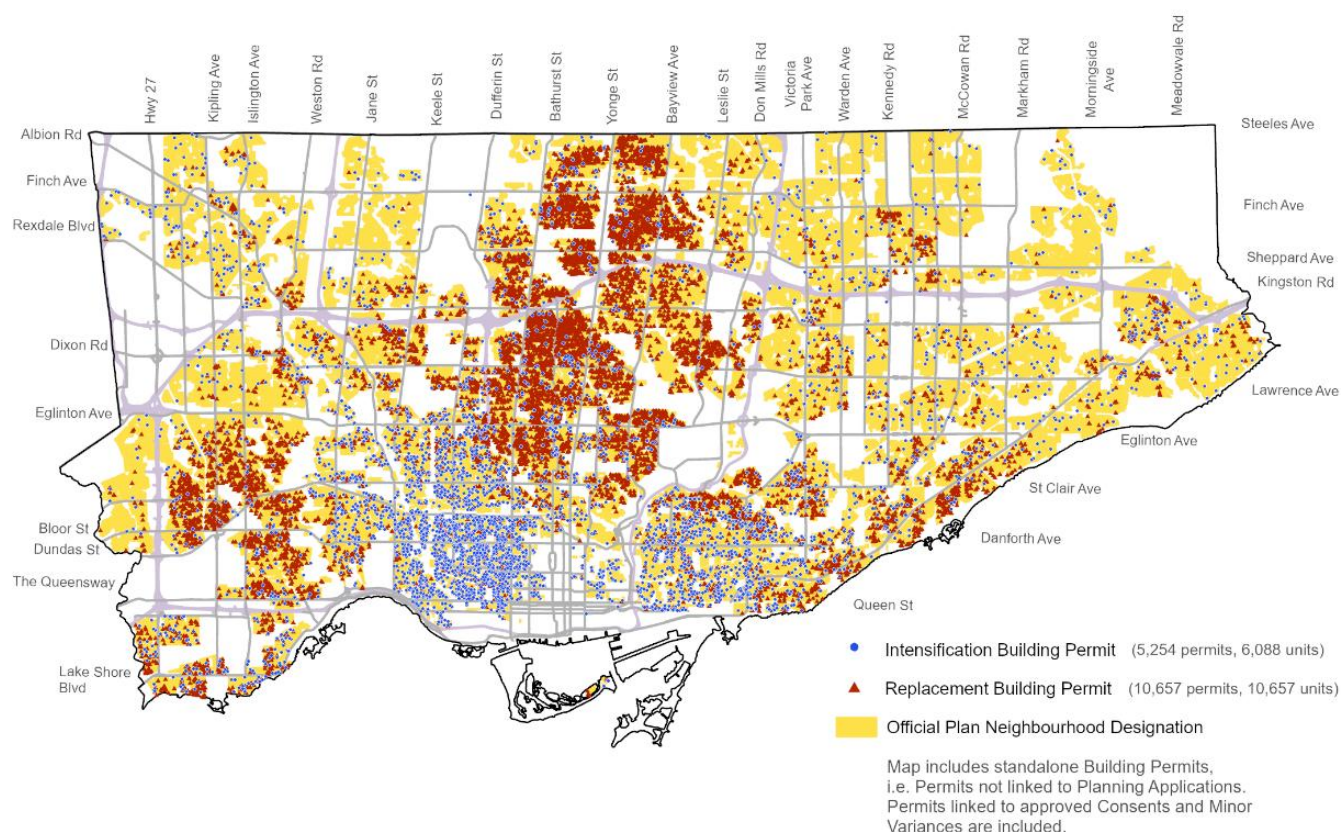
**Table 8-4 – Recommended Minimum Pipe Diameters
Gravity Flow**

Type of Flow	Minimum Diameter in mm (inches)
Sewage and Sludge	200 (8)

Table 8-4 – Recommended Minimum Pipe Diameters

Type of Flow	Minimum Diameter in mm (inches)
Sewage	100 (4)
Sludge	150 (6)
Chemicals (non-scale-forming)	12 (0.5)
Chemicals (scale-forming)	25 (1)

Map 2: Building Permit Activity in Neighbourhoods



Source: Toronto Building, January 1 2011 to December 31 2023

Toronto City Planning, Planning Research and Analytics - February 2025



Theme 3: Traffic, Garbage and Other

Additional comments all in opposition to proposal:

Worries about inadequate parking, traffic congestion, and snow removal.

Fear that the city's infrastructure (e.g., schools, roads) can't handle increased density.

Belief that developers will outbid residents, turning neighbourhoods into speculative zones.

Concern that Scarborough is being disproportionately impacted.

NAVIGATE

- » Section 1
- » Section 3
- » Section 4
- » Section 5
- » Section 6
- » Section 7
- » Section 8
- » Section 9
- » Section 10
- » Section 11
- » Section 12

THE ONTARIO BUILDING CODE | SEWAGE SYSTEM DESIGN FLOWS

8.2.1.3. Sewage System **design** Flows

(1) For **residential** *occupancies*, the total daily **design sanitary** sewage flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.A.

(2) For all other *occupancies*, the total daily **design sanitary** sewage flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.B.

(3) Where a **building** contains more than one establishment, the total daily **design sanitary** sewage flow shall be the sum of the total daily **design sanitary** sewageflow for each establishment.

(4) Where an *occupancy* is not listed in Table 8.2.1.3.B., the highest of metered flow data from at least 3 similar establishments shall be acceptable for determining the total daily **design sanitary** sewage flow.

Table 8.2.1.3.A.

residential Occupancy

Forming Part of Sentence 8.2.1.3.(1)

<i>Item</i>	Column 1 residential Occupancy	Column 2 Volume, litres
1.	Apartments, Condominiums, Other Multi-family Dwellings - per person ⁽¹⁾	275
2.	Boarding houses	
	a) Per person,	
	i) with meals and laundry facilities, or,	200
	ii) without meal or laundry facilities, and	150
	b) Per non-resident staff per 8 hour shift	40
3.	Boarding School - per person	300



October 22, 2024

Planning Policy Branch
Ministry of Municipal Affairs and Housing
777 Bay St, 13th Floor
Toronto, ON
M7A 2J3

Public Works

10 Peel Centre Dr.
Suite A
Brampton, ON
L6T 4B9
tel: 905-791-7800
peelregion.ca

Re: Proposed amendment to Ontario Regulation 299/19 ADDITIONAL RESIDENTIAL UNITS, made under the Planning Act (ERO 019-9210)

To whom it may concern:

Peel Region appreciates the opportunity to comment on the proposed regulation to facilitate creation of additional residential units. Peel Region staff generally support efforts to permit “as of right” residential housing up to three units per lot but only in strategic growth areas (such as major transit station areas and urban growth centres).

Overall, this change could create more housing options and support intensification. Some “as of right” provisions could be supported in other areas pending further studies demonstrating the availability of infrastructure and services to support housing that includes units that are affordable to low- and moderate income households.

The following Peel Region staff comments are provided for the Ministry’s consideration related to Peel’s responsibilities as the provider of water and wastewater infrastructure and services.

PEEL REGION STAFF COMMENTS ON THE PROPOSAL

Reduction or elimination of the need for landowners to obtain a rezoning or minor variance prior to construction.

Peel Region is not a participant in the building permit process; however, does have a role to provide water and wastewater services or upgrades to existing connections to accommodate additional residential units, should they be required. This review is currently undertaken through circulation of minor variances where proposals for additional residential units are included and Peel Region advises applicants, through the Committee of Adjustment process, of the metering requirements and servicing permitting requirements. No connection to an existing water service or sewer lateral can be made without Peel Region’s approval. Without the Committee of Adjustment process, there is an increased risk non-compliant connections to Peel Region’s water and wastewater systems and may cause delays in the building permit process. There will need to be an increased responsibility for local municipal building departments to advise the applicants of the requirements for connecting to Peel Region’s services.



Public Works

10 Peel Centre Dr.
Suite A
Brampton, ON
L6T 4B9
tel: 905-791-7800
peelregion.ca

Province-wide as-of-right permission to add units to any residential-use land parcel of land with full municipal water and sewage services, and discretionary permission for parcels that are rural or not fully serviced.

Coordination between Peel Region and the local municipalities will be required at the building permit stage so Peel Region can confirm the availability of adequate municipal water and wastewater services. The system was not designed for the additional water and wastewater flows that will be generated by the creation of a substantial number of additional residential units within existing properties. Without consultation with Peel Region in advance, there is significant risk of system inadequacies, including the likelihood for low water pressure during high demand periods and potential sewer surcharging during normal periods due to excessive flows.

It is important to note that water and sewer pipes are sized according to subdivision/parcel designs and predicted flows before development begins; thus they may not be rated for the new higher volumes resulting from population intensification. With the additional flows, there is a higher risk (both in likelihood and severity) of sewer surcharging resulting in environmental spills and basement flooding during heavy rainfall events when inflow and infiltration allows stormwater into the sanitary sewers, including flows from private sump pumps, downspouts and foundation drains connected to the sanitary sewer system.

CONCLUSION

Peel Region asks that the Ministry consider the comments provided herein to inform its decisions on the approach to as-of-right permissions for additional residential units. Should the proposal advance, Peel Region looks forward to participating in the consultation on the draft regulation.

If you have any questions or require more information, please contact me at anthony.parente@peelregion.ca.

Kind Regards,

Signed by:

27D2A0DF6C854BB...

Anthony Parente, P.Eng.
General Manager, Water & Wastewater Divisions
Region of Peel, Public Works