



 Watson
& Associates
ECONOMISTS LTD.

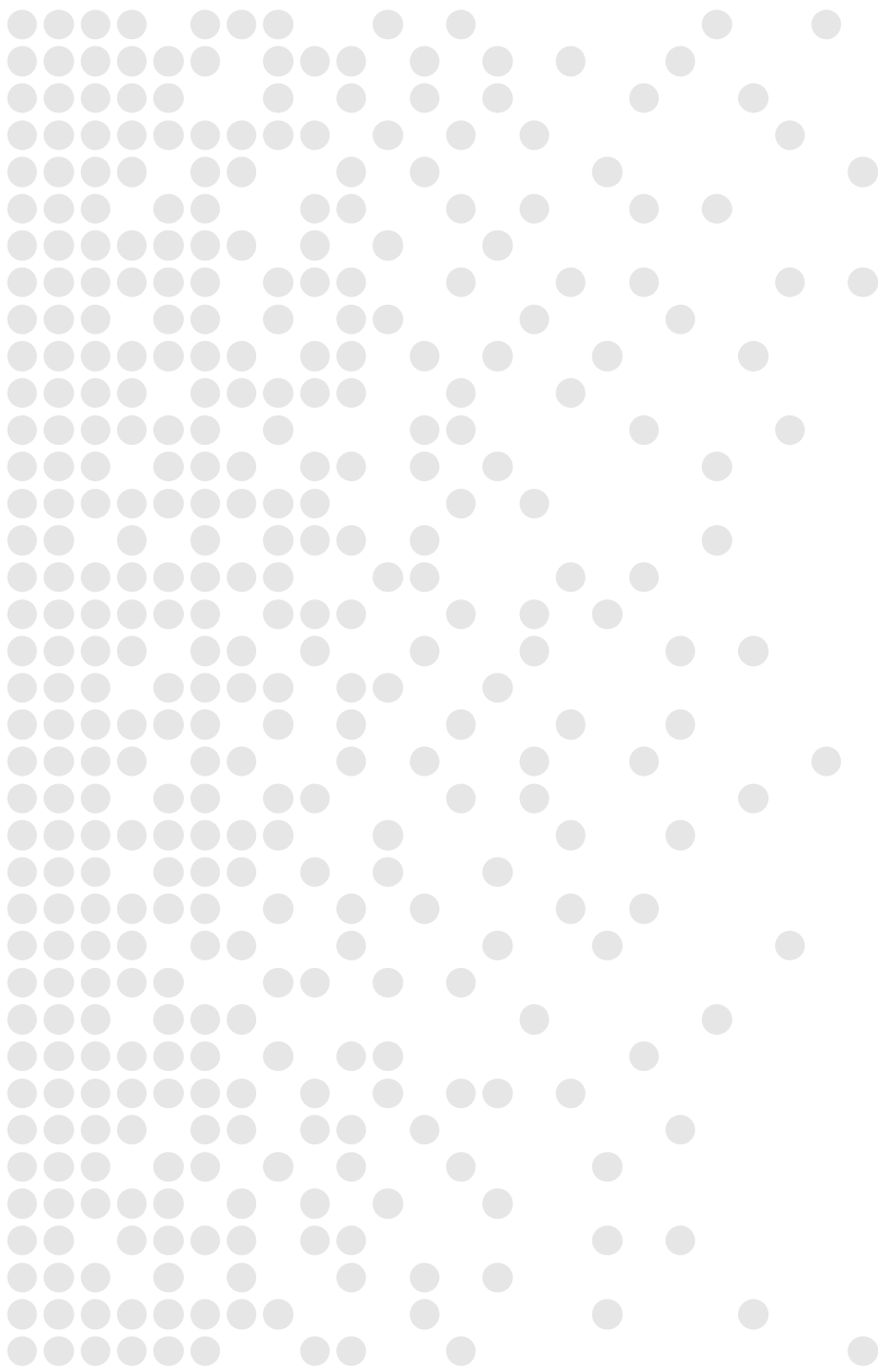
8th Concession Road Area (Oldcastle) Capital Charges

Council Meeting
July 9, 2024

Agenda



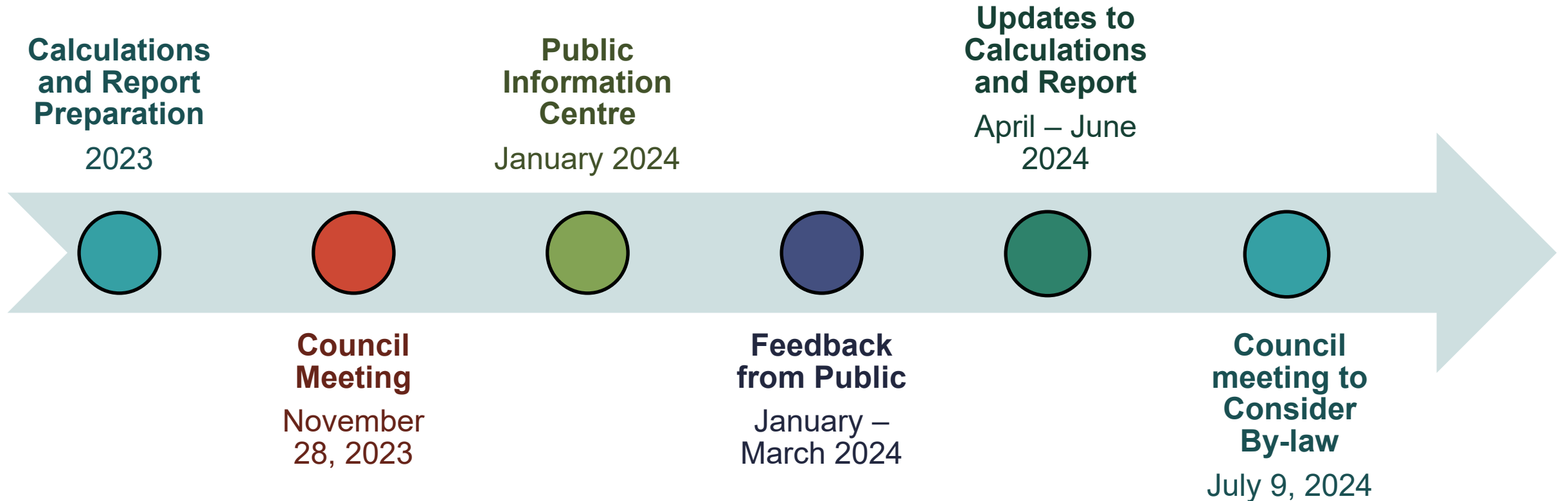
- Background
- Summary of Public Information Centre
- Updated Calculations
- Next Steps
- Questions



Background

8th Concession Road Area (Oldcastle) Capital Charges

Study Process



Background



- Properties within the Oldcastle Hamlet have traditionally been serviced by private on-site systems, some of which are inadequate, malfunctioning, and have caused land and surface water pollution
- The Town and Ministry of Environment have identified the need for proper treatment of wastewater in the Hamlet
- A preferred strategy has been identified through the 2018 “Oldcastle Hamlet Sanitary Servicing 8th Concession Road Trunk Sanitary Sewer Outlet Preliminary Design” Report
 - Report outlined trunk and local sewer projects and cost estimates
 - Cost estimates have been updated to reflect current costs

Background



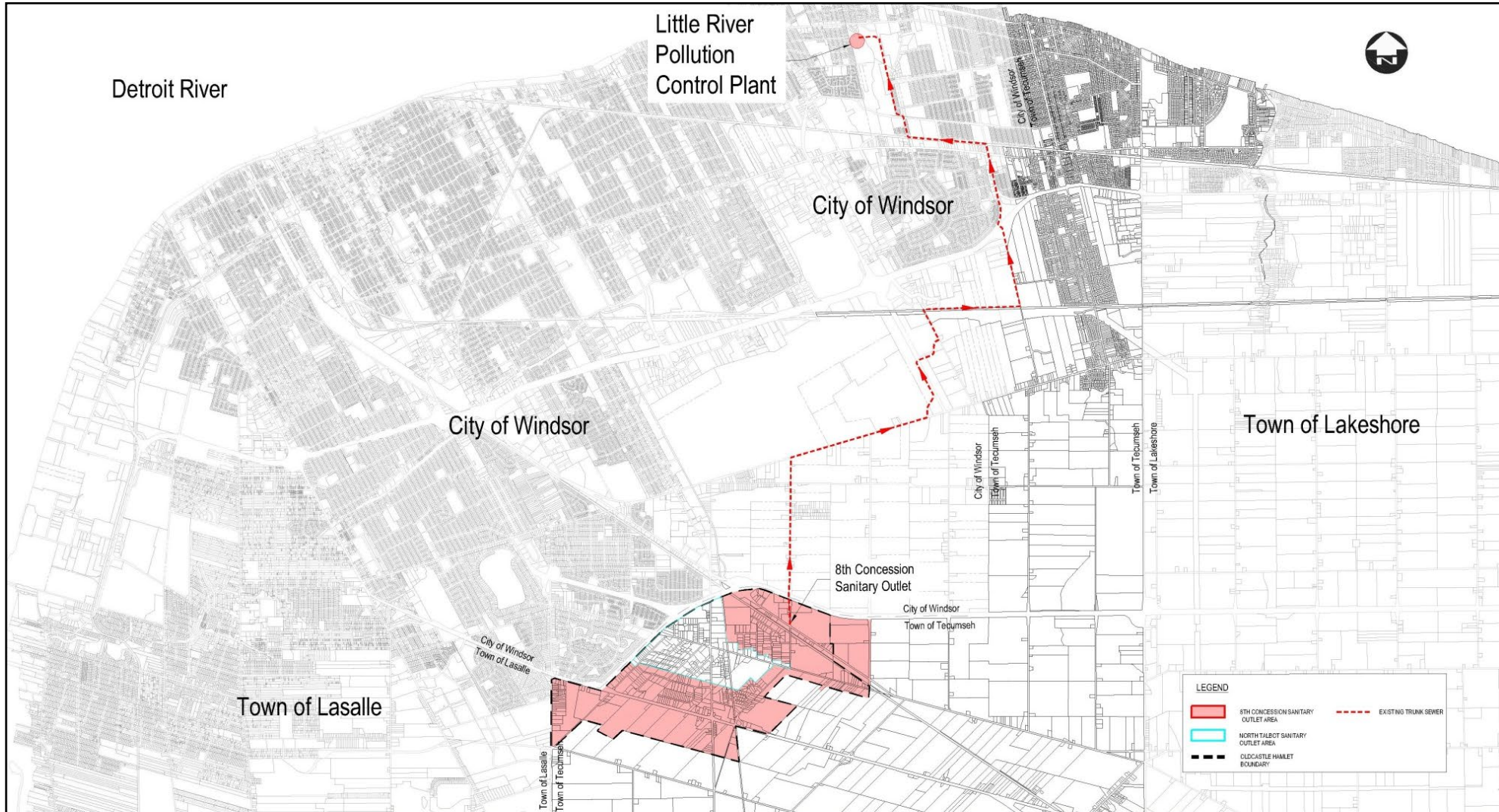
- New development in the Oldcastle area would be subject to development charges (D.C.s) under the *Development Charges Act*
 - D.C.s will be paid by new development for their share of the costs for wastewater infrastructure
- The recovery of costs for wastewater servicing related to existing properties is proposed to be recovered through a capital charge via Part XII of the *Municipal Act*
- The Town retained Watson to undertake the calculation of these capital charges through this study process

Legislative Framework



- Part XII of the *Municipal Act* provides municipalities with broad powers to impose fees and charges via by-law as follows:
 - “For services or activities provided or done by or on behalf of it;
 - for costs payable by it for services or activities provided or done by or on behalf of any other municipality or local board; and
 - for the use of its property including property under its control.”
- It is proposed that existing properties will pay the non-growth-related costs of the infrastructure through capital charges imposed under Part XII
 - Note: Future development will pay the growth-related costs of the infrastructure through D.C.s

Service Area



LEGEND

	8TH CONCESSION SANITARY OUTLET AREA		EXISTING TRUNK SEWER
	NORTH TALBOT SANITARY OUTLET AREA		OLDCASTLE HAMLET BOUNDARY

Town of Tecumseh
Ontario, Canada

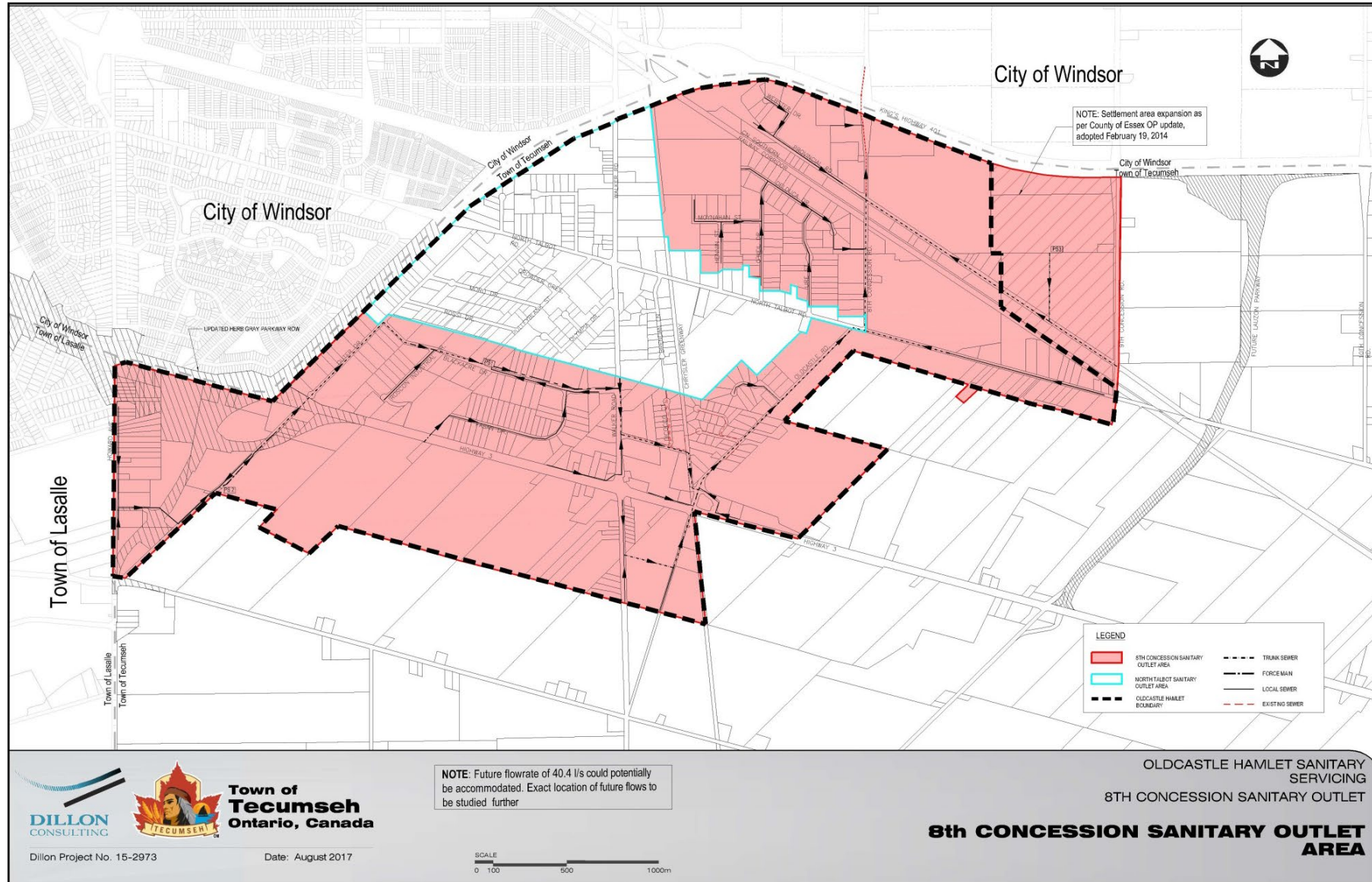
OLDCASTLE HAMLET SANITARY SERVICING
8TH CONCESSION SANITARY OUTLET

TRUNK SANITARY SEWER TO LRPCP

Dillon Project No. 15-2973 Date: July 2017

SCALE
0 500 1500 2500m

Service Area

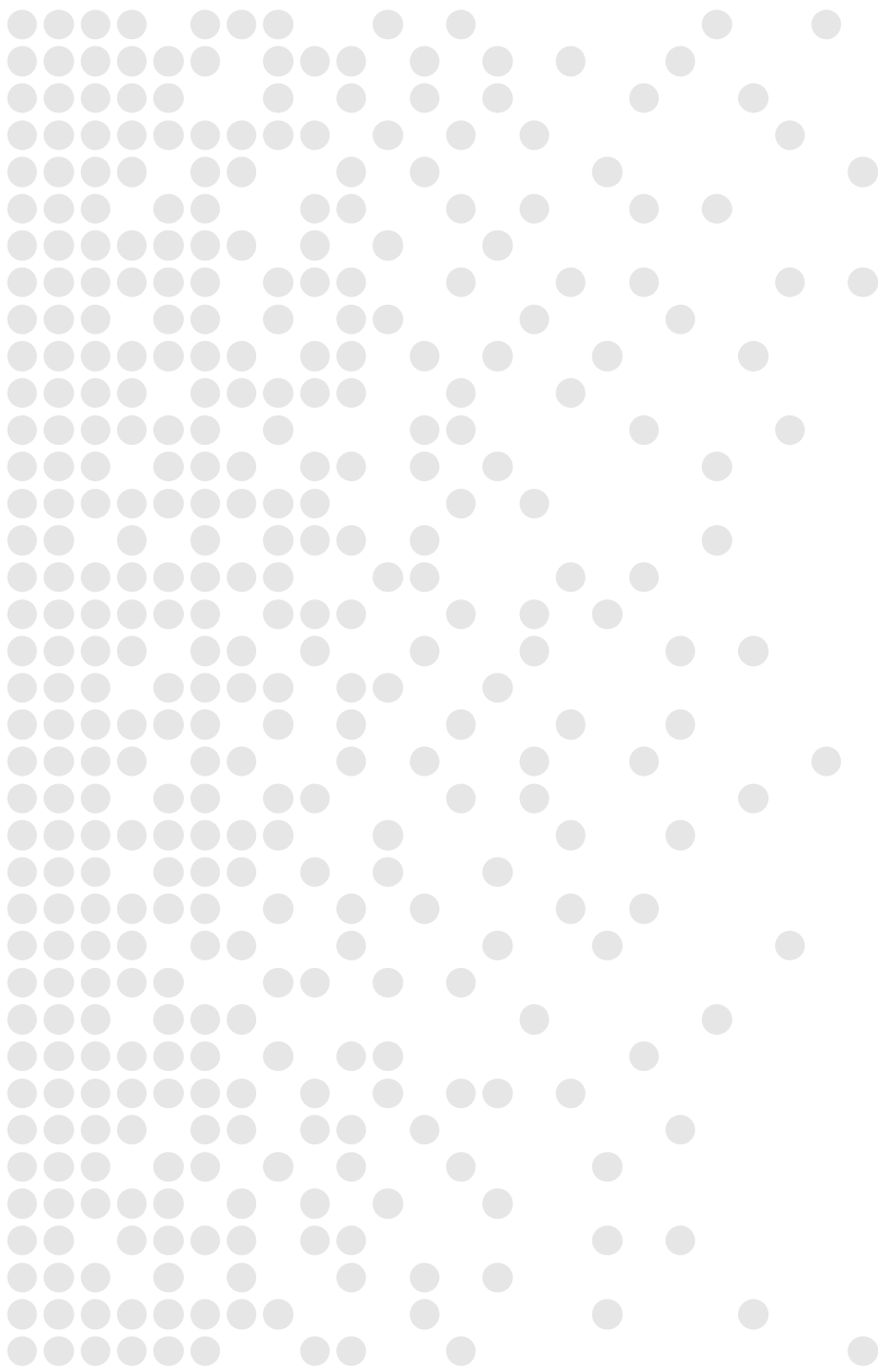




Methodology – Conversion of Properties to Single Detached Equivalents (S.D.E.s)

- S.D.E. approach normalizes wastewater use of all types of development (res and non-res) relative to the use of a single detached home
- S.D.E. basis is preferred to an area basis given that population densities are more closely related to shares of sanitary flows vs. property area
- 3.2 persons per single family home is assumed for this calculation (based on 2019 DC Study)
- Example calculation to convert a business park to S.D.E.s is provided as follows:

Property Type	Population Density (persons/hectare)	Area of Property (hectares)	Assumed Population	S.D.E. Assumption	Total S.D.E.s for Property
	<i>A</i>	<i>B</i>	$A \times B = C$	<i>D</i>	$C / D = E$
Business Park	35.0	0.52	18.2	3.2	5.7



Summary of Public Information Centre

8th Concession Road Area (Oldcastle) Capital Charges

Summary of Public Information Centre



- Watson and the Town undertook a virtual Public Information Centre to inform the public of the capital charge and associated process
- Comments were received from the public on concerns and issues related to the charge
- Comments and responses provided are included in the accompanying staff report
- Generally, comments related to:
 - Questions on the charge that would apply to specific properties
 - Quantum of charge
 - Timing of connection and payment



Updated Calculations

8th Concession Road Area (Oldcastle) Capital Charges

Updated Calculations



- Based on updated cost estimates and feedback received from landowners the following changes have been made to the calculations:
 - Specific property adjustments for densities and land use categories
 - Updated cost estimates for trunk sewer infrastructure
 - Allocation of costs to Town for properties temporarily discharging into North Talbot Road Sanitary Sewer Outlet
- Changes are detailed in the reissued report
- The following provides for the updated calculations. Orange boxes denote changes in calculations

Infrastructure



- Three components of infrastructure:
 1. **Main (Trunk) charge:** sanitary sewers greater than 375mm in diameter, pump stations and forcemains
 2. **Local charge:** sewers <375 mm in diameter
 3. **Lateral charge:** cost related to connect the sewer to a property

Summary of S.D.E.s within Study Area

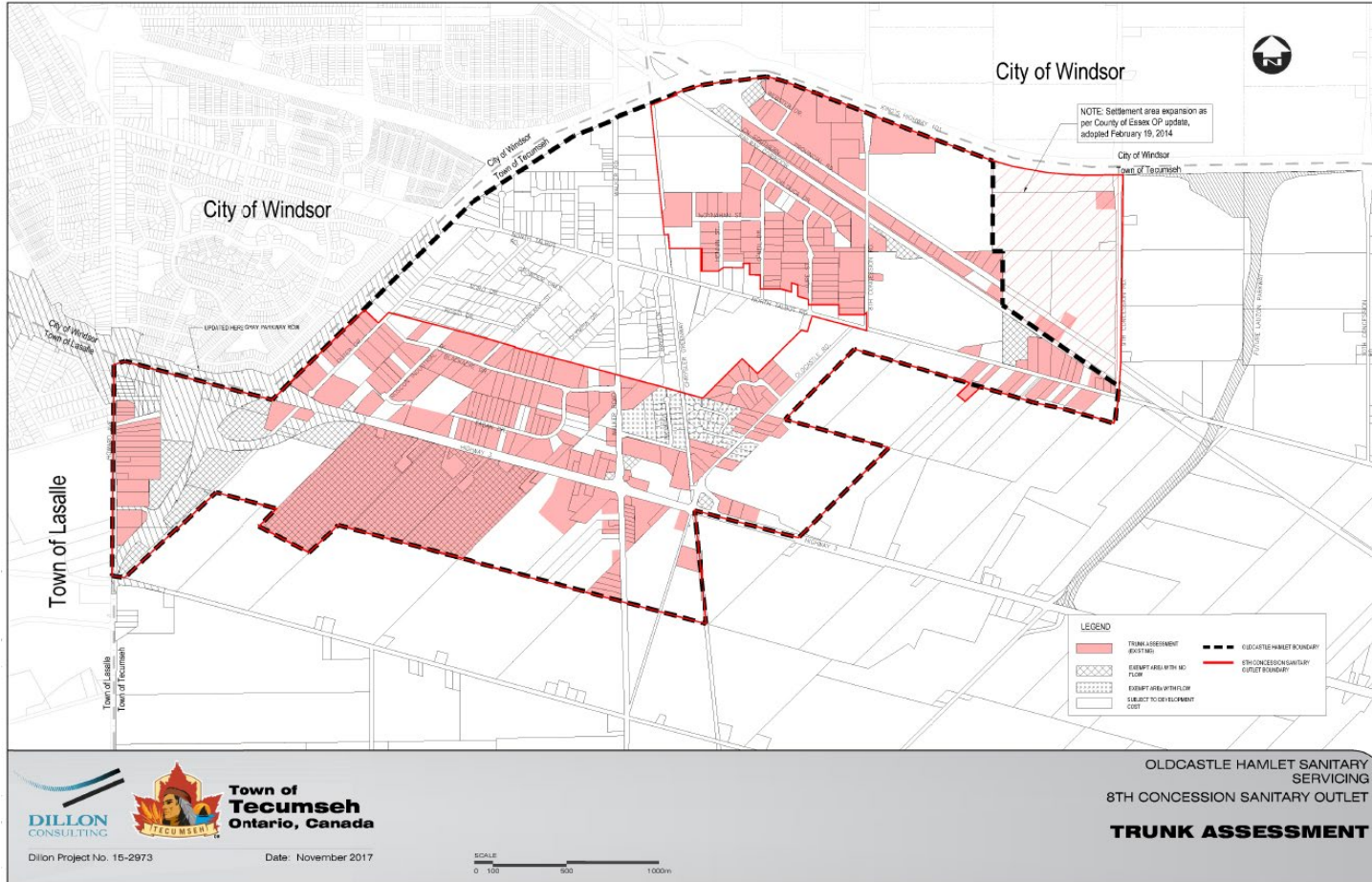


Total S.D.E.s	Existing	New
Residential	125	1,651
Non-Residential	1,999	3,005
Total	2,124	4,656

- Total existing S.D.E.s are used in the denominator of the Part XII charge calculation
- Numerator is the capital cost (identified in the next section)

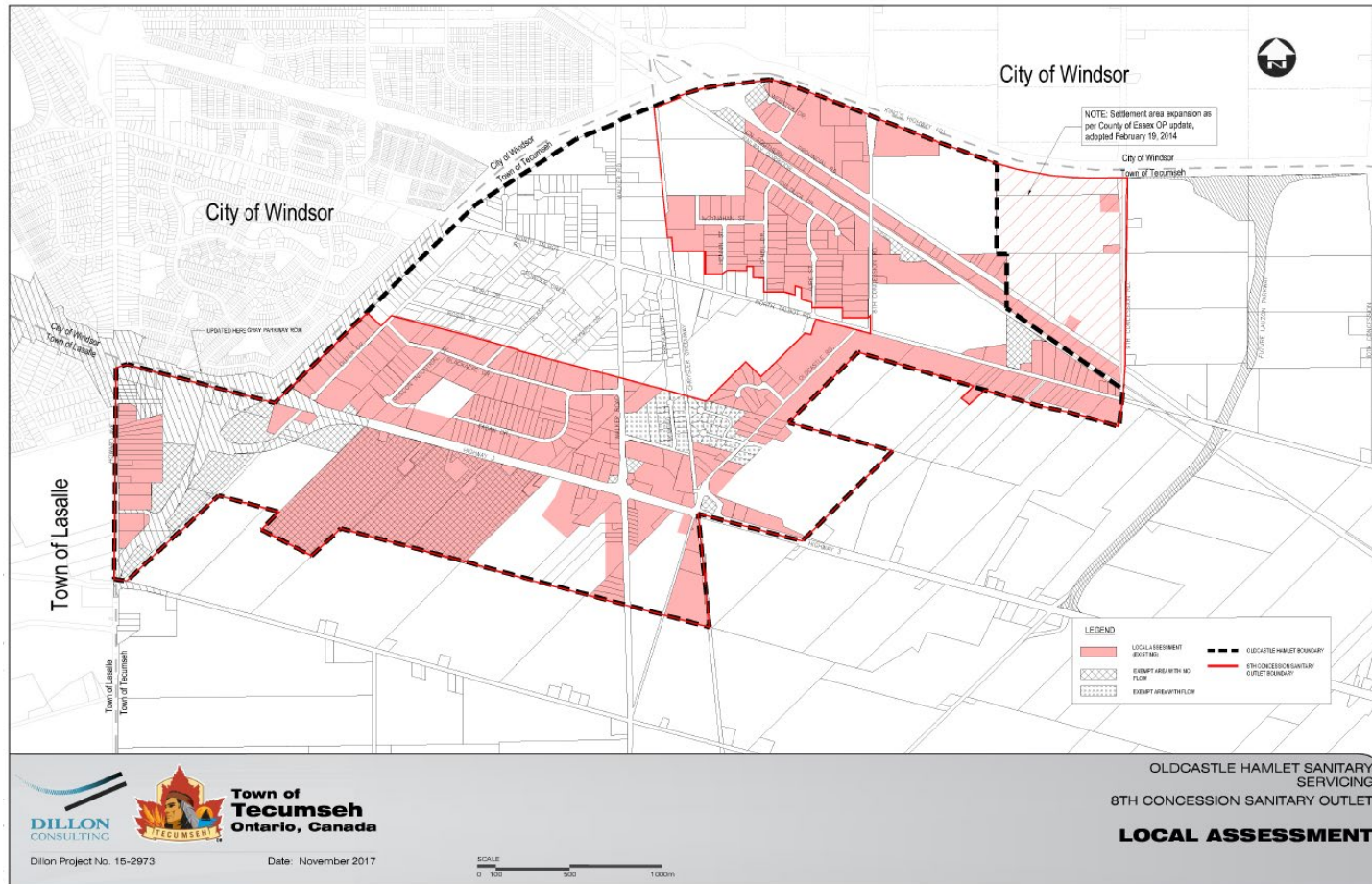
- Property specific adjustments resulted in an increase of 2 existing S.D.E.s

Existing Properties Benefiting from Trunk Infrastructure



Existing S.D.E.s benefitting from trunk infrastructure: 2,124

Existing Properties Benefiting from Local Infrastructure



Existing S.D.E.s benefitting from local infrastructure: 2,829

Note: S.D.E.s for local charge is higher than trunk infrastructure, given that the Town is installing the local infrastructure for certain new developments where a D.C. would otherwise apply.

Capital Costs



Component	Total Cost	Town Share	Growth-Related (D.C.s)	Non-Growth-Related (Part XII)*
Trunk Sewers	\$79.5 million	\$46.9 million	\$34.8 million	\$7.6 million
Local Sewers	\$14.8 million	\$14.8 million	N/A**	\$14.8 million

- Increase in trunk sewer costs since Nov 2023 report: **+\$16 million**
- Increase in capital costs included in Part XII charge: **+\$2.8 million**

- Lateral capital costs are assessed on a per property basis based on the type of lateral installed:

Description	Capital Cost (\$)
150 mm (6 inch), without inspection manhole	\$3,974
150 mm (6 inch), with inspection manhole	\$11,124
200 mm (8 inch), with inspection manhole	\$12,399
250 mm (10 inch), with inspection manhole	\$14,306

*Note: a minor component of the works (approximately \$300,000) benefits existing development in other areas, not included as part of this calculation

**Under the Town's Local Service Policy, the construction of these works is direct developer responsibility and not included in the DC. Costs identified above do not include local sewers to be installed by developing landowners



Properties Serviced by Existing Sewers

- Certain properties within Sewer Outlet area are currently serviced by existing sewers
- These wastewater flows are temporarily discharging into North Talbot Road Sanitary Sewer Outlet
- These properties are not subject to the charge
- As part of the report updates, the portion of costs related to these properties has been allocated as a Town-funded component
- Ensures costs related to these properties are not allocated to properties already subject to the Part XII charge

As a result of the above adjustment, the Town is responsible for funding \$970,000 of the capital costs.

Calculation of Capital Charge



Calculation of Main Charge per S.D.E.

Total Capital Costs (\$)	\$7,630,392
Total S.D.E.s	2,124
Main Charge per S.D.E.	\$3,592

Calculation of Local Charge per S.D.E.

Total Capital Costs (\$)	\$14,758,951
Total S.D.E.s	2,829
Local Charge per S.D.E.	\$5,218

Total Part XII Charge per S.D.E.

Component of Charge	Charge (\$)
Main Charge per S.D.E.	\$3,592
Local Charge per S.D.E.	\$5,218
Total	\$8,810

Increase in total Part XII Charge per S.D.E.: +\$1,679

- Note: S.D.E.s for local charge is higher, given that the Town is installing the local infrastructure for certain new developments where a D.C. would otherwise apply.
- These properties would pay the D.C. to fund the Main trunk infrastructure and a Part XII charge for the local infrastructure

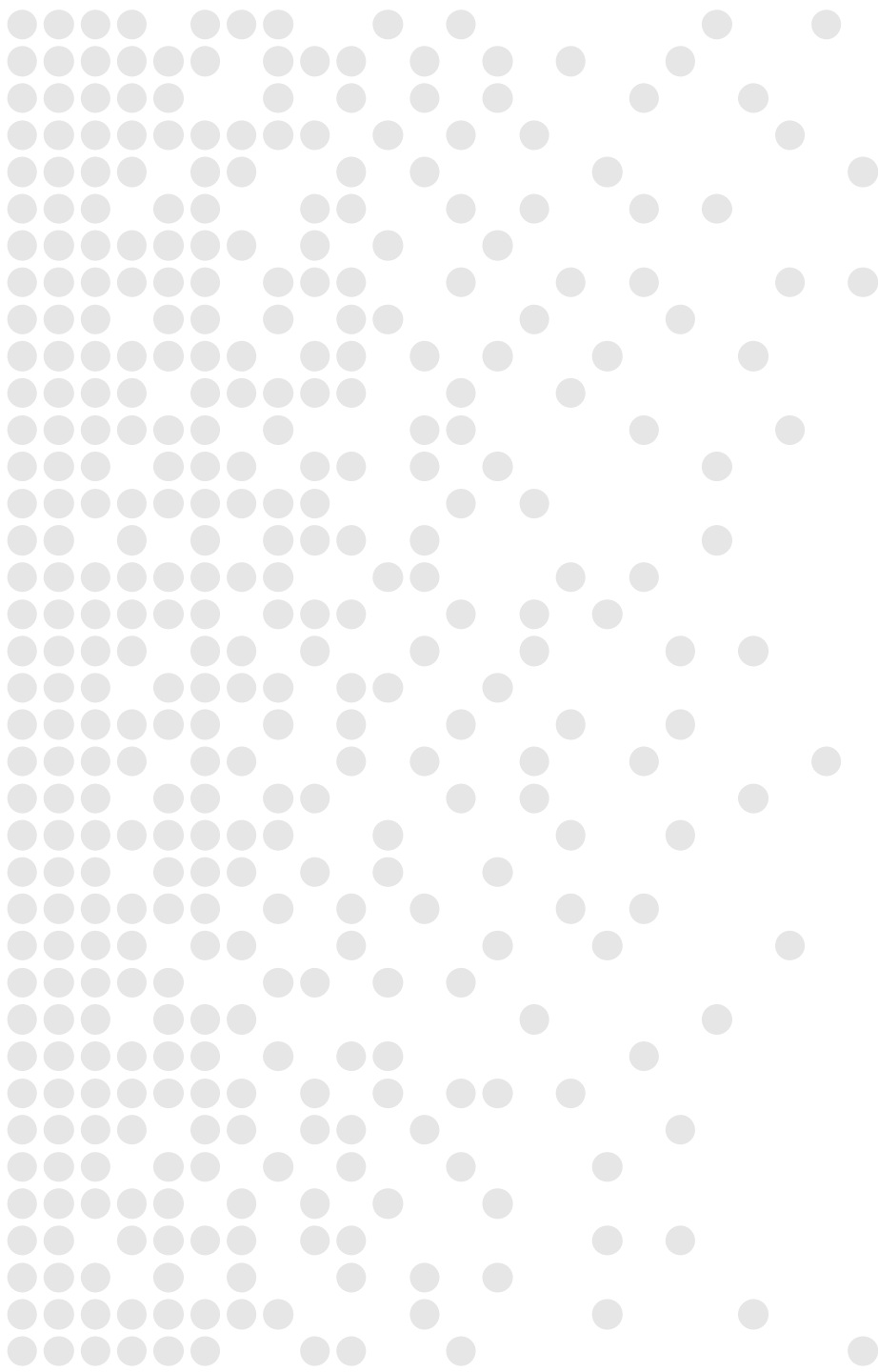
- The above charge is applied to each property based on the total number of S.D.E.s for the property
- Calculations of the charge for each property in the study area are provided in the report

Special Considerations



Properties not subject to the charge:

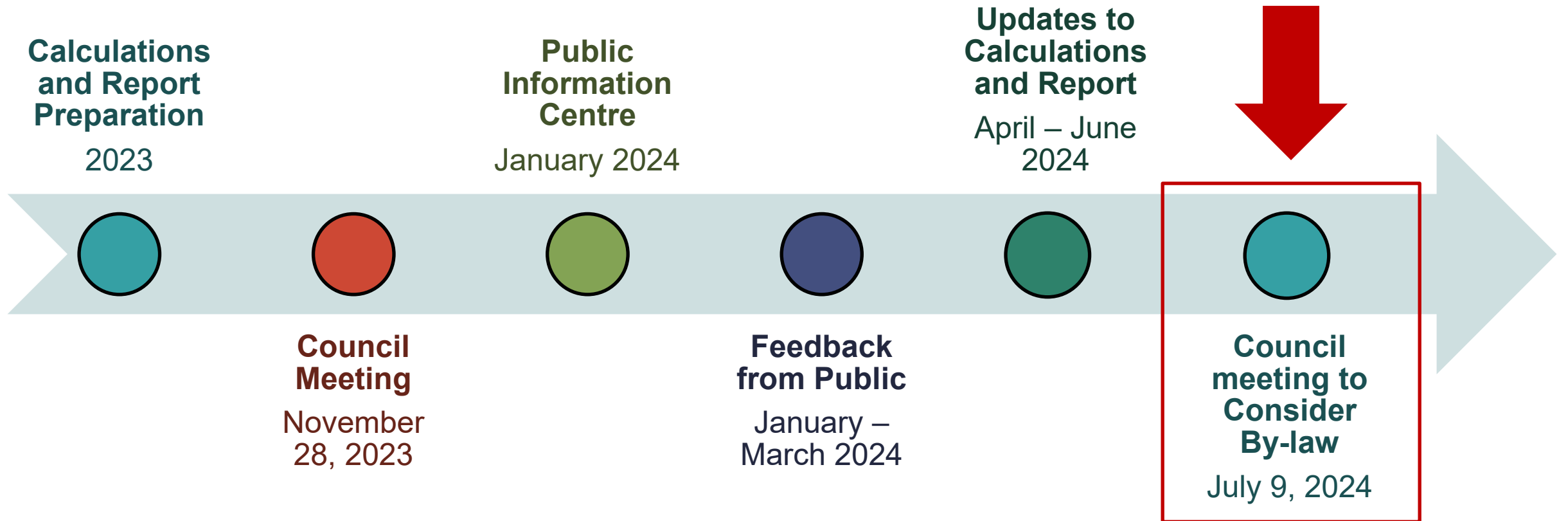
- Existing Sanitary Sewers
 - Properties within the Sewer Outlet area that are currently serviced by existing sewers and have been temporarily discharging into North Talbot Road Sanitary Sewer until they can connect to 8th Concession Rd sewer
- 'Frozen' Areas
 - There are a number of properties that are fully or partially 'frozen'
 - Not intended to be serviced/do not have any sewage capacity allocated
- D.C. Recoverable
 - Undeveloped properties are not subject to the charge as growth-related capital costs are included in the D.C. calculation
 - These properties are subject to the D.C. to recover capital costs related to the development of the land



Next Steps

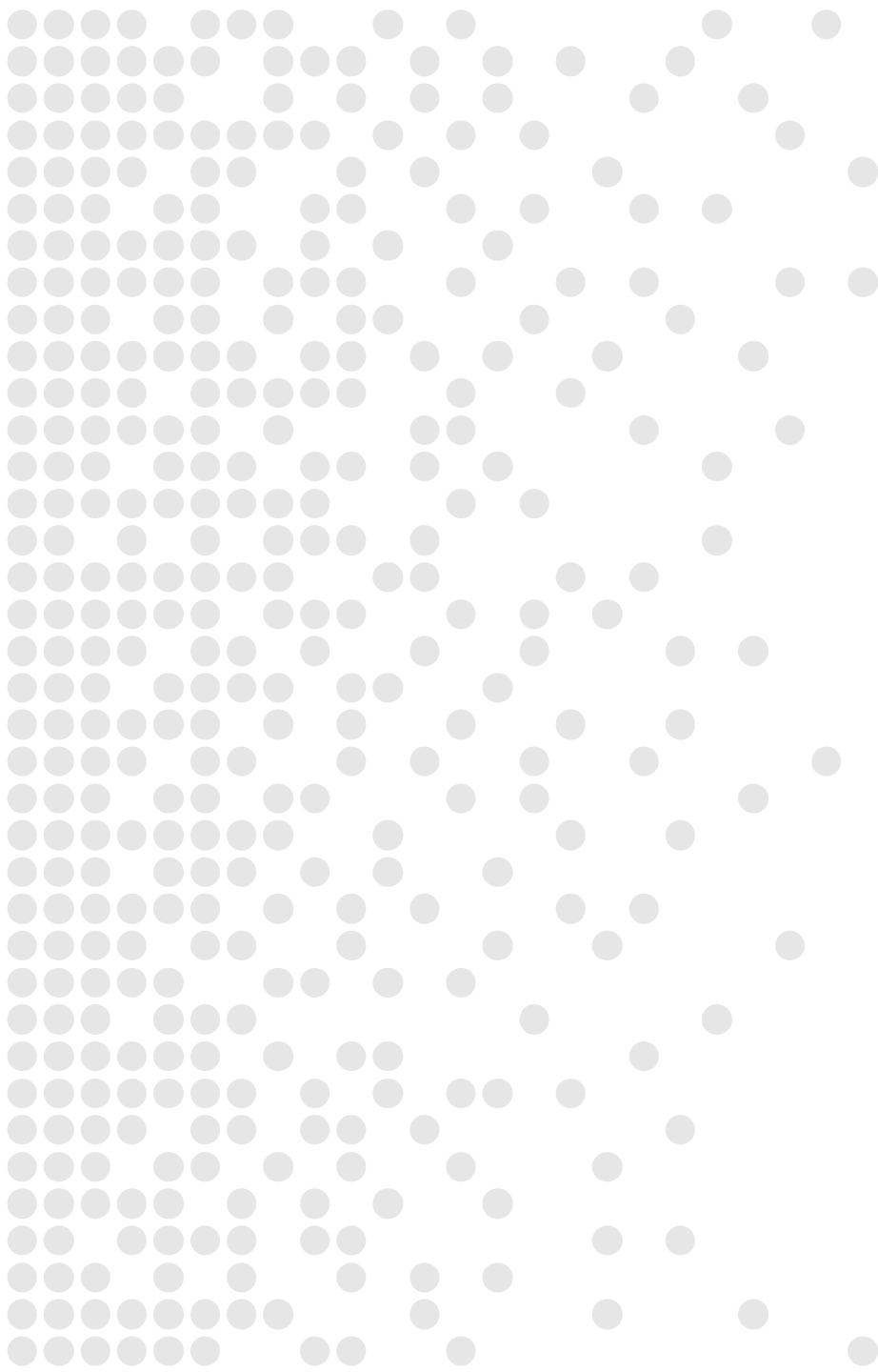
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Next Steps





Questions?



Appendix

8th Concession Road Area (Oldcastle) Capital Charges

Frequently Asked Questions - 1



Q1

Why are sanitary sewers needed? (my septic system is functioning 'perfectly')

- Historically properties within the Oldcastle Hamlet area were serviced by private septic systems.
- In the late 2000's Ministry of Environment and Climate Change received complaints regarding sewage effluents from failing systems
- The Ministry requested a plan from the Town to address issues
- With availability of the North Talbot Road and 8th Concession Road trunk sanitary sewers in 2011, the Town's plan outlined installation of sanitary sewers on a yearly basis
- This plan was accepted by the Ministry. If the Ministry was not satisfied with the Town's plan, the Ministry could issue a Provincial Officer's Order under the Water Resources Act to address the sewage effluent
- There have been numerous studies and policies prepared to date with respect to wastewater servicing

Frequently Asked Questions - 2



Q2

What is the timing for the installation of sewers, and for the assessments?

Timing of Sewers

- Installation of sewers within the 2 outlets (North Talbot Road and 8th Concession Road) are subject to available funding, staffing resources, and Council approval
- Tentative schedule is based on a 30-year program, assuming one phase of sewers per year. To date, the Town has installed 10 of the possible 30 phases.

Timing of Assessments

- Assessments will be mailed out to affected properties within the service area once the sanitary service connection has been provided to the property line, generally within a few months of the completion of construction

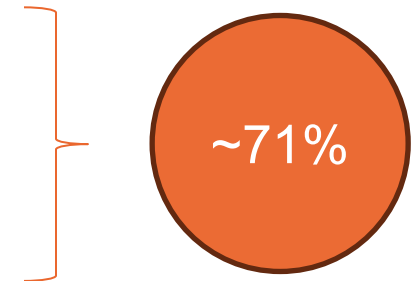
Frequently Asked Questions - 3



Q3

The costs are too high I can't afford the assessment

- The calculated assessments are based on actual costs incurred to date and estimated construction costs for future phases
- Total project costs = \$94.28 million
 - \$21.10 million in grant funding
 - \$11.51 million funded by the City of Windsor
 - \$34.78 million funded by Town Development Charges (new development)
- Town will offer debentures over 10-year or 20-year terms through the Ontario Infrastructure and Lands Corporation. Annual payments will include interest at a rate set when the debenture is obtained



Ex. Annual Payments
\$50,000 assessment
10-year @ 4% interest
\$6,165/year

Ex. Annual Payments
\$50,000 assessment
20-year @ 4% interest
\$3,679/year

Frequently Asked Questions - 4



Q4

The City of Windsor received grants; why not the Town of Tecumseh?

- The Wastewater Agreement between the City of Windsor and the Town of Tecumseh (By-Law 2004-70) outlines the cost sharing percentages for each of the phases of the trunk sanitary sewer through the City of Windsor.
- In 2009 the City was successful in receiving grant funding from upper levels of government, which benefitted both the City and the Town as outlined below:

Trunk Sanitary Sewers (Through the City of Windsor) Cost Comparison		
	<u>w/ Grants</u>	<u>w/o Grants</u>
Federal/Provincial	\$ 21,099,523.75	\$ -
Windsor	\$ 11,506,381.49	\$ 24,204,225.64
Tecumseh	\$ 9,599,097.95	\$ 18,000,777.55
TOTAL	\$ 42,205,003.19	\$ 42,205,003.19

Frequently Asked Questions - 5



Q5

Do all of the properties within the sanitary service area pay into the sewers?

- All properties in the 8th Concession Road Sanitary Sewer Outlet area will pay for the use of the sanitary sewers through either:

Part XII Main and Lateral Charge	Development Charges	Install own local sewers
<ul style="list-style-type: none">• <u>Trunk Component</u> existing• <u>Local Component</u> existing and new development and redevelopment	<ul style="list-style-type: none">• New development and redevelopment	<ul style="list-style-type: none">• New development and redevelopment

Charges subject to exemptions noted earlier in presentation (i.e. existing sanitary sewers and frozen areas)

Frequently Asked Questions - 5



Q5

Do all of the properties within the sanitary service area pay into the sewers?

Main (Trunk + Local) Charge



Main (Trunk + Local) Charge, DCs



DCs, Installation of own Local Sewers



Main (Local) Charge, DCs



Frequently Asked Questions - 6



Q6

All properties should be charged in a fair manner

- When identifying the infrastructure requirements to service the area, a flow per hectare approach was utilized for each of the property types (e.g. residential, commercial, industrial, etc.)
- As the infrastructure was identified based on the required flow for each property, the Single-detached Equivalent approach discussed earlier in the presentation provides the most equitable apportionment of costs
- Each property is assigned a number of Single-detached Equivalent units based on the assumed flow for that property

Frequently Asked Questions - 7



Q7

Will my basement flood once I connect to the sanitary sewers?

- Water can enter basements in several different ways and for many reasons and is most likely to occur during periods of heavy rainfall.
- A backup of wastewater in the sanitary sewer system (from a combination of wastewater and rainwater) is one of the most damaging ways that flooding of a basement can occur.
- Unwanted rainwater can enter into the sanitary sewer system by various ways.
- In 2014 the Town implemented a new standard for new residential subdivisions that all plumbing fixtures in basements must be drained via a sewage ejector pump to the sanitary building sewer. All fixtures on the first-floor level and above may be drained by gravity pipes to the building sewer. This system virtually ensures that basement flooding will not occur from surcharging of the Town's sanitary sewer system.

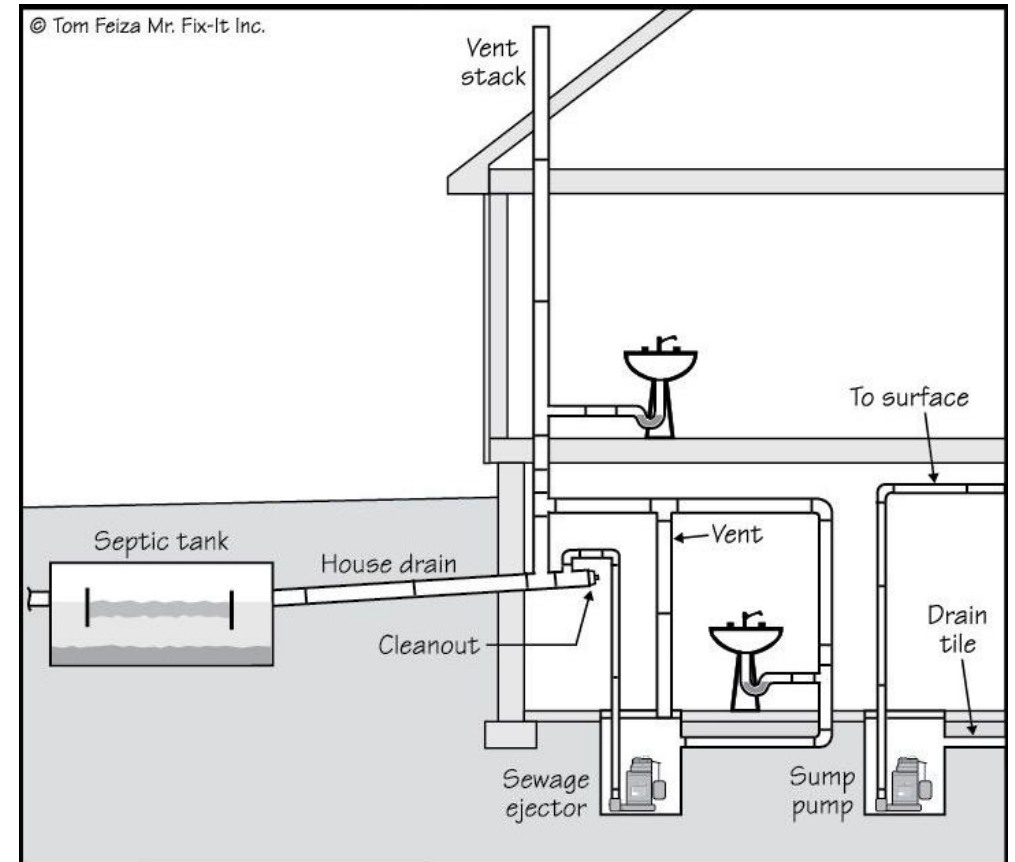
Frequently Asked Questions – 7 (continued)



Q7

Will my basement flood once I connect to the sanitary sewers? (continued)

- Residential houses constructed with septic systems will typically have their sanitary building sewer exiting the basement wall above the basement floor. This requires any basement fixtures (floor drain, shower, laundry tub, etc.) to be drained via a sewage ejector pump, which hydraulically separates the basement from the building sewer; this is the exact situation the Town is now requesting in all new residential subdivisions to eliminate the risk of basement flooding from surcharging sanitary sewers.



Frequently Asked Questions - 8



Q8

I recently installed a new septic system and wasn't informed by the Town on the timing of sanitary sewers.

- When a building permit application is received from a property located within the Oldcastle Hamlet, the Building Department will review whether there are existing sanitary sewers available, and if not, they will consult with Public Works & Engineering Services on what is proposed within the 5-year PWES Capital Works Plan. If sanitary sewers are proposed within the next 1-3 years, the Building Department may choose to permit a temporary solution (i.e. holding tank) to allow the property owner to forego the expense of a full septic system.
- Although the Town may have a tentative servicing schedule for the Oldcastle Hamlet, it is subject to available funding, staffing resources, Council approval, and is subject to ongoing revisions.

Frequently Asked Questions - 9



Q9

Can Council decline to pass the By-Law, and if so, what are the implications?

- This would be inconsistent with past practice and policy in the Town.
- Historically, where there is a derived benefit from major capital servicing infrastructure to property, the project has been subject to full cost recovery against the benefitting landowners
- To date, over 50% of the total project cost has been constructed. The Town's share has been funded through debt, sanitary sewer reserve funds and rate charges.
- Without a clear and concise method for funding the Part XII share of the costs, Administration could not recommend continued installation of sewers
 - The Town could fall out of compliance with the Ministry
 - The Ministry could issue a Provincial Officer's Order to install sewers and potentially stop development