MASTER SERVICING PLAN UPDATE AND PUBLIC INFORMATION CENTRE PREVIEW

OCTOBER 10, 2023





OVERVIEW

- Where we are in the project?
- General Overview of Existing Conditions
- Transportation
- Water
- Wastewater
- Stormwater
- Public Consultation Centres
- Next Steps
- Questions?

WHERE WE ARE IN THE PROJECT?



Investigations and Modelling is complete.



Bottlenecks in the system have been identified for each type of infrastructure.



Alternatives have been generated for addressing existing and future needs.



Time to complete public consultation and then finalize reporting based on public and stakeholder feedback.



EXISTING CONDITIONS – LONG SAULT AND INGLESIDE



Transportation

No existing bottlenecks identified

Improvements to address lighting, future reconstructions and key safety issues.



Water

Water Treatment deficit is an issue

Changes in how industry looks at Fire Flow



Wastewater

Minor bottlenecks in the collection system around County Road 36

Future identified areas of concern within original Town Site.

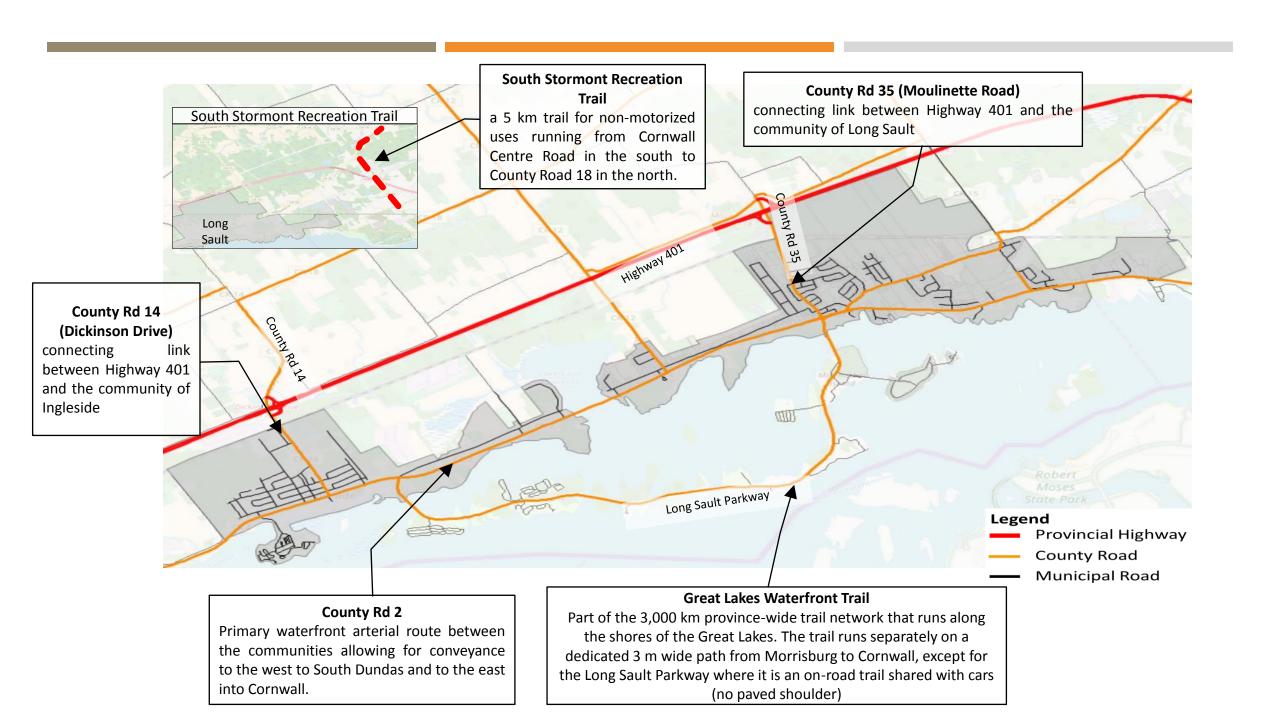


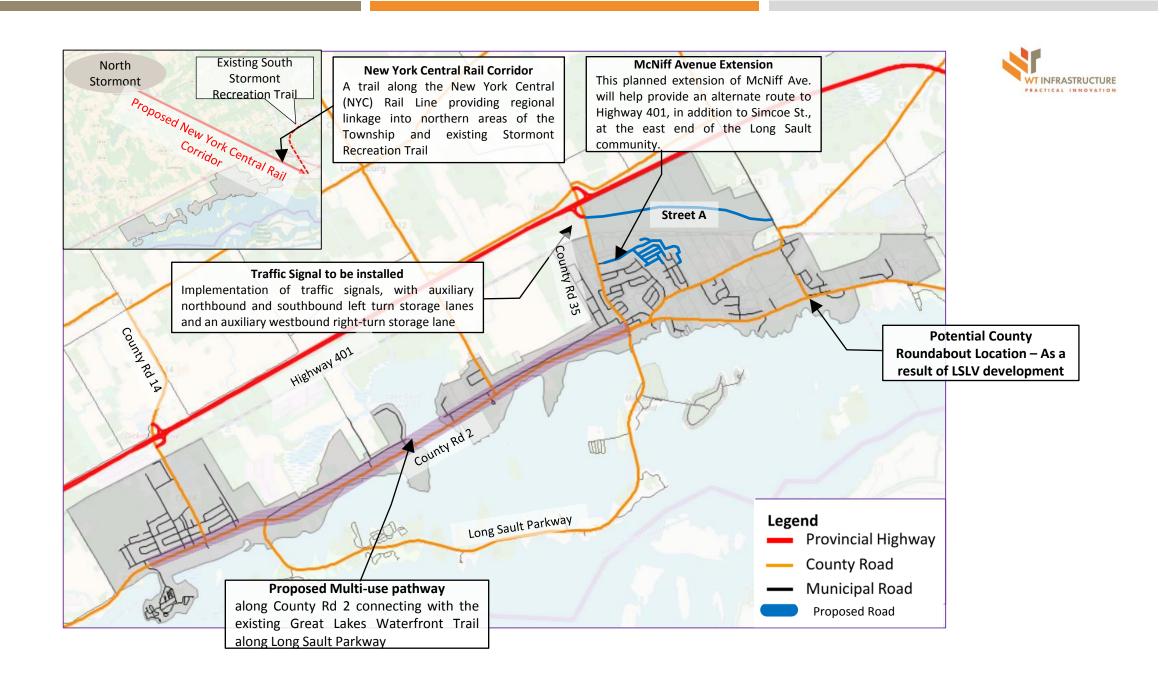
Stormwater

No existing stormwater management in existing Town Sites.

New development have individual management systems.

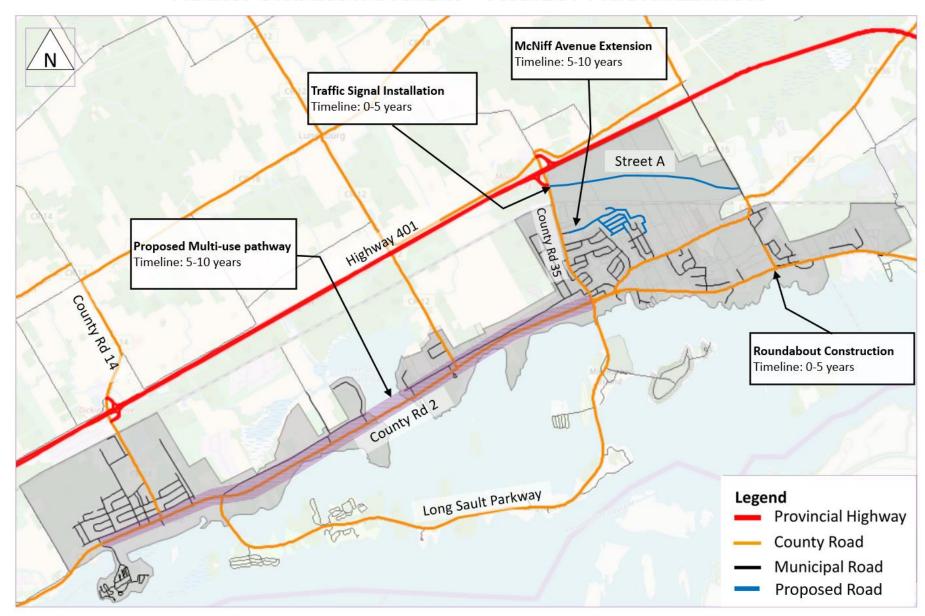






TRANSPORTATION SYSTEM – PROJECT PRIORITIZATION





TRANSPORTATION SERVICING

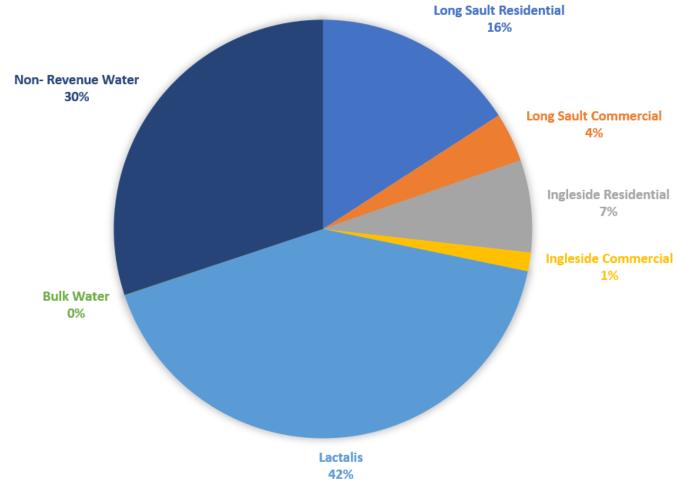
- New Integrated Road Cross-Section
 - Consistent Lighting
 - Single sidewalk
- Active Transportation/Pedestrians
 - Improved sidewalk connectivity
- Deficient Road Condition Correction
 - Integration of road condition assessments into master servicing plan.
- Planned Outcome
 - Annual road construction projects that address condition and servicing issues



WATER DEMAND MANAGEMENT

- Water Treatment Capacity
 - Plant capacity expansion is still required
 - Class EA for expansion in progress
 - Implementation in 2024
- Water Demand
 - Average per capita use residential 285 Lpcd
 - Non-revenue water approximately 30% of total

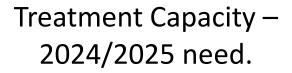
BREAKDOWN OF REVENUE AND NON-REVENUE WATER USAGE





WATER SYSTEM BOTTLENECKS







Age – Too much of the infrastructure is original.



Storage – Not an immediate need.



WATER SYSTEM – FUTURE LAYOUT AND ALTERNATIVES Ingleside Northeast Loop PROBLEM IDENTIFICATION: 150mm Ingleside Booster to Lactalis STANDARD SIZE IS INADEQUATE TO SUPPORT North Community Loop PROBLEM IDENTIFICATION: UNEQUAL LOOPING OF FIRE FLOW INTO NEW DEVELOPMENT. Long Sault Logistic Village Servicing PROBLEM IDENTIFICATION: 150mm STANDARD WATERMAIN TO MAJOR USER. 200mm loop from Ault to Farren via New 300mm loop from Moulinette Rd (CR SIZE IS INADEQUATE TO SUPPORT FIRE FLOW Alt WT-D-E1 - Upsize watermain along St. Lawrence, Development 35) to Avonmore Rd. (CR 15). INTO NEW DEVELOPMENT. Farran, College and Dickinson - 1.65 km PAID FOR BY DEVELOPER PAID FOR BY DEVELOPER 200mm loop from Moulinette Rd. (CR 35 to Jim Alt WT-D-E2 - Upsize watermain along St. Lawrence and Incremental cost Est. \$4.5M Brownell Blvd. Dickinson - 1.75 km Timeline - 5 - 20 years Timeline - 0 to 5 years PAID FOR BY DEVELOPER PAID FOR BY TOWNSHIP Incremental cost Est. \$4.5M Timeline - 5 - 20 years Timeline - 5 to 10 years Barry St. - Chase Meadows to Watermain Size Fenton Farm increase to 200mm loop for fire flow. < 200 mm PAID FOR BY DEVELOPER Timeline - 10-20 years with 200 mm - 300 mm development > 300 mm Proposed Watermain Water Storage Loop Twin Transmission Main from WTP to Long Sault West End Servicing PROBLEM IDENTIFICATION: In order to feed and distribute water from PROBLEM IDENTIFICATION: Watermain crossing PROBLEM IDENTIFICATION: WEST END OF INGLESIDE HAS LIMITED storage to both Long Sault and Ingleside, a larger loop is required. causeway is highest risk piece of infrastructure FIRE FLOW AS IT IS SUPPLIED BY 150mm WATERMAIN ONLY. 400mm loop from Long Sault Parkway to McNiff via Mille Roches Road PAID FOR BY TOWNSHIP Upsize watermain on St. Lawrence from Ault to Napier. PAID FOR BY TOWNSHIP PAID FOR BY TOWNSHIP Est. Cost: \$5M Est. Cost: \$6M Timeline - 5 - 20 years Est. \$4.5M Timeline - 5 - 20 years Timeline - 5 to 20 years

WT INFRASTRUCTURE

PRACTICAL INNOVATION

WATER SERVICING – BIG PICTURE

- Limited current problems beyond treatment capacity.
 \$3M (2023 \$).
- Infrastructure renewal will be an ongoing issue.
- System upgrades represent \$20M +/-\$1M (2023 \$)
 per year minimum investment
- Storage is later in the design horizon. 10-20 years.
 \$10-12M (2023 \$)
- Works need to be integrated with other servicing components (sanitary sewer, stormwater, road crosssection).



SANITARY SERVICING





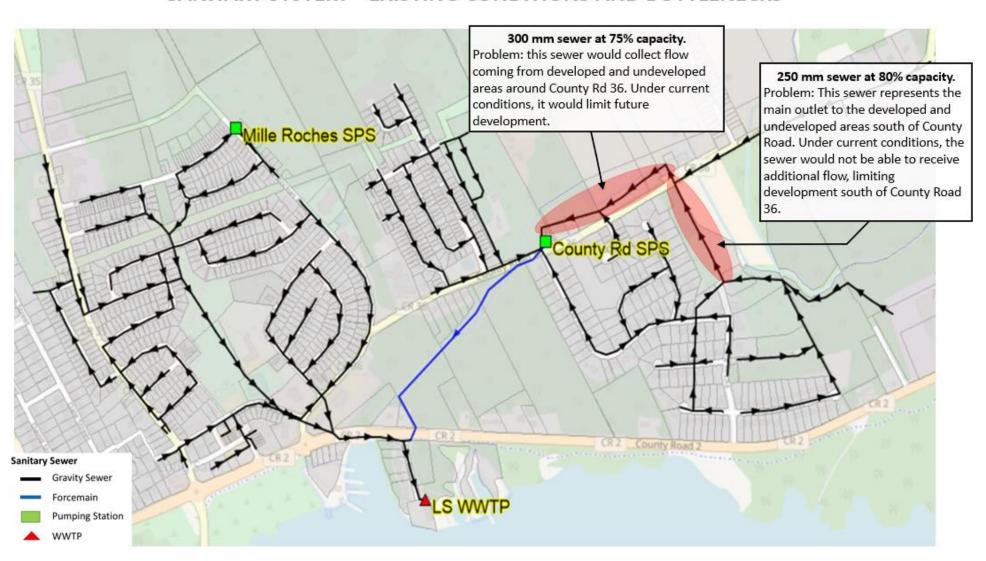


INGLESIDE WWTP EXPANSION REQUIRED FOR GROWTH (IMMEDIATE) LONG SAULT WWTP EXPANSION REQUIRED FOR GROWTH (WITHIN 5 YEARS) AGE AND INFILTRATION/INFLOW IS AN ISSUE.



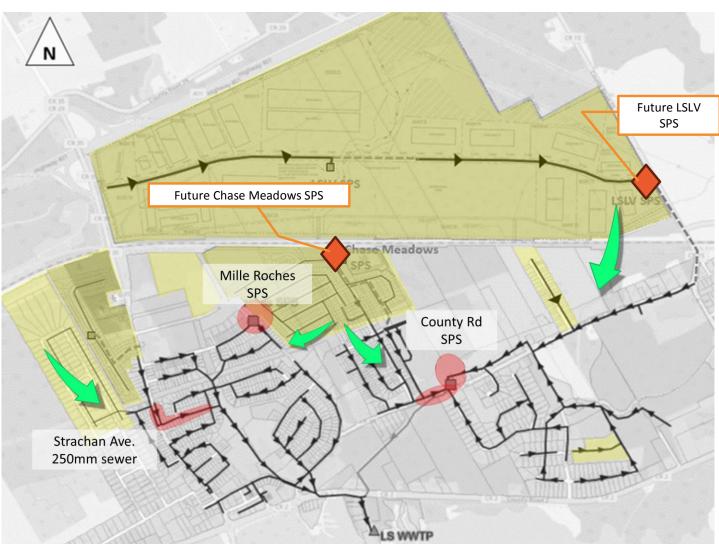
LONG SAULT SANITARY SYSTEM – EXISTING CONDITIONS AND BOTTLENECKS





Long Sault Sanitary System – Future Conditions





- Bottlenecks develop with growth.
- Options include:
 - Decentralized Collection Model
 - Centralized Collection Model
- Decentralized is easier for the Township to implement as all of the work is by developers. Four pumping stations required.
- Centralized requires more coordination and investment by Township. Two pumping stations required.

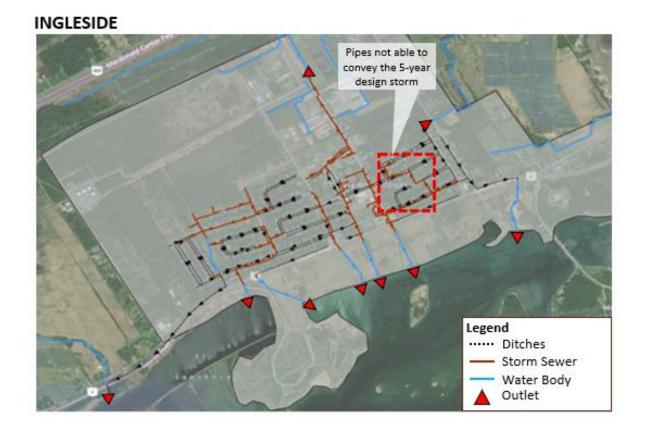
SANITARY SERVICING – BIG PICTURE

- Plant Expansions are the immediate priority.
- Ingleside infrastructure has adequate collection capacity.
- Age and renewal are an issue in both systems.
 Focused renewal program
- Long Sault requires coordinated effort for efficient system expansion. Township may need to invest in capacity and recover cost from future developments.



STORM WATER SYSTEM SERVICING

- Neither system is significantly urbanized.
- Quality and Quantity Management is limited to new developments
- Quantity control is not required for direct discharge to St. Lawrence
- Quality control is required for new developments and renewal.
- Existing bottlenecks limited to Ingleside.



FUTURE DEVELOPMENT AND RENEWAL

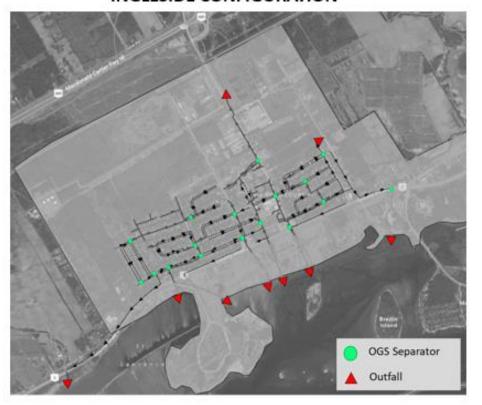
LONG SAULT CONFIGURATION



Estimated Costs: \$4.5M (+/-25%)

- Long Sault: End of Pipe Solution
- New Developments: Centralized or Individual Systems depending on location

INGLESIDE CONFIGURATION



Estimated Costs: \$3.0M (+/-25%)

- Ingleside Existing: Treatment unit with each renewal project.
- New Developments: Centralized or Individual Systems depending on size of development

STORMWATER MANAGEMENT SERVICING – BIG PICTURE

- Existing conditions are generally acceptable.
- Upgrades will be driven by other infrastructure renewal projects (watermain, road, sanitary sewer).
- No current regulatory pressure to advance the projects independently.
- Oversizing of facilities for new developments may require Township contribution. This would be recoverable from future developments.



PUBLIC CONSULTATION CENTRE

- October 17th, 2023 5 7 pm Township Hall
- Self-guided Open House Format
- Summary of Project
- Divided by common and community specific boards
- Problem Identification, Bottlenecks and Alternatives
- Township and Consultant team members available to answer questions

- November 7th, 2023 5 7 pm Township Hall
- Self-guided Open House Format
- Summary of Project
- Divided by common and community specific boards
- Alternative Analysis, Preferred Alternatives, Costs and Implementation plan.
- Township and Consultant team members available to answer questions

NEXT STEPS



Public Consultation Comment Review and Integration



Stakeholder Follow-up and Comment Resolution



Completion of Draft Master Servicing Plan



Development of Capital Implementation Recommendation Plan



Issue Notice of Completion



30-day Review Period



Finalize Master Servicing Plan

QUESTIONS?

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