

Simcoe-Townsend Water Supply System

Municipal Class Environmental Assessment

Norfolk County

Public Information Centre #2

November 8, 2022 from 5:00pm to 7:00pm

Norfolk County Administration Building Council Chambers
50 Colborne St S, Simcoe, ON

norfolkcounty.ca

Welcome!

The goals of this Public Information Centre (PIC) are to:



- ▶ Provide an update on the Study since PIC #1
- ▶ Present the evaluation of alternative site locations for the booster pumping station



- ▶ Present the preferred alternative site location for the booster pumping station and elevated tower



- ▶ Identify potentially affected residents and businesses within the project area



- ▶ Answer any questions you may have and provide an opportunity to get involved in the project

Comments received during this study will be used to help identify the recommended approach for current and future improvements within Norfolk County.

Project Objectives

We are taking steps to meet the future needs of Norfolk County. We are completing the first phase of the Inter Urban Water Supply System (IUWS), which will interconnect all the communities within the County to secure a reliable and consistent water supply. More information about the IUWS is available online: <https://www.norfolkcounty.ca/living/roads-water-wastewater/inter-urban-water-supply/>

The strategic priorities of the project are to:

- ▶ Deliver high quality water services
- ▶ Ensure fire flow and water supply for growth to 2041 and beyond
- ▶ Build reliable infrastructure
- ▶ Provide future connections to Delhi and Waterford

The project will also focus on achieving the following sustainability goals within the County’s water supply network.

Alignment with
Growth Demand

Flexibility Peak
Demand

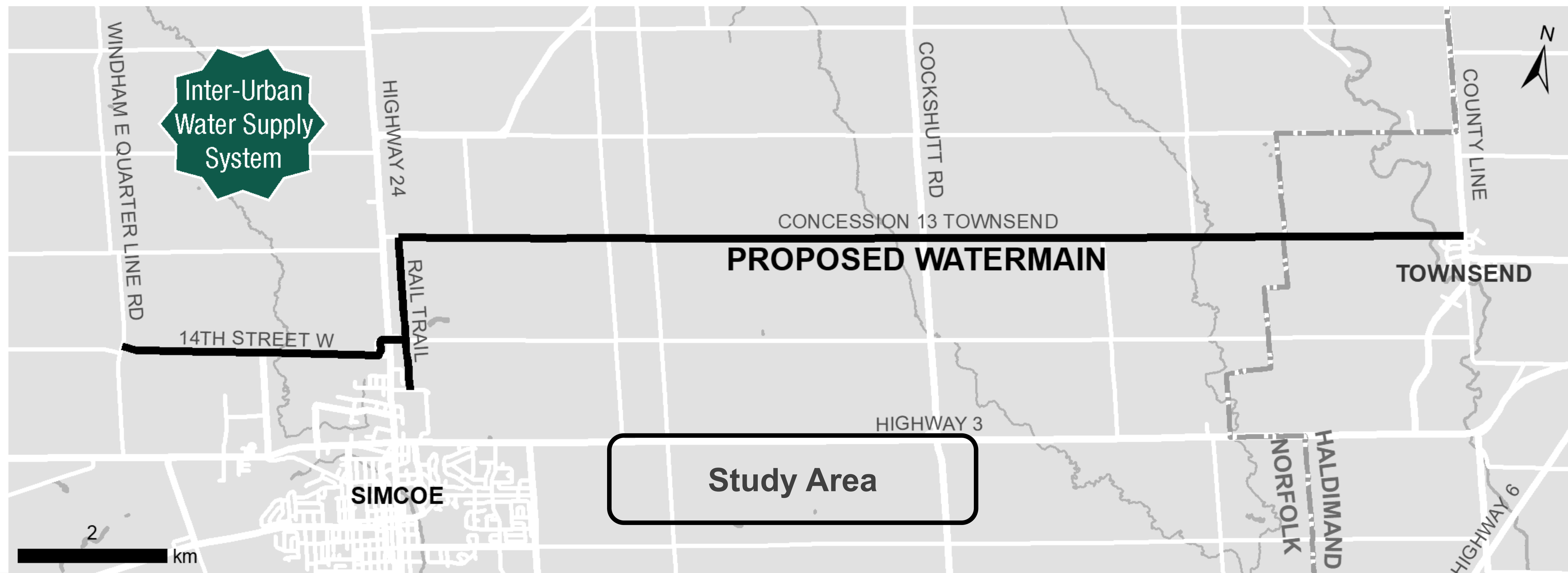
Operational
Efficiency

Water
Conservation

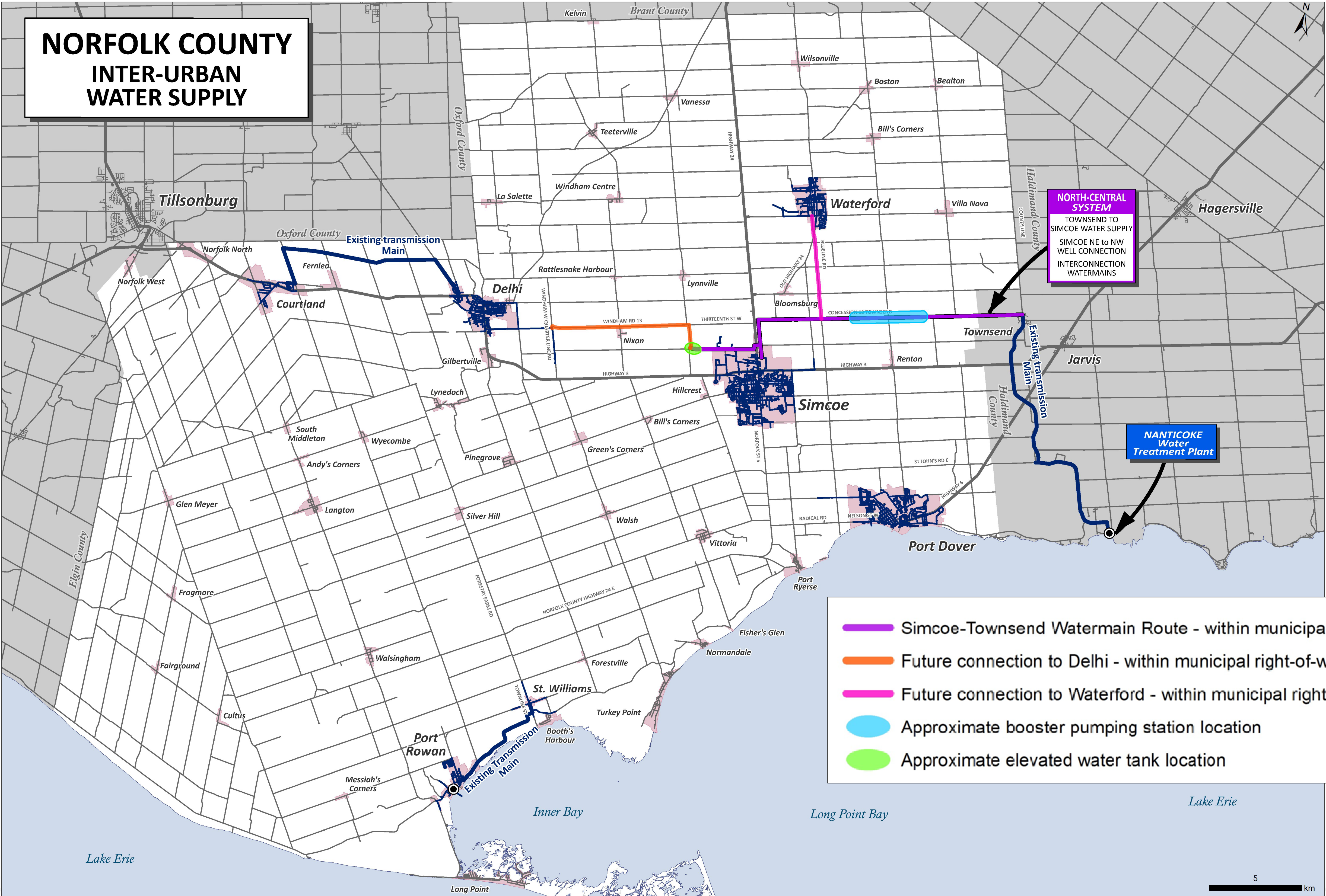
Increased
Connectivity

Project Summary

Norfolk County is undertaking a Municipal Class Environmental Assessment (EA) study. The County is proposing to build a new watermain that connects Simcoe to the Townsend Water Supply System. The project will also include a new elevated water tank and booster station. The purpose of this new water infrastructure is to secure water supply from the Nanticoke Water Treatment Plant. The Simcoe-Townsend Water Supply System study will complete the first phase of the IUWS program.



Project Area



Schedule ‘B’ Municipal Class EA Study Process

This study will meet the requirements for Schedule ‘B’ projects and will satisfy the first two phases of the Class EA process.

We are currently in Phase 2 and presenting alternative locations for the booster pumping station (or alternative solutions).

Phase 1: Problem and Opportunity

- Review background planning and policy documents (e.g., Official Plan)
- Identify study area needs, problems and opportunities

Phase 2: Alternative Solutions

- Inventory the socio-economic, natural and cultural environments
- Identify and evaluate feasible Alternative Solutions
- Select the preferred Alternative Solution
- Present to public, Indigenous communities and agencies for comment

Booster Pumping Station – Alternative Locations

Several alternative locations along Concession 13 Townsend were evaluated for the booster pumping station. It should be noted that the lands west of Cockshutt Road were not considered due to existing topography, land use, and proximity to hazard lands. The approximate locations were considered:



Evaluation Criteria

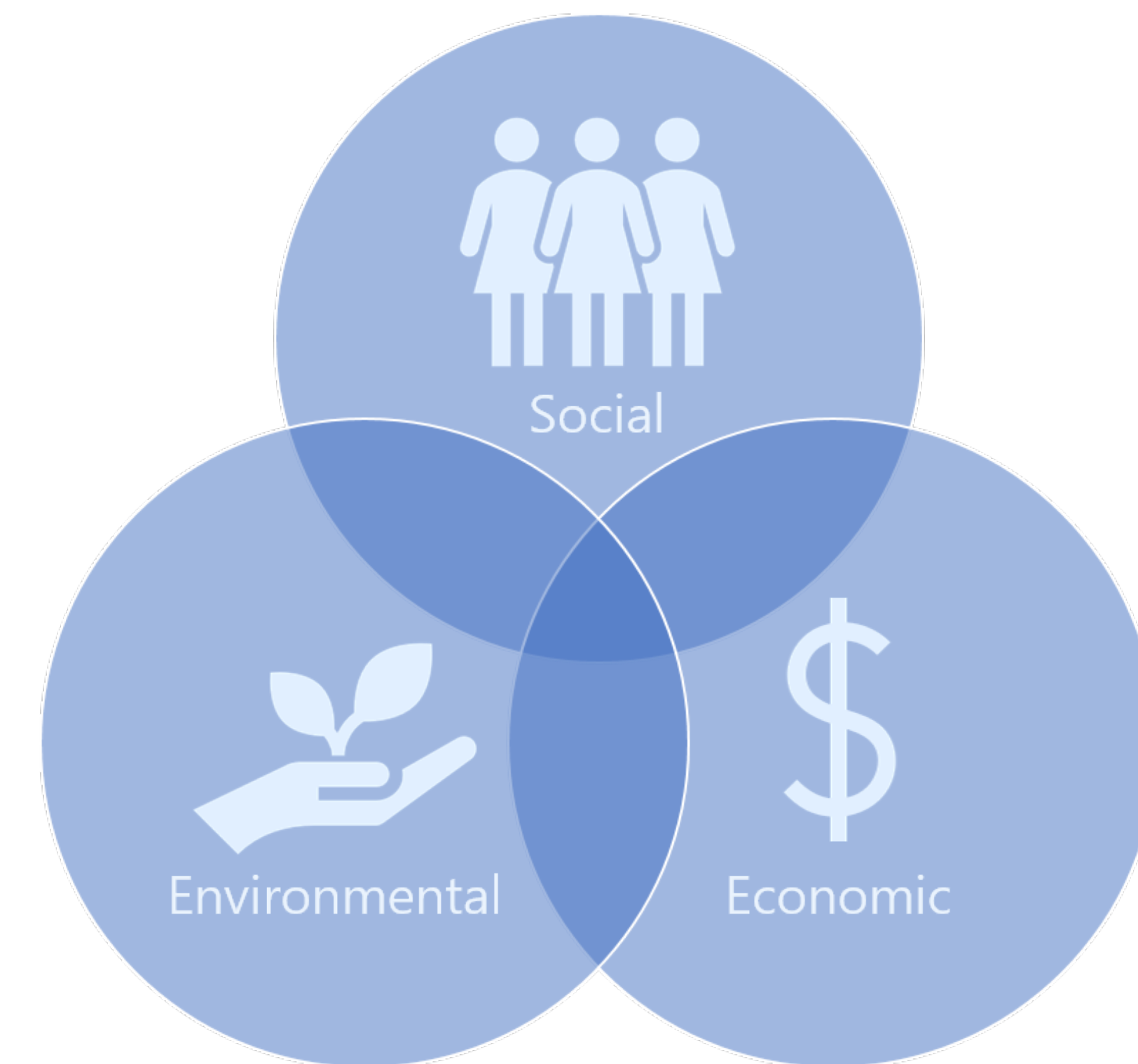
The alternative locations were assessed using the following factors and criteria:

Socio-Economic Environment

- Potential to impact existing land uses (e.g., construction impacts, aesthetics, noise during operation, water pressure, safety)
- Potential to impact agricultural land uses
- Potential to support growth within Urban Areas

Natural Environment

- Potential to impact fish and fish habitat
- Potential to impact water resources including surface water (i.e., rivers, creeks, etc.), groundwater recharge areas and wellhead protection areas
- Potential to impact significant natural heritage features
- Potential to impact significant wildlife habitat and species at risk



Evaluation Criteria Continued

Cultural Environment

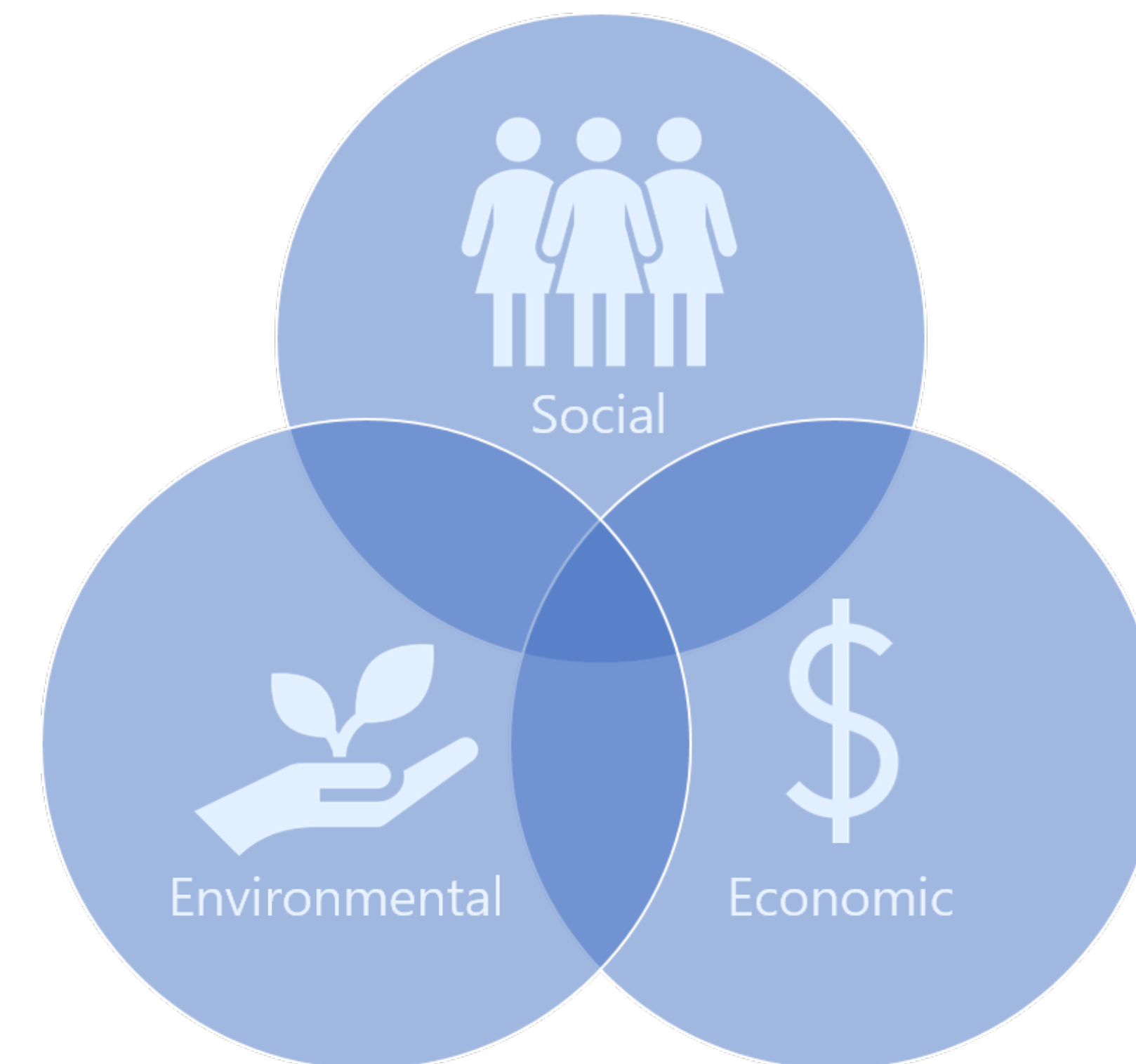
- Potential to impact archaeological resources
- Potential to impact cultural heritage resources

Technical Considerations

- Potential land requirements including acquisition or easements (temporary/permanent)
- Potential to impact existing utilities and infrastructure
- Constructability (e.g., open cut, non-destructive technologies, etc.)

Financial

- Estimated capital and operational costs



Evaluation of Alternative Locations

Alternative Location 3 was determined to be the recommended location for the booster pumping station.

Factor	Do Nothing	Alternative Location 1	Alternative Location 2	Alternative Location 3	Alternative Location 4
Socio-Economic Environment	Least Preferred	Moderately Preferred	Least Preferred	Most Preferred	Most Preferred
Natural Environment	Most Preferred	Most Preferred	Least Preferred	Most Preferred	Most Preferred
Cultural Environment	Most Preferred	No Significant Difference	No Significant Difference	No Significant Difference	No Significant Difference
Technical Considerations	Most Preferred	Most Preferred	Moderately Preferred	Moderately Preferred	Least Preferred
Financial Considerations	Most Preferred	Least Preferred	Least Preferred	Most Preferred	Least Preferred
Summary	Moderately Preferred	Moderately Preferred	Least Preferred	Recommended	Moderately Preferred

Recommended Location – Alternative Location 3

- To accommodate the 4800m² (approximately 60m x 80m) booster pumping station at this location, property acquisition is required from one landowner.
- The existing topography would require minor grading to accommodate a booster pumping station.
- No anticipated impacts to fish or fish habitat, water resources, groundwater recharge areas or wellhead protection areas, significant natural heritage features.
- No anticipated impacts to existing utilities or infrastructure.
- A Stage 1 Archaeological Assessment will be required (previously undisturbed agricultural land).



While Alternative Location 3 is the recommended location, both Alternative Locations 1 and 3 will be presented to the property owner during land acquisition discussions.

Elevated Water Tank

At the west end of the proposed transmission watermain (Simcoe), an elevated water tank will be constructed to act as a buffer during periods of peak demand (peak water consumption).

The tower will enable efficient operations and provide redundancy to the water supply system.

The elevated tower will be located on municipally owned land.



Structure Design

Booster Pumping Station



- Road access will be constructed around the outer limits of the building.
- Minimum space of 60m x 80m required for the building.
- Building will be fenced.
- Lands surrounding building will be landscaped/treed to mitigate potential noise.
- Building sized for ultimate capacity of 19,000 m³/day.
- Includes Standby Power and Re-chlorination facilities.



Elevated Water Tank

- Capacity 4,500 m³ to be confirmed during Detailed Design
- Diameter – 30 to 35 m
- Height – 50 m
- Includes future connections to Waterford and Delhi Systems

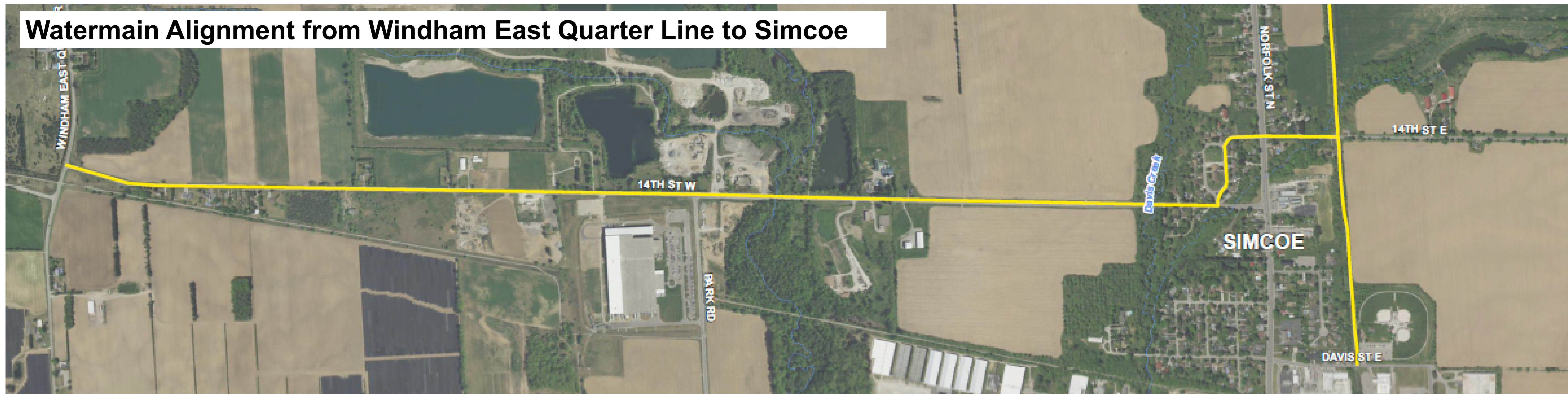
Transmission Watermain

The transmission watermain will be approximately 20km in length and constructed within the municipal right-of-way, avoiding impacts to private property.

Watermain Alignment from Simcoe to Townsend



Watermain Alignment from Windham East Quarter Line to Simcoe



Potential Impacts and Proposed Mitigation

- Based on the anticipated impacts, preliminary mitigation measures have been recommended.
- Mitigation measures will be refined during the future detailed design phase and then implemented during and following construction, with appropriate monitoring programs in place.

Potential Impact	Proposed Mitigation Measures/Commitments to Future Work
Wildlife/Habitat	Targeted species surveys will be carried out for species that have the potential to be present.
Archaeological Resources	A Stage 1 Archaeological Assessment will be completed to determine if portions of the study area retain potential for the identification and recovery of archaeological resources. No construction activities will take place until the Ministry of Tourism, Culture and Sport has confirmed in writing that all archaeological licensing and technical review requirements have been satisfied.
Property	Impacts to private property have been identified in association with the Recommended Alternative. Negotiations with impacted property owner are underway.
Noise	Mitigation measures are available by designing the building and equipment to minimize sound transmission.
Aesthetics	Mitigation measures to reduce impacts are available through landscape and architectural design compatible to the surrounding area.
Short-term Construction Impacts	Noise, vibration, air (dust), traffic impacts are anticipated but will be temporary in nature and are largely unavoidable. With adequate controls, impacts can be minimized. Construction staging and traffic management will be confirmed during the design phase.

Anticipated Project Timelines



Timelines are contingent on project progress, approvals and available funding.

Next Steps

Following the PIC, the project team will complete the next steps identified below:



Thank you for participating!

Thank you for participating in the Public Information Centre for the Norfolk County Simcoe-Townsend Water Supply System Municipal Class EA Study. Your feedback is valuable and appreciated.

Please provide comments by filling out a comment form or by contacting a member of the project team below by **December 6, 2022**:

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All information is collected in accordance with the Freedom of Information and Privacy Act.

[norfolkcounty.ca](https://www.norfolkcounty.ca)

Frequently Asked Questions

Where will the watermain be placed?

The watermain will be located within the municipal right-of-way to avoid encroachment on private properties, and conflicts with existing utilities and infrastructure. The alignment of the watermain is subject to further refinement during the detailed design stage.

How will the County restore the landscape and road infrastructure?

Landscaping and roadways will be restored to like or better condition where impacted (i.e., new topsoil and/or sod, road resurfacing/rehabilitation).

Will there be road closures? How long will construction take?

Construction is anticipated to occur over 2024/2025, subject to funding and approvals. The entire corridor will not be impacted all at once, and the contractor will be required to restore the surface areas within a reasonable amount of time following installation of the watermain. Nearby residents will be notified of construction in advance. Driveway access and local traffic will be maintained, though short term, temporary closures to roads may be required.

Will the Waterford Heritage Trail remain open during construction?

Safety is of the utmost importance to the County. The project team is currently reviewing the alignment along to trail for the possibility to allow safe access to pedestrians during construction. Short term, temporary closures of the trail may be required. Construction staging and detours will be further refined in the next stage of the project, detailed design.