

Class Environmental Assessment

Arthur Street Trunk Sewer

The City of Guelph

Public Information Centre

December 12, 2013

Welcome

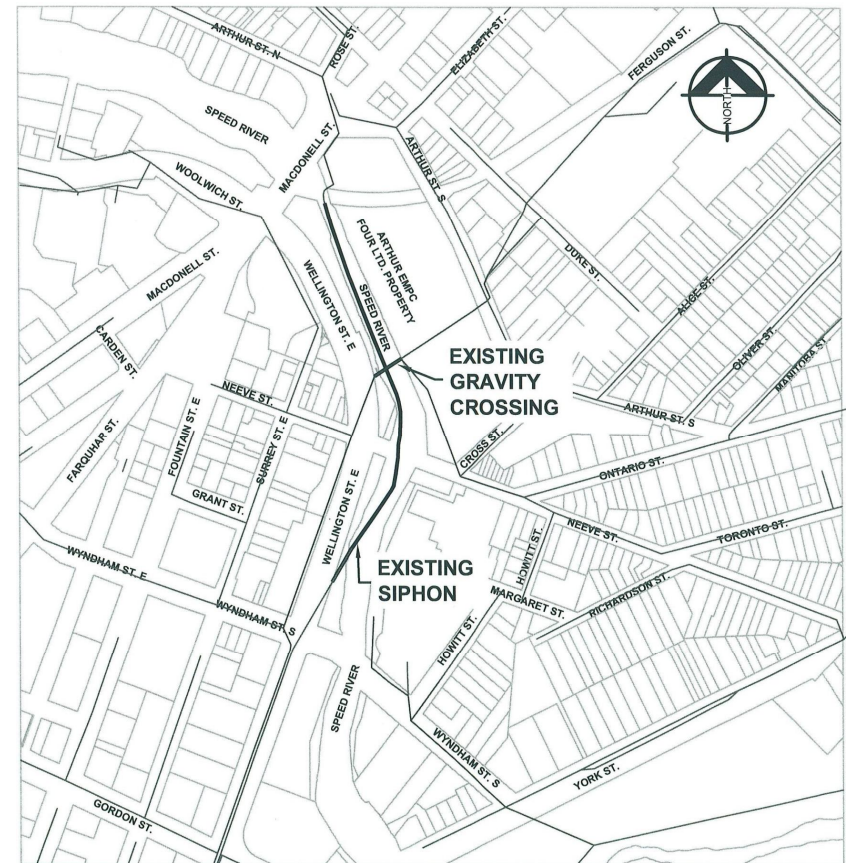
- ❖ Please sign in on the sheet provided. Then feel free to walk around and view the displays.
- ❖ If you have any questions, our representatives will be pleased to discuss the project with you.
- ❖ Comment sheets are provided for those who wish to provide comments in writing. Please place your completed sheets in the Comment Box or send them to one of the identified Project Team Members listed below.
- ❖ Please contact one of the following Team Members for additional information:

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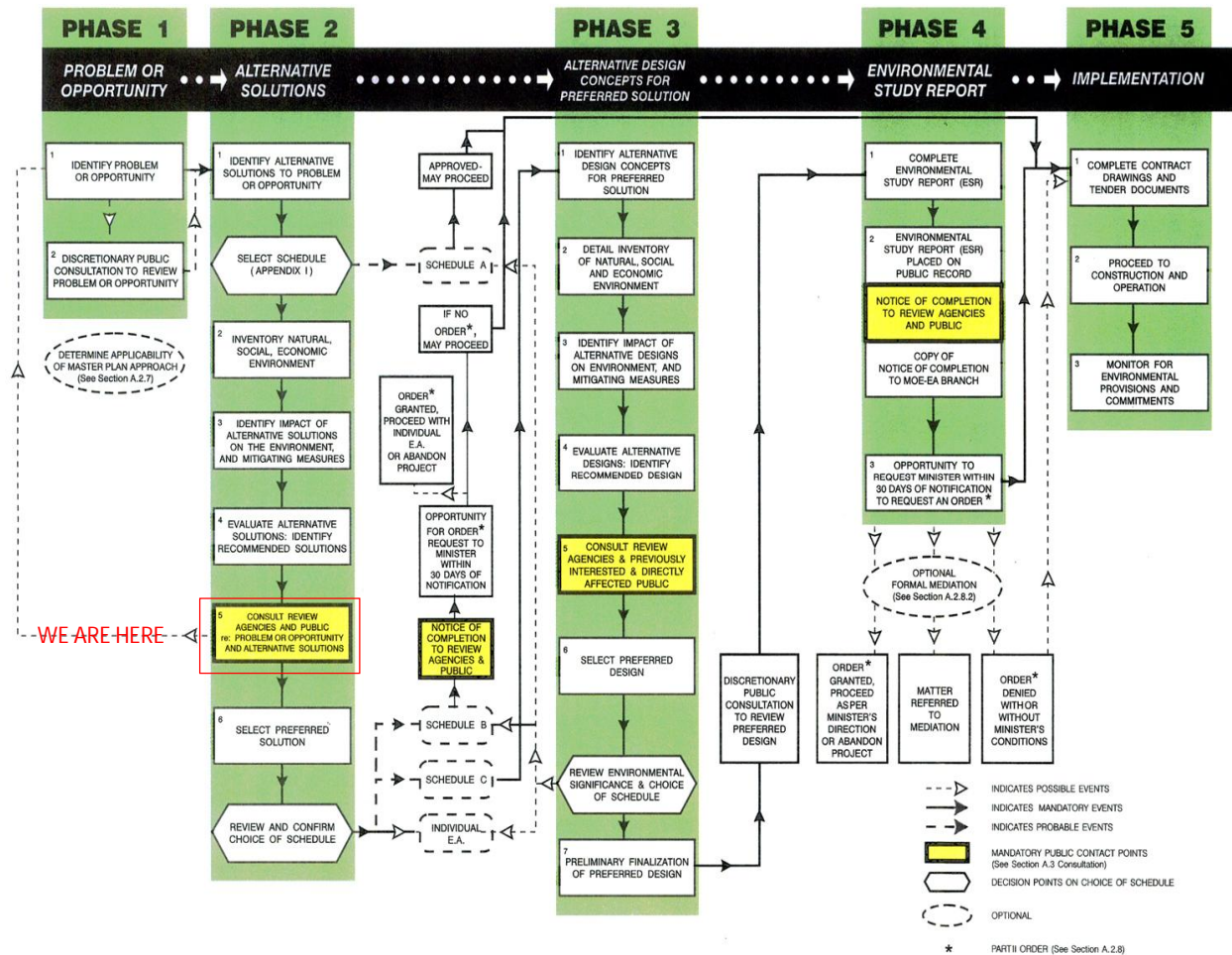
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Background

As part of the City's sanitary sewer drainage network, a 300mm diameter gravity sewer and a 400mm siphon cross the Speed River in the area north of Neeve Street. They connect the Arthur Street trunk sanitary sewer to the Speed River trunk sanitary sewer on Wellington Street. East of the river the 300mm diameter sewer passes through a private property. The two sewers which service a drainage area of approximately 965ha in the northeast part of the City are at the end of their service life and require replacement. Due to their age and size, they lack capacity to convey projected sewage flows. The City is undertaking a Class Environmental Assessment to identify the future location of the Speed River Crossing for the Arthur Street Sanitary Sewer or an alternative to crossing the Speed River.



Class Environmental Assessment Planning Process



Problem/Opportunity Statement

Problem Statement

Much of the City's sanitary sewer infrastructure is aging and in need of replacement. The existing Speed River crossings pose several risks due to their age and location within the river. Additionally, the ability for this portion of the Arthur Trunk Sewer to convey peak flows under existing and future growth scenarios is limited given its current condition.

Opportunity Statement

There is the opportunity to provide a new route and alignment for the Arthur Street Trunk Sewer downstream of Macdonell Street which will address environmental impacts associated with the existing infrastructure currently located in the Speed River. The new trunk sewer will also be able to convey peak flows under existing and future growth scenarios.

Alternative Solutions

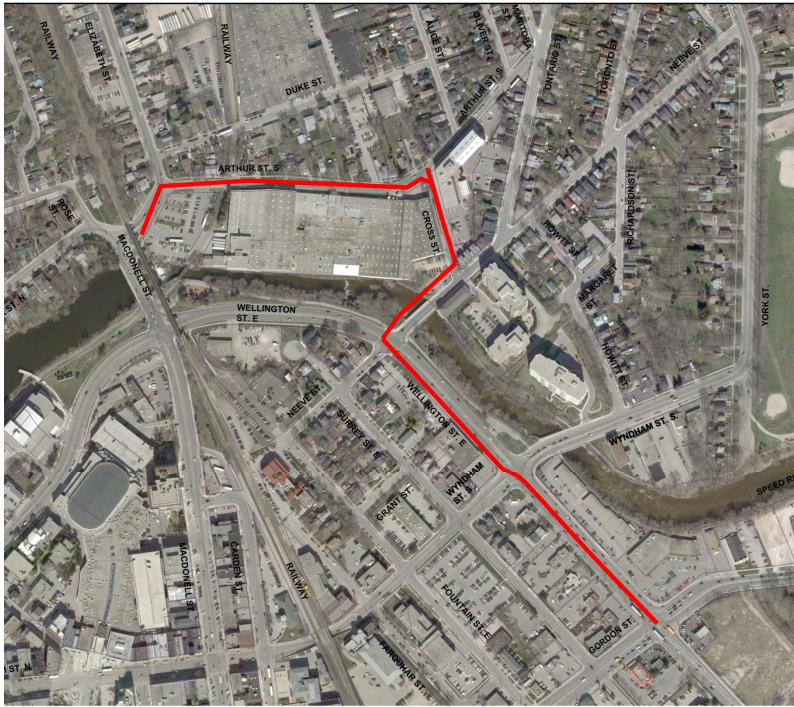
- ❖ **Alternative 1: Do Nothing.** This alternative is considered as the “benchmark” for which all other alternative for which all other alternatives are evaluated against. “Do Nothing” represents what would likely occur if none of the alternatives were to be implemented. With this option, there are no impacts to natural features resulting from construction activities, however, there is a potential impact to the natural environment in the event of sewer surcharging or structure failure as the current alignment will continue through the Speed River. This alternative does not address the problem statement.
- ❖ **Alternative 2:** Replace the existing gravity and siphon sewers with a single gravity crossing, just upstream of the existing gravity crossing. An easement would be required across private property on the east side of the river. Sewers on Cross Street and Arthur Street would be rerouted to the new river crossing sewer. On the west side of the river, the sewer on Wellington Street would be upgraded from the new river crossing to Gordon Street. Downstream improvements would also be required to convey the design flows on the Speed River Trunk Sewer from St. Arnaud Street along Waterloo Avenue to Silvercreek Parkway South.
- ❖ **Alternative 3:** Similar to Alternative 2, except there would be a siphon crossing of the Speed River, just upstream of the Neeve Street Bridge, rather than the gravity crossing.
- ❖ **Alternative 4:** Replace the existing gravity and siphon sewers with a new trunk sewer along Arthur Street, down Cross Street, along Neeve Street to the river, under the Neeve Street bridge along the east river bank to the existing trail along the east side of the river, to Wyndham Street and connect to the new York Trunk Sewer in the park east of York Street.
- ❖ **Alternative 5:** Similar to Alternative 4, except going along Neeve Street to Howitt Street to Wyndham Street.

Alternative 2



LEGEND
— PROPOSED TRUNK SANITARY SEWER

Alternative 3



LEGEND
— PROPOSED TRUNK SANITARY SEWER

Alternative 4



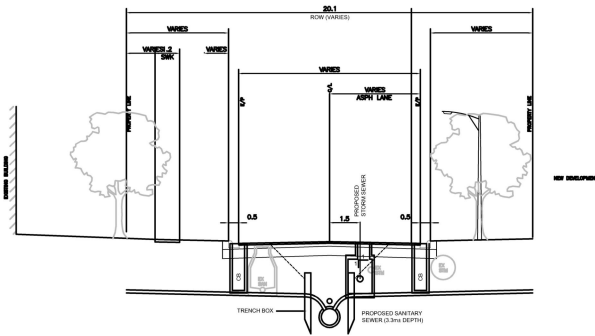
LEGEND
— PROPOSED TRUNK SANITARY SEWER

Alternative 5

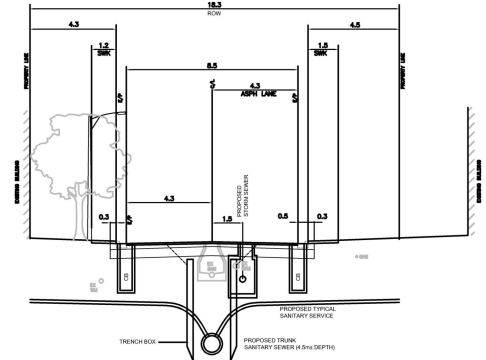


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— PROPOSED TRUNK SANITARY SEWER

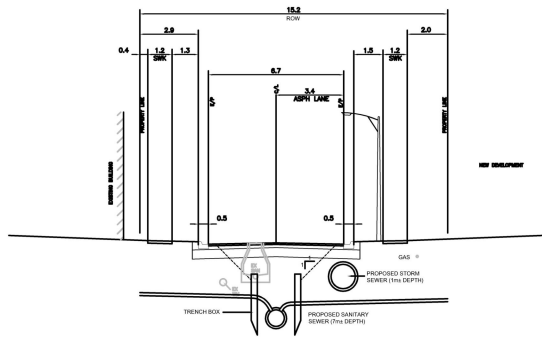
Typical Cross-Sections



SECTION TYPICAL ARTHUR STREET FROM ELIZABETH ST. TO CROSS ST. ①

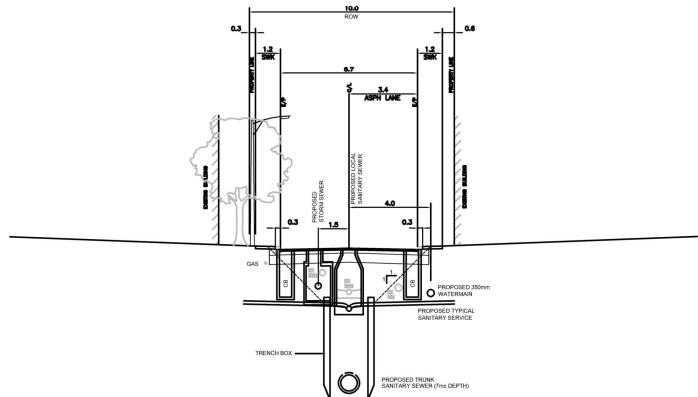


SECTION TYPICAL NEEVE STREET FROM CROSS ST. TO HOWITT ST. ③

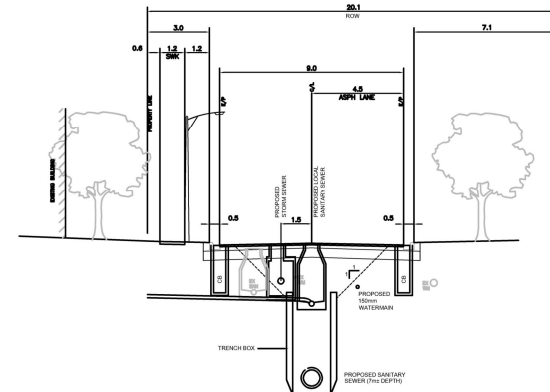


SECTION TYPICAL CROSS STREET ②

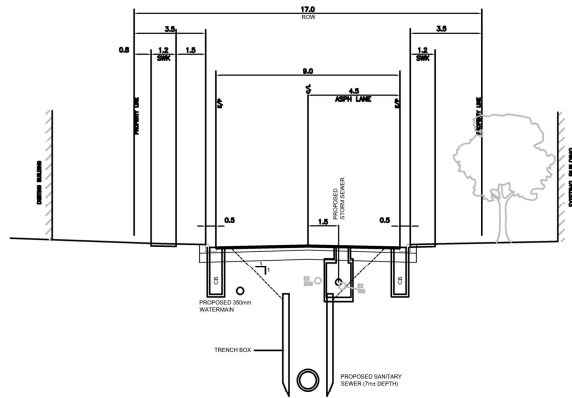
Typical Cross-Sections



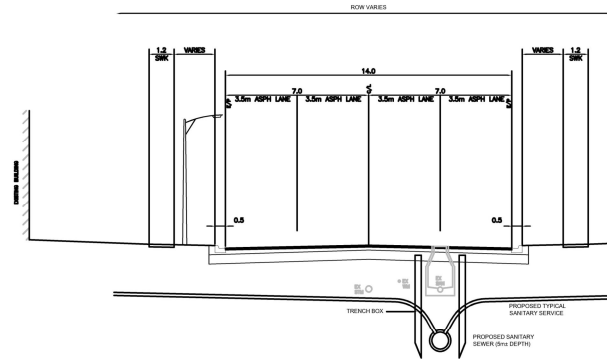
SECTION TYPICAL HOWITT STREET FROM NEEVE ST. TO MARGARET ST. ④



SECTION TYPICAL HOWITT STREET FROM MARGARET ST. TO WYNDHAM ST. S. ⑥



SECTION TYPICAL MARGARET STREET ⑤



SECTION TYPICAL WYNDHAM STREET S. FROM HOWITT ST. TO YORK RD. ⑦

Evaluation Criteria of Alternative Solutions

| | Alternative 1 Do Nothing | Alternative 2 Gravity Crossing to Speed Trunk | Alternative 3 Siphon Crossing to Speed Trunk | Alternative 4 Under Bridge to York Trunk | Alternative 5 Along Existing Streets to York Trunk |
|------------------------------------|--|---|---|--|--|
| Addresses Problem Statement | does not address problem | addresses problem | addresses problem | addresses problem | addresses problem |
| Environmental Effects | | | | | |
| • Impact on Trees and Vegetation | pipe failure may impact vegetation | trees and vegetation at watercourse crossing impacted | trees and vegetation at watercourse crossing impacted | trees and vegetation along existing trail impacted | limited impact to street trees |
| • Impact on Fisheries | pipe failure would impact fisheries | some temporary impacts to fish habitat | some temporary impacts to fish habitat | some temporary impacts to fish habitat | limited impacts since work is on road ROW |
| • Watercourse Crossing | existing crossings | crossing required | crossing required | crossing required | no crossing required |
| Social and Cultural Effects | | | | | |
| • Traffic Impacts | no traffic impacts | disruption to Wellington Street and Waterloo Avenue traffic | disruption to Wellington Street and Waterloo Avenue traffic | disruption to Wyndham Street traffic | disruption to Wyndham Street and local street traffic |
| • Archaeological Impacts | no change to archaeological impacts | some impacts possible - additional study required | some impacts possible - additional study required | some impacts possible - additional study required | limited impacts since work is on road ROW |
| • Heritage Resource Impacts | no change to heritage impacts | some impacts possible - additional study required | some impacts possible - additional study required | some impacts possible - additional study required | limited impacts since work is on road ROW |
| Economic Effects | | | | | |
| • Estimated Capital Cost | maintenance of existing no new capital works | \$10.9 Million | \$11.1 Million | \$6.1 Million | \$6.2 Million |
| • Operating and Maintenance Costs | highest expected O & M cost | river crossing impacts O & M cost | higher O & M due to siphon river crossing maintenance | bridge crossing impacts O & M cost | least expected O & M cost |
| • Land Acquisition Requirements | easement across private property required | easement across private property required | no easement required | no easement required | no easement required |
| | | | | | Recommended Alternative |

Level of Impact

- Least Preferred
- Low to Moderate Preference
- Moderate Preference
- Moderate to High Preference
- Most Preferred

Project Schedule

February 2013

December 2013

January 2014

February 2014

Spring 2015

Notice of Project
Initiation
February, 2013



Notice of
Completion &
Public Review

Tentative
Construction
Start

- ❖ Introduce Study
- ❖ Request early input
- ❖ Identify stakeholders-prepare mailing list

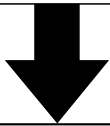
- ❖ Input required on:
 - Evaluation & analysis of alternatives
 - Project impacts-mitigation
 - Implementation

- ❖ Prepare Project File documentation

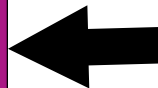
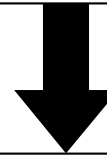
Ongoing Consultation as Required

Next Steps

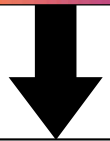
Following the PIC, comments received from agencies & the public will be reviewed for consideration.



Alternative solution will be evaluated and a preferred solution established.



Once a preferred alternative has been selected, the project file documentation will be prepared. Review agencies & the public will be notified of the completion of the Class EA and will be provided the opportunity to comment during the 30 day period following the notification. If agencies &/or the public do not agree with the preferred solution, they can contact the Ministry of Environment and request a Part II Order for additional studies to be completed. If the Ministry agrees, a Part II Order will be issued and the proponent will be required to further the study.



Upon completion of the 30 day review period and no comments from agencies or the public, the study will be complete. The project may proceed to detailed design, tender & construction

THANK YOU FOR ATTENDING!

Your comments will be considered.

Please remember to place your completed sheets in the comment box provided.