



CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
Engineering Services Division

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	May 2, 2022
SUBJECT/REPORT NO:	Wellington Street North Storm Sewer Outfall Repair (PW22030) (Wards 2 and 3)
WARD(S) AFFECTED:	Wards 2 and 3
PREPARED BY:	Erika Waite (905) 546-2424 Ext. 1234
SUBMITTED BY:	Susan Jacob Acting Director, Engineering Services Public Works Department
SIGNATURE:	

RECOMMENDATION

- (a) That the General Manager of Public Works be authorized and directed to design, tender and award a contract in 2022 to repair the Wellington Street North Outfall;
- (b) That the General Manager of Public Works be authorized to execute, on behalf of the City of Hamilton, all agreements and other documents necessary to implement such award on confirmation that each such agreement be in a form satisfactory to the City Solicitor;
- (c) That the Wellington Street Storm Outfall Repair project be funded by a transfer of previously approved rate supported funding of \$3,000,000 from the Eastern Sewer Interceptor (ESI) - South Service - Fruitland to Green (#5162262250);
- (d) That the Eastern Sewer Interceptor (ESI) - South Service - Fruitland to Green 2022 planned rehabilitation works be postponed and reprogrammed during the 2023 Capital Budget Process.

EXECUTIVE SUMMARY

OUR Vision: To be the best place to raise a child and age successfully.
OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.
OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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The Wellington Street outfall is a large (2.5m wide x 2.13m tall) twin box storm sewer that outfalls directly into Hamilton Harbour at Pier 10, just north of Burlington St. and immediately east of Wellington St. North. It was constructed in 1937.

The City of Hamilton (City) retained R.V. Anderson Associates Ltd. to undertake the structural rehabilitation design needed to repair the structure in 2021 with the intent to determine needs and schedule work in 2023-2024.

Due to the extent of deterioration, delay of a repair will increase risk and liability due to possible collapse, impacting business for Hamilton Oshawa Port Authority and its clients. It is recommended that the City expedites design, procurement, and construction so that full repairs can be completed in the Summer of 2022. Coordination with Hamilton Oshawa Port Authority and its clients has taken place and the preferred timing for construction has been identified as being between June and August.

Staff have determined the most appropriate and cost-effective long-term intervention is to:

1. Temporarily remove the rail section that crosses the sewer structure,
2. Repair the roof of the structure by a combination of precast and cast-in-place slab replacements and interior concrete wall repairs to mitigate further deterioration, and;
3. Replace the rail section above the sewer structure.

Alternatives for Consideration – See page 4

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: The cost to repair the Wellington Street Sewer Outfall has been estimated as having an upset limit of \$3,000,000. All funding to award the contract is recommended to be funded from project ID 5162262250 (Eastern Sewer Interceptor (ESI) - South Service - Fruitland to Green) which has an approved budget of \$8,000,000. The Eastern Sewer Interceptor (ESI) project would be resubmitted for consideration through the 2023 Capital Budget Process where timing of construction would better align with the preferred rehabilitation plan for both sewers.

Staffing: None

Legal: None

HISTORICAL BACKGROUND

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In 2020, the City retained R.V. Anderson Associates to undertake a Remotely Operated Vehicle (ROV) inspection inside the Wellington Street North Storm Outfall Sewer. Based on the recommendations outlined in the resulting assessment report dated June 21, 2021, it was concluded that further investigation is required to determine the accurate location and condition of the sewer.

Further investigation and assessment of the structure has been taking place since 2021. Low lake levels encountered late in 2021 allowed human entry into the structure resulting in a more thorough and detailed condition assessment.

The concrete roof along the entire length of the structure is in poor condition. The roof section and supporting columns under the rail crossing, that were built in 1928 to support the rail, were determined to be inadequately designed and exhibit significant structural damage.

The rail crossing the Wellington Outfall structure is owned and operated by the Hamilton Oshawa Port Authority.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

None

RELEVANT CONSULTATION

The following groups have been consulted and are supportive of the recommendations:

Corporate Services Department – Risk Management Division
Corporate Services Department – Financial Planning, Administration and Policy
Division, Budgets and Financial Policy Section
Public Works Department – Hamilton Water Division
Hamilton Oshawa Port Authority – Rail Owner and Operator
Parrish and Heinbecker, Limited – Impacted Industry
Bunge Canada – Impacted Industry

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The findings of the detailed condition assessment were initially communicated to the City in February of 2022. Based on those findings City staff are recommending that expedited repairs take place in 2022 to reduce the risk and exposure to failure during a construction period preferred by the Hamilton-Oshawa Port Authority and its clients.

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The Eastern Sewer Interceptor (ESI) project would be resubmitted for consideration through the 2023 Capital Budget Process where timing of construction would better align with the preferred rehabilitation plan for this sewer. Condition of the sewer is periodically monitored and is expected to remain in stable condition within the next year.

ALTERNATIVES FOR CONSIDERATION

An alternative for consideration is to not expediate the project. In this case, rates supported funds will be requested during the 2023 budget Council approval process with tendering and construction scheduled in 2023. This option will increase risk and liability due to possible collapse in the interim impacting business for Hamilton Oshawa Port Authority and its clients.

Financial: No financial Implications.

Staffing: No staffing Implications.

Legal: Liability implications in the case the structure collapse in the interim.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Healthy and Safe Communities

Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

Built Environment and Infrastructure

Hamilton is supported by state-of-the-art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

N/A