

Subject: Gross Budget Increase for Humberstone EPA and OWRA Infrastructure

Upgrades – Phase 1 (Humberstone Landfill)

Report to: Public Works Committee

Report date: Tuesday, February 19, 2019

## Recommendations

 That the Gross Budget for the Humberstone Landfill site EPA and OWRA project BE INCREASED by \$570,000 and that the increase BE FUNDED from the Capital Variance Project - Waste Management.

# **Key Facts**

- The purpose of this report is to seek Council approval for the increase to the gross budget for the Humberstone Landfill site Environmental Protection Act (EPA) and Ontario Water Resources Act (OWRA) Infrastructure Upgrades Project – Phase 1 at the Humberstone Landfill site in the City of Welland.
- The current Council approved capital budget is \$5,736,000 for this project, and based on the lowest compliant bid received in response to tender 2018-T-106 (RN18-06), Infrastructure Upgrades – Phase 1 at the Humberstone Landfill in the City of Welland, there is a budget shortfall of \$570,000.
- The budget shortfall is inclusive of construction costs, consulting engineering services and management costs relating to the project.
- This is Phase 1 of 2 for the Infrastructure Upgrades at the Humberstone Landfill. Phase 1 is scheduled to be completed in 2019, subject to Council's approval of this report. Phase 2 will be initiated in 2020, subject to approval of the 2020 Capital Budget and approval by the Ministry of Environment Conservation and Parks (MECP). See Appendix 1 for key map.

## **Financial Considerations**

Council has approved \$5,736,000 for project 20000338 – Humberstone EPA and OWRA which includes the Infrastructure Upgrades Phase 1 at the Humberstone Landfill in the City of Welland. The budget includes the detailed design, construction, engineering, contract administration and inspection, internal staff time and contingency.

Based on the lowest compliant tender bid, the project budget required is now forecasted to be \$6,306,000, which leaves a projected budget shortfall of \$570,000. The additional

funding is required due to market conditions that have changed relative to when the budget estimates were prepared.

Staff is recommending that this projected budget shortfall be funded through the Capital Variance Project – Waste Management. As at February 1, 2019 the Waste Management Capital Variance Reserve balance not committed is \$1,421,467. Not funding the projected budget shortfall at this time will delay project construction until 2020, and result in possibly higher construction costs due to inflation.

Appendix 2 – Total Estimated Project Cost provides a full budget breakdown.

## **Analysis**

- In May of 2016, the Niagara Region received approval from the Ministry of Environment and Climate Change (MOECC, now MECP) for the expansion of the Humberstone Landfill, equivalent to an additional 25 years of landfilling capacity.
- The Humberstone Landfill site provides public waste disposal capacity for the Niagara Region in south Niagara.
- The Infrastructure Upgrades were subject to an Individual Environmental Assessment. As part of that process, four (4) Public Information Centres were held, two (2) during the Terms of Reference phase and two (2) during the Environmental Assessment (EA) phase.
- Niagara Region retained Golder Associates to undertake detailed design for the project through a competitive process 2016-RFP-33.
- The detailed design is complete and approved by the MECP.

The proposed work is required to satisfy commitments made during and requirements of the EA and Environmental Compliance Approval (ECA) process for the expansion of the Humberstone Landfill to secure the additional public sector capacity in South Niagara and to increase the operational efficiencies at the Humberstone Landfill. The infrastructure upgrades include installation of the second phase of the Landfill Gas Collection and Control System (LGCCS), installation of Supervisory Control and Data Acquisition (SCADA) at each of the Leachate Collection System (LCS) pump stations, minor storm management upgrades, and landscaping in order to provide screening of the expanded landfill to St. George Park to the north.

#### Alternatives Reviewed

The Infrastructure Upgrades are required in order to facilitate the expansion of the Humberstone Landfill as per the EA and ECA approvals in May 2016 and February 2019, respectively.

Alternatives to the landfill expansion were reviewed during the EA and it was determined that the expansion of the Humberstone Landfill was the most appropriate solution. Prior to initiating the EA, our consultant concluded that the expansion of Humberstone Landfill would avoid an operating budget increase of \$1.5 million per year starting when the remaining capacity was fully utilized, should waste be redirect to the private sector.

## **Relationship to Council Strategic Priorities**

Securing additional landfill capacity at the Humberstone Landfill aligns with the Doing Business Differently and achieving Organizational Excellence. Niagara Region staff have put forward considerable effort to ensure that the approvals for the new landfill capacity are obtained in a timely manner and any impact to the public is mitigated.

## **Other Pertinent Reports**

- PWA 38-2011 Long Term Landfill Utilization Plan
- PW 62-2012 Humberstone Landfill EA Update
- PW 14-2014 EA of Proposed Expansion of the Humberstone Landfill Terms of Reference Approval and Geotechnical Work
- PW 88-2014 Host Municipality Compensation, Humberstone Landfill Expansion
- WMPSC- C 23-2016 Humberstone Landfill Expansion Environmental Assessment Approval

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Recommended by:

Catherine Habermebl Acting Commissioner, Public Works Public Works

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# Submitted by:

Ron Tripp, P.Eng. Acting Chief Administrative Officer

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# **Appendices**

Appendix 1 Key Plan Page 5
Appendix 2 Project Financial Summary Page 6





APPENDIX 1 - REPORT PW16-2019 INFRASTRUCTURE UPGRADES - PHASE 1

HUMBERSTONE LANDFILL SITE CITY OF WELLAND

DATE FEB. 2019

SCALE 1:50,000 m

REF. No. 2018-T-106 (RN#18-06)

DWG No. KEYPLAN

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#### PW 16-2019 APPENDIX 2 **Total Estimated Project Cost Budget Adjustment**

#### Phase 1 - Humberstone EPA and OWRA

Council

Budget

**Revised Council** 

Expended &

	Council Approved Budget	Budget Increase/ Reallocation	Approved Budget	Committed as of 01/24/19	Contract Award/ Forecast	Budget Remaining
	(A)	(B)	(C) = (A) + (B)	(D)	(E)	(F) = (C)-(D)- (E)
Total Estimated Project Cost (20000338)*						
(a) Construction (including Construction Contigency and 1.76% non-refundable HST)**     (b) Project Contingency     (c) Consulting Engineering Services	4,210,580 187,550	570,000	4,780,580 187,550		4,913,028 25,027	(132,448) 162,523
i. Detailed Design, Contract Administration and Inspection     (d) Project Management (In-House) and Operations	1,190,650 147,220		1,190,650 147,220	1,270,969 36,976	60,000	(80,319) 50,244
Total Estimated Project Cost	5,736,000	570,000	6,306,000	1,307,945	4,998,055	0
Project Funding Sources						
Waste Management Reserves	(5,736,000)	(570,000)	(5,736,000)	(5,736,000)	- (F70,000)	-
Capital Variance Project - Waste Management	(5,736,000)	(570,000) (570,000)	(570,000) (6,306,000)	(5,736,000)	(570,000) ( <b>570,000</b> )	-

<sup>\*</sup>All costs include 1.76% non-refundable HST

<sup>\*\*</sup>Total Contract Award is equal to i) \$4,828,054 before tax; ii) \$4,913,028 including 1.76% non-refundable HST; iii) \$5,455,701 including 13% HST