

DECISION/DIRECTION NOTE

Title: Robin Hood Bay Landfill Gas Collection and Covering System Expansion 2020

Date Prepared: February 19, 2020

Report To: Committee of the Whole

Councilor & Role: Councilor Ian Froude, Public Works and Sustainability Lead

Ward: Not ward specific

Decision/Direction Required:

Commitment and approval from Council to proceed with a capital works initiative to expand the landfill gas and covering system, and begin with installation of a final covering system at Robin Hood Bay Waste Management Facility. In order to proceed with this project, the City will need to access funds in the Robin Hood Bay Operating Reserve Fund, and potentially the Closure Fund.

Discussion – Background and Current Status:

The existing landfill gas collection and covering systems have been installed in four phases between 2008 and 2018. Presently, there are forty-three (43) landfill gas collection wells and approximately thirty-four (34) hectares of interim cover in place at Robin Hood Bay. The purpose of these systems is to eliminate and minimize passive venting of landfill gases to the atmosphere, increase collection of landfill gas, reduction of leachate generation, and improve aesthetics at the site.

Interim cover is intended for areas of the landfill that will be inactive for an extended period of time but will eventually be used again for landfill activities. Final cover is intended for areas of the landfill where no future landfilling is expected to occur in the future. There is currently no final covering system in place at RHB.

Landfilling at RHB has progressed to a point where a significant area (approximately 10 hectares) of the landfill can be placed under an interim or final cover. The City plans to work with a consultant in the coming months to determine which areas can be placed under final cover and which areas should be placed under interim cover.

The proposed expansion project for 2020 includes the addition of approximately ten (10) hectares of covering materials and addition of six to eight landfill gas collections wells. This project will result in an increase in greenhouse gas collection, reduce potential off-site odour impacts and reduce leachate generated.

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Key Considerations/Implications:

1. Budget/Financial Implications

The total estimated project cost is approximately \$4.0M. There are funds available for this project through the Robin Hood Bay Operations Reserve Fund. This reserve was created to meet the capital investment needs of the RHB site without having to adjust tipping fees. As of the end of 2019, the balance of the RHB operating reserve fund was \$7.2M.

There are also funds in the Robin Hood Bay Closure Fund which could potentially be used for any final cover needs.

2. Partners or Other Stakeholders

Eastern Regional Services Board

3. Alignment with Strategic Directions/Adopted Plans

- **Strategic Plan 2019-2029 Goal: *A Sustainable City***

Environmental benefits include a reduction in greenhouse gas emissions from Robin Hood Bay. This project supports progressive land use planning by keeping up with modern landfill development practices. Demonstrated value for money for residents include improvements to off-site air quality from a reduction in landfill gas emissions, which could lead to odours if not properly managed.

This project also follows objectives set out in a Landfill Gas Management Plan that was completed in 2018. The landfill gas management plan was developed as a tool for landfill management staff to use for long-term landfill development planning.

4. Legal or Policy Implications

N/A

5. Engagement and Communications Considerations

N/A

6. Human Resource Implications

N/A

7. Procurement Implications

The timeline for this project is to have completion by the end of 2020. Various open calls for bids will be issued over the course of the project for design services, procurement of materials and construction services.

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Procurement of materials and services will follow the requirements of the *Public Procurement Act, 2018*.

8. Information Technology Implications

N/A

9. Other Implications

N/A

Recommendation:

Council approve proceeding with the next phase of the landfill gas collection and covering system expansion in 2020.

Council approve accessing the Robin Hood Bay Operational Reserve and Closure Funds to fund this capital works project.

Prepared by/Signature:

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Approved by/Date/Signature:

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