A. Recommendations


AND THAT Council approve the issuance of the Notice of Completion for the Landfill Leachate Management Environmental Assessment subject to favorable comments and commitments forthcoming from the Saugeen Ojibway Nation as determined by the Director of Infrastructure and Public Works.

B. Overview

This Report seeks Council’s endorsement to issue a Notice of Completion regarding the Landfill Leachate Management Environmental Assessment for a 30 day period, once Saugeen Ojibway Nation comments have been received and are favorable. This Notice is the final step in the EA process and will result in the ability to proceed with the preferred option – installation of a leachate forcemain.

C. Background

The Town commenced a Landfill Leachate Management Environmental Assessment (EA) process in 2016 to consider alternatives to trucking leachate to the Craigleith WWTP with the potential to reduce costs associated with leachate management. The EA reviewed options for on-site treatment and pipeline conveyance to the Town’s existing waste water treatment plant.

The EA examined 4 main options: continue trucking, on-site treatment with infiltration, on-site treatment with discharge and piping leachate to an existing Town treatment plant. The trucking option has been identified as the highest cost option. A review of on-site treatment included options to install a large filtration bed or discharge to the Indian Brook. Overtime as the leachate strengthens a filter bed alone likely would not have the ability to adequately treat the leachate and additional mechanical treatment (a small wastewater plant) would be required in combination. Also, for the surface water discharge option a plant would need to be constructed. Construction of a plant, staffing and operations drive up costs making these
unfavorable financially. In addition, due to the nature of the subsurface and the sensitivity of the Indian Brook, on-site treatment is viewed as an environmental and technical challenge.

The EA also considered conveying the leachate to the Town’s existing waste water treatment plant in Thornbury via forcemain. Attachment 1 is a map of the potential routes. This option looked in detail at a number of route options. Through the EA it was identified that any of the route options could be considered as preferred. The identified constraints in each route option could be mitigated and all are constructible. The pumping leachate option was also estimated as the lowest 20 year life cycle cost.

Town Staff have had multiple meetings with SON and have discussed the forcemain as the preferred option. SON is in agreement with a forcemain as preferred option and Town Staff is anticipated final comments from SON that are expected to be favourable.

**D. Analysis**

Leachate conveyance via forcemain will be identified in the EA as the preferred option. Selection of a specific route will form part of the next stage of the project - detailed design. A forcemain solution is preferred over on-site treatment due to the estimated higher cost and concern regarding adequate treatment to allow groundwater or surface water discharge.

The forcemain option is also preferred over the current management option which is tanker truck hauling to the Craigleith waste water treatment plant. Reducing truck traffic was also indicated as benefit with the forcemain option. Trucking is also estimated to be the highest cost option, over the 20 year life cycle analysis conducted.

**Next Steps**

The final version of the EA report will be completed once SON comments are received a Notice of Completion will be distributed and placed in the local paper that the 30 day period for final comments regarding the project has commenced.

Following the 30 day public review period the Town will consider any submissions and barring any formal requests for review by the Ministry of Environment and Climate Change, the EA will be complete. The Town will then proceed with a request for proposal for detailed design work on forcemain route selection and design.

Town Staff recommends that the release of the Notice of Completion proceed once Saugeen Ojibway Nation (SON) final comments are received. The Town has conducted meaningful consultation with the SON Environment Office throughout this EA. This consultation has generated comments which Town Staff have addressed. The consultation will also result in the establishment of commitments for ongoing consultation with SON during the design phase. Town Staff have verbally discussed SON’s proposed conditions and Town Staff believe they are manageable but also useful and necessary to result in a successful project that will respect environmental concerns and archeological interests. As part of the obligation to consult with First Nations, a second phase of funding will need to be provided to assist SON’s participation in the detailed design and construction phases. This financial capacity will allow for
implementation and monitoring of agreements. The details of this financial capacity are being developed by SON, Town Staff will bring forward the details of the next phase of SON consultation during the Town’s design phase. At this time SON is agreeable to withdrawing any objections to the EA, with a condition that the Town continues to work on mitigating impacts. The Town is anticipating comments and a list of commitments from SON within the month. Town Staff are seeking approval from Council to proceed with the Notice of Completion once the comments are received favourably as determined by the Director on Infrastructure and Public Works. Gaining this approval from Council now will allow this project to continue moving forward. Town Staff will only issue Notice of Completion if the comments and commitments are as anticipated and favorable.

E. The Blue Mountains Strategic Plan

This EA works towards ensuring Town infrastructure is sustainable, by identifying the financially preferred option and one that maximizes the potential of existing infrastructure, such as the Thornbury Waste Water Plant.

F. Environmental Impacts

Installing a forcemain does have some temporary construction related impacts, however natural environment studies and archeological sampling will be conducted to assist with avoiding and mitigating impacts. A forcemain option will be a reduction in GhG’s compared to trucking.

G. Financial Impact

Estimated Construction Costs:

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Initial Construction Cost</th>
<th>20 Year Operational and Maintenance Cost</th>
<th>Total 20 Year Life Cycle Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck Leachate</td>
<td>0</td>
<td>$245,250/yr X 20 yrs</td>
<td>$4,988,000</td>
</tr>
<tr>
<td>On-Site Treatment and Infiltration</td>
<td>$2,350,000</td>
<td>$50,000/yr x 20 yrs</td>
<td>$3,350,000</td>
</tr>
<tr>
<td>On-Site Treatment and Discharge</td>
<td>$2,350,000</td>
<td>$50,000/yr x 20 yrs</td>
<td>$3,350,000</td>
</tr>
<tr>
<td>Pump Leachate (4 Route Options)</td>
<td>$1,650,000 to $2,050,000</td>
<td>$40,000/yr x 20 yrs</td>
<td>$2,450,000 to $2,850,000</td>
</tr>
</tbody>
</table>
Within a 20 year lifecycle pumping via forcemain is estimated to be the lowest cost. The lifecycle of the leachate liner system and a future phase to be constructed will be over 100 years. The option selected now is a long term investment.

H. In consultation with

None

I. Attached

1. Map of Proposed Forcemain Routes
2. Draft Notice of Completion

Respectfully submitted,

Jeffery Fletcher
Manager of Solid Waste and Environmental Initiatives

Reg Russwurm
Reg Russwurm, MBA, P.Eng
Director of Infrastructure & Public Works

For more information, please contact:
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519-599-3131 extension 238
TOWN OF THE BLUE MOUNTAINS
CLASS EA TO ADDRESS LEACHATE MANAGEMENT
AT THE BLUE MOUNTAINS LANDFILL
ROUTE OPTIONS

DATE
JAN. 27, 2017

PROJECT No.
16129

SCALE
1 : 20,000

FIGURE No.
1.0

- Wastewater Treatment Plant
- Pumping Station
- Route 1
- Route 2
- Route 3
- Route 4
- Continuation North
- Continuation East
- Affected Parcels (Route 4)
- Landfill Site
NOTICE OF COMPLETION

THE PROJECT:
The Town of The Blue Mountains initiated a Class Environmental Assessment (Class EA) process in August 2016 to consider alternatives to address leachate management at The Blue Mountains Landfill site (see key plan). Currently, leachate is collected within the lined waste cell and then trucked to the Town’s Craigleith wastewater treatment facility for treatment and disposal. The study considered a range of alternatives to address long term management of the leachate, including the following: i) Do nothing, continue to truck leachate, ii) On-site treatment and infiltration of leachate, iii) On-site treatment and discharge of leachate to Indian Brook, and iv) Pump leachate via forcemain to the existing sanitary collection system servicing Thornbury. Opportunities to partner wastewater servicing with adjacent commercial/industrial operations was also examined in conjunction with each of the alternatives being considered. The Class EA process investigated and evaluated each of the alternatives described above, including an analysis of life cycle costs for each over a 20 year time frame. From the investigation, the following preferred solution has been selected:

- Pump leachate via forcemain to the existing sanitary collection system servicing Thornbury

THE ENVIRONMENTAL SCREENING PROCESS:
This project is following the planning process established for Schedule ‘B’ activities under the Municipal Class Environmental Assessment (Class EA) document. Schedule B projects are approved subject to the completion of a screening process. The purpose of the screening process is to identify any potential environmental impacts associated with the proposal and to plan for appropriate mitigation of any impacts. The process includes consultation with the public, stakeholders, Aboriginal communities, and review agencies. The environmental assessment process has now been completed. There were no negative impacts identified with the project that could not be mitigated.

PUBLIC INVOLVEMENT:
A Project File documenting the Environmental Assessment process completed for this project is available for public review at The Town of the Blue Mountains municipal office (32 Mill Street, Thornbury ON) during normal business hours. A copy of the report has also been placed on the Town’s website: [http://www.thebluemountains.ca](http://www.thebluemountains.ca). For further information on this project, or to review the Class EA process, please contact the project engineers: B. M. Ross and Associates Ltd., 62 North Street, Goderich, Ontario, N7A 2T4. Telephone (888) 524-2641. Fax (519) 524-4403. Attention: Kelly Vader, Environmental Planner. E-mail: kvader@bmross.net.

If environmental concerns arise regarding the project which cannot be resolved in discussion with the Town of The Blue Mountains, a person or party may request that the Minister of the Environment and Climate Change make an order for the project to comply with Part II of the Environmental Assessment Act which addresses individual environmental assessments. Requests must be received at the address below within 30 calendar days of this Notice. A copy of the request must also be sent to the project engineers and Town at the above addresses. If there is no request received by July 21, 2017, the project will proceed as planned.

The Minister of the Environment and Climate Change
11th Floor, 77 Wellesley St. W., Toronto, ON M7A 2T5
Fax: 416-314-8452

This Notice Issued June 21, 2017
Jeffery Fletcher, Manager of Solid Waste and Environmental Initiatives
Town of The Blue Mountains