

SUBJECT: Discussion Paper, December 19, 2017 JWDC Meeting

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Date: December 15, 2017



This discussion paper is intended to provide information for the Joint Waste Disposal Site Committee (JWDC) meeting on December 19, 2017 and thereby assist the Committee with its deliberations and decision making.

1.0 Background Information

The following is the relevant background information.

- The Terms of Reference for the JWDC have been approved by both municipalities.
- The information and model that is being presented in this discussion paper are in response to two action items from the Committee's September 13, 2017 JWDC meeting; Staff was asked to create a cost sharing model for the operation of the Markdale Waste Disposal Site incorporating a multi-year phase in and including operational numbers and take it back to the Committee
- By Resolution Grey Highlands has approved a site-open schedule for its 3 WDS's, and has directed that Markdale is to become the primary waste disposal site for active landfilling and diversion and the Artemesia and Osprey sites are to operate as transfer stations accepting diversion materials and bagged waste only.
- The model does not incorporate the curbside collection of waste and recycling as each municipality have independent contracts that cover this service; the Grey Highlands contracts run to June 30, 2019, and the Chatsworth contracts run to June 30, 2026. However, it is recognized that in the future, it may be best to include these services in an overall operating model.
- Grey Highlands Council approved its 2018 capital and operating budget on December 6, 2018.

2.0 Key Considerations

The model that is being presented has regard for the following key considerations.

- The existing waste disposal sites in the two municipalities and the additional disposal cell at the Sullivan site that is in the final approval stages are very valuable municipal assets, similar to other municipal infrastructure.
- Based on the 2016 Landfill Monitoring Reports, and at the current fill rates, there is an estimated 66 years capacity remaining at the Markdale site, 18 years at the Artemesia

site, 4 years at the Osprey site, and less than 1 year at the Sullivan site. If the all the waste from both municipalities was taken to Markdale, the remaining life at Markdale could still be as much as 40 years with compaction and shredding. These numbers can be updated when the 2017 Monitoring Reports are completed.

- As such, these assets must be operated and maintained so as to maximize their life and value to the municipality.

3.0 Terms of Reference

The Objectives in the Terms of Reference for the JWDC follow:

1. To act in an advisory capacity to the Municipalities of Chatsworth and Grey Highlands Councils;
2. To review and amend existing Holland Markdale WDS operations agreement;
3. Facilitate a coordinated approach to represent the local community and municipal interests in optimizing waste diversion and waste management operations;
4. To review staff operational recommendations while considering expected levels of service, operational efficiencies & program sustainability
5. To bring forward recommendations for operational changes, as necessary; to respective Councils;
6. To remain aware of and inform respective Councils of evolving waste legislation and diversion requirements;
7. Assist in the development of a critical path for waste management planning (consider economic development and growth);
8. To keep in context with the framework of municipal strategic planning intentions including: operational excellence, fiscal & asset management, sustainable growth, community and economic development;

The model being presented considers Objectives 1, 2, 4, and 5. The model can be updated to implement the other objectives later, and as the Committee may recommend.

4.0 Operational Analysis

With the above as background, this section describes actions being taken to implement prior direction Grey Highlands Council has given and to optimize the operations at the Markdale, Osprey and Artemesia sites. Suggested actions the Committee could recommend with respect to the operations at the Sullivan site are included in a later section of this paper.

1. Pursuant an earlier resolution adopted by Grey Highlands, its waste disposal sites will be open to the public as follows:
 - Markdale will be open on Tuesday, Thursday, Friday and Saturday;

- Artemesia , will be open on Sundays;
 - Osprey will be open on Saturdays;
 - The days open and hours of operation for each of the sites are on Attachment 1 to this paper; and
 - Markdale will be open to receive the curbside waste on the days it is collected in both Municipalities under the current curbside collection agreements.
2. In addition, Grey Highlands has directed that
- Markdale will be the primary waste disposal site for active landfilling and diversion; and
 - Artemesia and Osprey will operate as transfer stations.
3. The following budget approvals are approved or will be brought forward for discussion:
- Grey Highlands has approved the purchase of some landfill cover plates, 8 – 40 yard roll off bins, a landfill compactor, a roll off truck and upgrades to the waste receiving area at Markdale including new waste collection bins, improvements to the scales and scale house, installation of a litter fence and the construction/installation of signed traffic routes, retaining walls, bollards, etc; and
 - Except for the roll off truck, Chatsworth has approved the capital purchases noted above and will be considering the roll off truck in its 2018 budget discussions.
4. With the new equipment and site improvements, Staff will be able to:
- Prohibit access for the general public to the active landfill area and generally make the site safer for the public;
 - Optimize the separation of the diversion materials from the waste;
 - Better track the type and quantity of waste and diversion material coming to the site; and
 - Minimize the amount of cover material required at the site thereby extending the life of the facility.
5. A preliminary sketch showing the conceptual layout for the proposed changes for the Markdale site is Attachment 2 to this paper.

6. With the Artemesia and Osprey sites becoming transfer facilities for bagged waste and diversion materials only, the remaining landfill capacity at those sites would be held in reserve.
7. It is anticipated the changes at the Markdale site will be in place by June 1, 2018, and that would be the start date for the conversion of Artemesia to a transfer site.
8. All the diversion opportunities that are currently in place at the three disposal sites will be maintained, and can be enhanced as Council may direct.

5.0 Staffing Analysis

The approved Grey Highlands budget allows for 5 additional staff to operate the facilities in Grey Highlands; 4 site attendants and 1 supervisor.

The intent is to have 3 attendants at the Markdale site when it is open to the public; one would receive the waste, the other 2 would ensure the waste or diversion material is put in the proper bin.

There would be 2 attendants at the Artemesia and Osprey sites when they are open. Having a minimum of 2 people at each site is recommended from a health and safety perspective and for security reasons as fees for waste disposal are being collected at those sites.

One attendant would be assigned to transferring the roll off bins between sites, compacting the waste on the active fill area, placing the cover plates or cover material as the case may be over the area where waste has been dumped, and general site cleanup, when required.

While the schedule has to be refined, the preliminary proposal is that there be 2, 2-person, 5-day shifts; one working Monday to Friday, and the other Friday to Tuesday. With this scenario, one part time staff person would be required to act as an attendant at Markdale on Thursdays and Saturdays. In addition, this part time person would backfill for attendants on vacation or on a sick day.

The supervisor will oversee the operation of the sites, assemble and check the data that is recorded by the attendants, and complete such operational reports as are necessary.

Including the one part time person for the two days each week and to fill in for the regular attendants when they are off, the staffing compliment is approximately 5.63 FTE.

6.0 Going Forward, Grey Highland Sites

Staff is comfortable with the operational plan for the three Grey Highland sites as it laid out above.

Going forward, additional diversion facilities can be added. As well, and as more operational data and experience becomes available, other possible efficiencies that may become apparent can be implemented.

7.0 Going Forward, Chatsworth (Sullivan Site)

Grey Highlands and Chatsworth Staff have had discussions about the operation of the Sullivan site. It is felt there are some improvements that could be made at the Sullivan site.

The first step to implementing these improvements might be to have Grey Highlands Staff operate and manage the day-to-day waste disposal service at this site. This would include staffing the site when it is open, operating Chatsworth equipment to compact and cover the active landfill area, coordinate the pickup and delivery of the waste diversion bins, the scrap metal, tires, etc., and monitor the re-use centre as it is only open on the days the site is open.

Chatsworth would retain responsibility to upgrade the scale house and scales, as appropriate, provide, maintain and fuel the equipment used to compact and cover the waste, complete the annual monitoring reports, transition the site to operate as a transfer station in the future with the construction of the receiving area, etc.

With additional access at Markdale, it is suggested Chatsworth consider eliminating the present Monday service at Sullivan.

Subject to more analysis, and the Sullivan only being open on Saturday's, it is thought that Grey Highlands would require two additional part time people to work as site attendants when the Sullivan site is open. The compaction and covering of the active landfill area would be done by one of the Grey Highlands full time attendants.

8.0 Cost Sharing

The current agreement between Grey Highlands and Chatsworth with respect to the operation of the Markdale Landfill site provides:

- the capital costs are to be split 50/50;
- the revenue and cost sharing of the operation of the Markdale site is to be based on a percentage formula based on the previous year's weight amount deposited at the site by each Municipality; and

- Grey Highlands is to provide the administrative staff required to manage and operate the site.

It is suggested the agreement be amended to better define

- what data is used to determine how the operating costs are distributed,
- what operating costs are included in the calculation, and
- how those operating costs and revenues are distributed.

The total amount of diversion and waste material coming into the site from the curbside collection, large commercial loads, and the individual owners in each municipality will be tracked.

The refined tracking of the amount of residential and small commercial waste and diversion materials that are brought to the Markdale site will enable those quantities to be distributed to the appropriate municipality. Generally, it is expected the weight of the waste material that is brought to the site by the public will be estimated. These weights would then be added to the weighed material and included in the cost distribution formula.

Grey Highlands can continue to track the direct labour and equipment operating and maintenance costs associated with the three Grey Highland sites. It would also track the direct labour costs associated with the Sullivan site, if the change is made to have it operated by Grey Highlands Staff as described above.

There are direct and indirect operational costs associated with the operation of the Markdale waste disposal site. They include, but are not necessarily limited to, hydro, insurance, office supplies, equipment and fleet repairs and maintenance, snow clearing and grass cutting, portable toilet rental, payments in lieu of taxes, professional fees (annual monitoring report), etc.

Currently, none of the administrative costs Grey Highlands incurs to operate and manage the Markdale site are charged back to Chatsworth. It is suggested a portion of those costs should be paid by Chatsworth based on an estimate of the percentage of time the Grey Highlands finance, transportation and environmental services, and other administration staff spend on solid waste disposal.

Finance staff advise that some of the costs charged to Chatsworth may be subject to tax to comply with applicable Federal and Provincial tax legislation.

All of the above costs are part of the overall operating cost, and would be included in the cost and fee distribution.

9.0 Future Reviews

All of the operational and cost sharing arrangements should be reviewed annually. It is suggested this is most appropriately done in advance of the start of the subsequent year budget discussions. That gives both municipalities an opportunity to consider and approve any changes the JWDSC might recommend to the two Councils.

10.0 Proposed Formula for Calculating Cost Distribution

Capital Costs

The capital costs benefit both municipalities, and accordingly it is suggested they continue to be split 50/50 as they are under the current agreement.

Waste and Diversion Handling Costs

The costs for handling the waste and diversion materials that are brought to the Markdale site are most appropriately distributed by weight as is presently done. Recognizing that it would not be practical to weigh all the waste that is brought to the site, the proposed cost distribution would be based on weights that can be readily measured or reasonably estimated. The weights that would be used for the cost distribution are summarized below.

Total weight to the Markdale site

- = weight of the curbside material collected in Chatsworth and Holland
- + weight of the curbside material collected in Grey Highlands
- + weight of the waste material brought to the site directly by Chatsworth/Holland customers
- + weight of the waste material brought to the site directly by Grey Highlands customers
- + weight of the waste material brought to the site from other Grey Highlands departments (fire halls, arenas, etc.)
- + weight of the waste material transferred to the site from Artemesia
- + weight of the material transferred to the site from Osprey

Percentage of total weight on which charges to Chatsworth would be

= Total weight of all materials from Chatsworth divided by Total Weight of all materials received at the site.

Chatsworth share of the costs

= attendant labour costs posted to Sullivan

+ attendant labour costs posted to Markdale times the percentage weight coming from Chatsworth

+ supervisor labour costs times the percentage weight coming from Chatsworth

+ operating and maintenance costs for the equipment used at Markdale times the percentage weight coming from Chatsworth

+ the direct and indirect operational costs, as described earlier, times the percentage weight coming from Chatsworth

+ the Grey Highlands administrative staff time spent on solid waste and recycling times the percentage weight coming from Chatsworth

+ net cost to remove and dispose of the diversion material from the Markdale site times the percentage weight coming from Chatsworth

+ all applicable taxes

A sample calculation showing how Chatsworth's share of the costs would be calculated using 2016 waste quantities and the 2018 Grey Highlands' budget cost estimates will be presented at the JWDC meeting. The costs are presented for comparison purposes, and would be refined as actual costs become available.

All fees collected at the Markdale site would be used to offset the operating costs at the Markdale site.

The revenues collected by Chatsworth from the sale of bag tags to their customers will remain with Chatsworth.

The revenues from fees collected at the Sullivan site would remain with Chatsworth.

The frequency and timing of payments can be addressed by the respective finance departments in each municipality.

11.0 Other Considerations for Further Optimization and Levels of Service

As noted earlier, this report has concentrated on addressing 4 of the objectives in the Terms of Reference for the JWDC. To begin to address the other 4 objectives, it is suggested the Committee can consider at least the following items at subsequent meetings.

Diverting more waste to Sullivan

If more waste was diverted to the Sullivan site now, that site could be capped out and closed sooner. Thereafter, the Sullivan site could be converted to a transfer station. It is understood it would be possible to divert the curbside waste collected in the former Sullivan Township to the Sullivan site now under Chatsworth's current curbside collection contract. Thereafter, the waste collected in the former Sullivan Township could be directed to Mount Forest, its present disposal site, or it could be directed to Markdale. Doing so would enhance the operational efficiency as the Sullivan site would only be staffed on the days it is open. Directing the waste to Markdale would optimize the use of that site.

Public Access to Waste Disposal Sites on Variable Statutory Holidays

The Committee should provide a recommendation on the WDS's being open to the public on statutory holidays. Canada Day, Christmas Day, Boxing Day, New Years Day and Remembrance Day are statutory holidays that can occur on any day of the week. Easter occurs on Friday. The other statutory holidays occur on a Monday. Only the Osprey site would be open if Monday service at Sullivan is discontinued, and only the Markdale site will be open on Friday. As a comparison, for the weeks including Christmas and New Years day the curbside collection in Grey Highlands is moved to the Saturday of that week.

With increased open days at Markdale, it is suggested all the sites could be closed on the Christmas, New Years, Easter and Canada Day statutory holidays. If they are scheduled to be open on Boxing Day, Remembrance Day, and the other statutory holidays that occur on Mondays, they would be.

Public Input on New Model

The Committee can consider what level of public input should be sought on the new model, and if an information session should be held to provide an opportunity for that input.

Updating the Waste and Recycling Bylaws

To help facilitate a jointly operated waste and diversion disposal service, the bylaws regulating that service should be similar in both municipalities. If the current operational agreement is amended, a review of the bylaws would be appropriate.

Uniform Tipping Fees

Currently many of the tipping fees for various waste and diversion items in the two municipalities differ. This includes the cost for a bag tag. While this will not affect the costing model discussed above, residents would see more consistency if the tipping fees were uniform. It is beyond the scope of this paper to discuss what the fees should be, but further information could be brought back for the Committee's consideration at a later date.

Additional Diversion Opportunities

As the operational activities are refined at the various sites, the Committee can consider recommending additional waste diversion opportunities. Some examples would include a re-use centre, facilities for the collection of household hazardous waste materials, shingles and mattresses and setting up a program for source separated organics and disposal.

Bill 151 – Waste Free Ontario Legislation

This new legislation continues to evolve. It would be prudent for the Committee to stay abreast of the most current developments and understand how they will affect Chatsworth and Grey Highlands.

12.0 Committee Recommendations

It is suggested the Committee consider the recommendations it wants to make to the two Councils. They might include the following and are presented for the Committee's consideration:

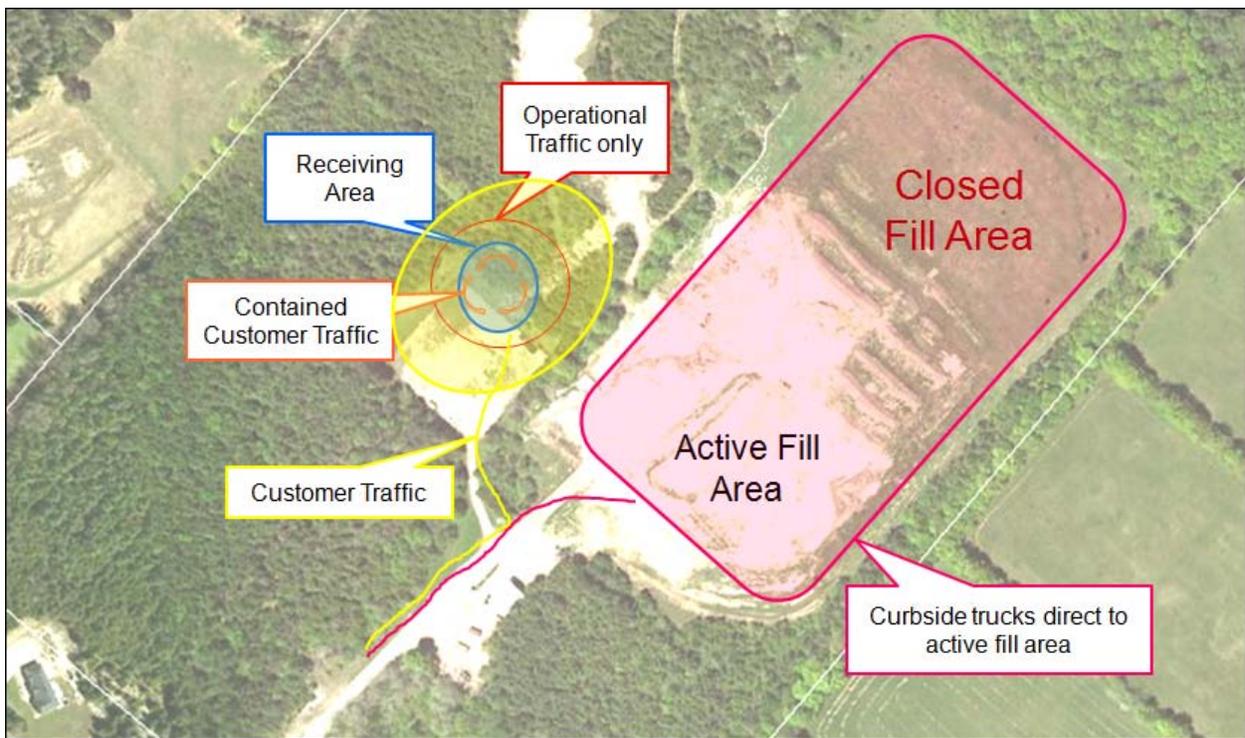
- Grey Highlands staffing the Sullivan site the day(s) it is open and being responsible for compacting and covering the active fill area using Chatsworth supplied and maintained equipment at a mutually agreeable time;
- Discontinuing the Monday service at the Sullivan site;
- Adopting the cost sharing model as presented in this paper, in principle; and
- Setting a time to meet to discuss the other considerations for further optimization and levels of service as identified in this paper.

Attachment 1

Site	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Markdale			11-4 (5)		11-4 (5)	11-4 (5)	9-4 (7)
Artemesia	9-4 (7)						
Osprey		9-4 (7)					

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Attachment 2



Markdale WDS Conceptual Receiving Area