

THE REGIONAL MUNICIPALITY OF HALTON

INTEROFFICE MEMORANDUM

TO: P. Pomeroy, Regional Chairman
Members of Regional Council

FROM: David Varley, Regional Clerk

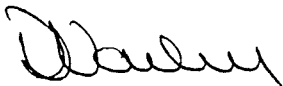
DATE 1987 01 27

SUBJECT: FIN 17/87 - Landfill Economic Impact & Affordability
Analysis Update

At its meeting held November 19, 1986, Regional Council requested more detailed information with respect to land costs, offsite road improvement costs, landscaping for buffer, afteruse, contingency and property acquisition costs that were not clearly set out in the Economic Impact and Affordability Analysis report submitted by C. N. Watson and Associates.

The Regional Treasurer has prepared FIN 17/87 which sets out these costs and the report is being circulated at this time for the information of Council Members only.

This report will be included in the next Solid Waste Management Committee Agenda for formal consideration, but is being circulated now as a number of Members of Council have requested this information.



DJV:ps

THE REGIONAL MUNICIPALITY OF HALTON

Report to The Chairman and Members of the Solid Waste
Management Committee

From J. L. Rinaldo, Director of Finance

Date 1987 01 22

Report No FIN 17/87

RE: Landfill Economic Impact and Affordability
Analysis Update

RECOMMENDATION:

THAT FIN Report FIN 17/87; Landfill
Economic Impact and Affordability
Analysis Update be received for
information.

REPORT:

You will recall that C.N. Watson of C.N. Watson and Associates presented the Landfill Economic Impact and Affordability Analysis Report at the November 12, 1986 Planning and Public Works Committee.

At that time, further information was requested, specifically:

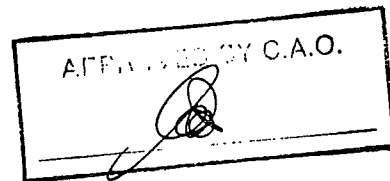
"That the Consultant Mr. C. Watson of C.N. Watson and Associates be asked to provide the back-up information with respect to the land costs contained in the Economic Impact and Affordability Analysis Report and further that back-up information be provided on the costs for off-site road improvement costs, landscaping for buffer, after use, contingency and property acquisition".

C.N. Watson and Associates have prepared a response to the Committee's request and it is attached to this report for your consideration.

Should the Solid Waste Management Committee wish to receive additional information on the provisions included for land acquisitions, I will provide this information 'in camera' at the meeting.

Respectfully submitted,


J. L. Rinaldo
Director of Finance and
Regional Treasurer



GS/pd

Atta.

December 23, 1986

Mr. J. L. Rinaldo
Treasurer
Region of Halton
1151 Bronte Road
Oakville, Ontario
L6J 1E6

Dear Mr. Rinaldo:

Re: Requests from the S.W.M. Committee for Further Information
Concerning "Schedule K, Economic Impact and Affordability
Analysis"

Further to your request to respond to a S.W.M. Committee resolution asking for additional information on specific items in our report, we would reply as follows:

1. Basis for Haul Cost Calculations

The haul cost calculation for Site D is documented on pages 2-6 to 2-10 (Schedule K) and for Site F, on pages 3-6 to 3-12 (Schedule K). As noted on pages 2-6 and 3-6:

"The methodology for calculating total haul costs (including private haulers and citizens transporting waste to the site), is described in some detail in the E. A. Economic Analysis, Technical Report No. 3 (June, 1985) on pages 7-5 to 7-8. Cost assumptions were reviewed subsequently, by contacting the municipalities in the original sample and updating to 1986 dollars."

Total haul costs for Sites D and F were calculated based on haul distances and haul times from each of ten Regional zones to the Sites. These were prepared by the Regional Planning and Development Department and are included as part of the E.A. Transportation Assessment Report prepared by Giffels Associates (Schedule 28).

Appendix C of the Economic Analysis (Technical Report No. 3, Schedule 30) provides an example of the methodology used to calculate the per ton haul costs for each of the sites. Three

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years were selected for separate analysis--1988 (representing the early period of the landfill operation), 1996 (the opening of the E.F.W. plant) and 2008 (the final year of the planning period). The haul times and distances were identical for each of the three analysis years. These are described on pages 5-1 to 5-3 and Tables 9 and 10 in the E. A. Transportation Analysis (Schedule 28).

Haul costs for each year were calculated by using the weighted average operating cost (gas, maintenance and salaries) per ton of waste (calculated by the method shown in Appendix C of Schedule 30), inflating it where necessary and then multiplying it by the total annual waste tonnage (as set out in Appendix C of Schedule K). To this was added the capital cost also calculated on a per ton basis (as shown in Appendix C of Schedule 30); this remained constant (uninflated) for each seven year period to represent the average lifetime of a haul vehicle. The combined operating and capital costs were then increased by 15% for overhead and the total was increased by a further 15% to include minor hauler costs.

2. Off-site Road Improvement Costs

The off-site road improvement costs for Site D are shown on Table 1, page 2-3 (Schedule K) as \$130,000 (1986\$). The amount is based on information supplied by Giffels Associates, as set out in Schedule CD, pages 64-66. Giffels have stated that no off-site road improvements are required for Site F (Schedule CF, page 63) and, accordingly, no costs have been included in Table 7, page 3-3 (Schedule K).

3. Costs for Landscaping the Buffer

The cost estimates for landscaping the buffer area (Site D - \$130,000; Site F - \$100,000) for both Sites D and F were supplied by Landplan.

4. After-Use Costs

The after-use costs for Site D (\$27,000) were supplied by Ecological Services for Planning. The after-use costs for Site F (\$1,598,000) were supplied by Landplan.

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5. Contingency

The contingency for Site D, as shown in Table 1, page 2-3 (Schedule K) is \$2,226,000 (1986\$). Of this total, \$1,226,000 is for engineering and construction, supplied by Hydrology Consultants (Appendix A, page A-4). The balance of the contingency was for non-engineering items.

The contingency for Site F, as shown in Table 7, page 3-3 (Schedule K) is \$1,239,000 (1986\$). Of this total, \$1,139,000 is for engineering and construction, as supplied by Hydrology Consultants (Appendix A, page A-8). The balance of the contingency was for non-engineering items, which are considered to be more significant with Site D than with Site F.

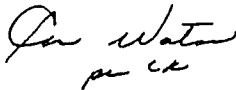
6. Property Acquisition

The property acquisition costs for Sites D and F were supplied by the Regional Property Manager.

If you have any questions or wish further information, please do not hesitate to call.

Yours truly,

C.N. WATSON AND ASSOCIATES LTD.



C. N. Watson, CMC

December 23, 1986

Mr. J. L. Rinaldo
Treasurer
Region of Halton
1151 Bronte Road
Oakville, Ontario
L6J 1E6

Dear Mr. Rinaldo:

Re: Division of Municipal Haul Costs for Sites D and F by
Municipality Based on Landfill Technical Study,
"Economic Impact and Affordability Analysis"
(Schedule K)

Further to your telephone request, we have calculated a
general breakdown of municipal haul costs for Sites D and F
by municipality.

The cost figures encompass the annual municipal haul costs for
the complete forecast period from 1988 to 2008, discounted to
January 1, 1987 present value. They were calculated based on
the waste quantities projection and generalized assumptions
concerning type of vehicles and operational characteristics
from Halton Region municipalities and others in the Metro
vicinity, using the travel times and distances prepared by
Regional staff and Giffels Associates Limited.

The estimated breakdown of Sites D and F municipal haul
costs for the 20 year period is as follows:

Site D

	<u>\$000,000 Present Value</u> <u>as of January 1, 1987</u>		<u>% of Landfilled</u> <u>Waste Volume (1990)</u>
	<u>\$</u>	<u>%</u>	<u>%</u>
Burlington	3.6	40.....	42
Oakville	3.4	37.....	37
Milton	0.5	6.....	9
Halton Hills	<u>1.6</u>	<u>17.....</u>	<u>12</u>
Total	\$9.1	100	100

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Site F

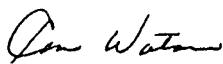
	<u>\$000,000 Present Value as of January 1, 1987</u>		<u>% of Landfilled Waste Volume (1990)</u>
	<u>\$</u>	<u>%</u>	<u>%</u>
Burlington	1.5	17.....	42
Oakville	3.8	41.....	37
Milton	1.2	13.....	9
Halton Hills	<u>2.7</u>	<u>29.....</u>	<u>12</u>
Total	\$9.2	100	100

In addition to the municipal haul costs referred to above (Site D - \$9.1 million; Site F - \$9.2 million), an estimated \$1.3 million for Site D and \$1.4 million for Site F have been included as the cost incurred by the "small haulers", whose loads are below the 150 kg. charge limit.

If you have any questions or wish further clarification on this, please do not hesitate to call.

Yours very truly,

C.N. WATSON AND ASSOCIATES LTD.


per CMC

C. N. Watson, CMC