

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT
Operations and Waste Management Division

TO: Chair and Members Public Works Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: January 16, 2012	
SUBJECT/REPORT NO: Waste Collection Procurement Process for 2013-2020 (PW11030d) - (City Wide) (Outstanding Business List Item)	
SUBMITTED BY: Gerry Davis, CMA General Manager Public Works Department	PREPARED BY: Raffaella Morello (905) 546-2424, Extension 3445 Pat Parker (905) 546-2424, Extension 3916
SIGNATURE:	

RECOMMENDATION

- (a) That the City's Waste Collection System commencing April 1, 2013 be approved consisting of the following services:
- (i) Weekly collection of Organic Waste;
 - (ii) Bi-weekly collection of Garbage;
 - (iii) Weekly Leaf and Yard Waste collection;
 - (iv) Bi-weekly call-in Bulk Waste collection for curbside collection and weekly call-in collection of Bulk Waste for multi-residential buildings;
 - (v) Weekly two-stream collection of Recyclable Materials;
 - (vi) Weekly two-stream Automated Recycling Cart collection;
 - (vii) Weekly front-end Bin Service for Garbage collection;
 - (viii) Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection;
 - (ix) Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers;
- (b) That the waste collection system in (a) include the following refinements:

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- (i) Collection of up to six (6) containers of garbage per residential unit on an bi-weekly schedule;
 - (ii) Permit the use of alternative recycling containers to reduce escaped waste;
 - (iii) Supply of front-end garbage bin containers for garbage collection at municipal facilities;
 - (iv) Eliminate Special Considerations for families with children, medical circumstances, home day cares and agricultural properties based on the increased container limit in recommendation (b) (i);
 - (v) Phase in of smaller green carts;
- (c) That appropriate amendments to Solid Waste Management By-law 09-067 be enacted to implement recommendations (a) and (b);
- (d) That Halton Recycling Ltd. (dba Emterra Environmental), be selected as the Successful Proponent for:
- (i) Project 5 of Request for Proposals C11-30-11 which is comprised of:
 - 1. Weekly collection of Organic Waste in Zones B1, B2 and B3;
 - 2. Bi-weekly collection of Garbage per residential unit in Zones B1, B2 and B3;
 - 3. Weekly Leaf and Yard Waste collection in Zones B1, B2 and B3;
 - 4. Bi-weekly call-in Bulk Waste curbside collection and weekly collection of Bulk Waste for multi-residential buildings in Zones B1, B2 and B3;
 - 5. Weekly two-stream collection of Recyclable Materials City-wide;
 - 6. Weekly two-stream Automated Recycling Cart collection City-wide;
 - 7. Weekly front-end Bin Service for Garbage collection City-wide;
 - 8. Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection City-wide;
 - 9. Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers in Zones B1, B2 and B3;
 - (ii) Additional Work identified in Request for Proposals C11-30-11 including:
 - 1. A six (6) container limit for bi-weekly collection of garbage;
 - 2. Collection of blue boxes with lids and larger blue boxes;
 - 3. The supply of bin containers at municipal facilities.
- (e) The contract period shall be seven years commencing April 1, 2013 with the potential extension of one, one year term;

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- (f) That the General Manager of Public Works be authorized and directed to finalize the terms and conditions of the agreement with Halton Recycling Ltd. (dba Emterra Environmental) in accordance with the provisions of Request for Proposals C11-30-11;
- (g) That the Mayor and City Clerk be authorized and directed to execute the agreement with Halton Recycling Ltd. (dba Emterra Environmental), together with any necessary documents, all in a form satisfactory to the City Solicitor;
- (h) That Capital Project 5121294500 Recycling Program - Vehicle Acquisition and Facility Modification, which was parked during the 2012 Capital Budget process be withdrawn from further consideration and the 2012 Capital Financing Strategy amended to reflect a lower reliance on Future Fund financing;
- (i) That the Outstanding Business Items referring to Waste Collection and Recycling Processing Procurement Processes for 2013 - 2020 as well as Activity Based Costing for Public Sector Waste Collection 2013-2020 be identified as completed and removed from the Public Works Committee Outstanding Business List.

EXECUTIVE SUMMARY

The City's existing waste collection contracts will end in March 2013. An extensive review of potential service levels and policy changes has been undertaken, with Council's input and direction from Reports PW04113a, PW11030a, PW11030b and PW11030c. Pricing for the various options has been obtained through a Request for Proposals (RFP) and Internal Costing process. The various options resulted in six Projects for RFP C11-30-11, which are summarized in Report PW11030d as Appendix A.

Together with the pricing, a number of collection systems were evaluated based on financial, environmental and social considerations to determine a Preferred Waste Collection System for 2013-2020. New contracts need to be approved early in 2012 to ensure continuous service for the public in April 2013.

This report provides the results of the RFP process, Internal Costing and system analysis utilized to arrive at the Preferred Waste Collection System. The financial analysis also considered operational impacts of the collection options on the Waste Collection System as well as 'Other Considerations' to refine the system and the related costs.

Three systems were included in the RFP and internal costing process to provide pricing on each option. There were three sets of projects: Projects 1 & 2 were based on the current collection system; Projects 3 & 4 were based on a weekly collection system with enhancements to address areas requiring improvement and Projects 5 & 6 were based on an enhanced system with bi-weekly waste collection.

Council also provided direction to explore extending the public/private service collection model to all curbside collection services including recycling. As a result, an Internal Costing Team was established to develop pricing for recycling collection by public

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forces in the City's 'A' Zones. The RFP included options to reflect a public sector component for each of the three collection options and these are Projects 2, 4, and 6.

The City's current public/private waste collection model is for all curbside collection services, except recycling, with a portion of the City being serviced by public forces and the other portion being serviced through a contractor. A map showing the City's waste collection zones is included in Report PW11030d as Appendix B. Public forces collect in the 'A' Zones and contracted forces collect in the 'B' Zones.

Based on the competitive costs between the public and private sector for 2007-2010, Committee and Council approved continuation of the split collection model on April 27, 2011 as outlined in Report PW04113a. The results demonstrated that the competitive environment continues to provide long term best value for Hamilton tax payers. As a result all projects included an internal costing component for collection in the 'A' Zones.

Other considerations to enhance the collection system to reduce illegal dumping, litter and escaped waste, add flexibility to set out extra waste through tags or extra bags, and use of smaller green carts were also considered. Initial information on these considerations was provided in Report PW11030c and was also included as 'Additional Work' in the RFP and Internal Costing process. The policy options and related costs have been matched with the appropriate collection systems.

The evaluation process resulted in a Preferred Waste Collection System based on a balance of economic, environmental and social benefits and is reflected best in Project 5 of the RFP. The Preferred System includes bi-weekly collection of garbage with enhancements and a summary of this system is provided in Table 1. The details and analysis used to arrive at this recommendation are provided in the report. Overall, the Preferred Waste Collection system results in a savings from current costs of approximately \$3 million compared to the 2011 Budget. Based on escalation only, this would represent a savings of almost \$60 million over the collection period of 2013 to 2020. It provides increased service levels while providing the opportunity to increase diversion from landfill.

Table 1: Summary of Preferred Waste Collection System - Year One Costs in 2011 Dollars		
Project 5 Highlights (Bi-weekly + Enhancements)	Costs	Benefits
What Services will be provided? <ul style="list-style-type: none"> • Weekly Green Cart • Year-round weekly unlimited Leaf & Yard waste (LYW) collection • Bi-weekly garbage collection • Year-round bi-weekly call-in bulk waste • Weekly two stream recycling collection • Weekly Front-end Bin Service garbage collection • Weekly front-end Bin Service for Recyclable Fibres collection; • Weekly two-stream Automated Recycling 	\$20.93 million per year	<ul style="list-style-type: none"> • Increased diversion • Increased service levels for LYW and bulk from seasonal to year-round collection • Reduced potential for illegal dumping of LYW and bulk • Maximize capacity at Central

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Table 1: Summary of Preferred Waste Collection System - Year One Costs in 2011 Dollars		
Project 5 Highlights (Bi-weekly + Enhancements)	Costs	Benefits
<ul style="list-style-type: none"> Cart collection Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers 		<ul style="list-style-type: none"> Composting Facility Increased services at lowest cost Reduced air emissions from Compressed Natural Gas (CNG) vehicles
Who will provide recycling collection service? <ul style="list-style-type: none"> Continue with 100% contracted collection 	Included Above	
What policy changes will be implemented? <ul style="list-style-type: none"> Six container limit for bi-weekly garbage collection 	\$.25 million	<ul style="list-style-type: none"> Increased service level for container limits Flexibility for setting out extra waste Reduced potential for illegal dumping No need for special consideration or grace weeks Does not require additional costs for production and distribution of tags
<ul style="list-style-type: none"> Recycling Container Options: Revise by-law to allow for use of lids on blue boxes and larger blue boxes 	\$0	<ul style="list-style-type: none"> Flexibility Potential reduction in windblown litter
<ul style="list-style-type: none"> Supply of Bin Containers – Municipal Facilities 	\$.02 million	<ul style="list-style-type: none"> Lower cost from current rental system
<ul style="list-style-type: none"> Smaller Green Carts: Phase in of smaller green carts for replacements 	\$0	<ul style="list-style-type: none"> Flexibility for residents Reduced capital costs

Table 1: Summary of Preferred Waste Collection System - Year One Costs in 2011 Dollars		
Project 5 Highlights (Bi-weekly + Enhancements)	Costs	Benefits
Total Cost (2011 \$s)	\$21.20 million	<ul style="list-style-type: none"> • Approximately \$3 million savings compared to 2011 budget

Halton Recycling Ltd. (dba Emterra Environmental) is the Preferred Proponent for RFP C11-30-11 for Project 5. It is recommended that the Preferred Waste Collection System in Project 5 be approved, and that Halton Recycling Ltd. (dba Emterra Environmental) be named the Successful Proponent for the provision of the contracted waste collection services for the contract period of 2013 to 2020, in accordance with the detailed recommendations in this report.

Alternatives for Consideration - See Page 11

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial: As part of the Evaluation Process set out in the RFP a detailed financial analysis was completed on the Waste Collection System options which took into consideration the prices submitted in the RFP proposals, the costing submitted by the Internal Costing Team, financial considerations for the Additional Work, and other variables which affect the operation of the City’s waste management system. Table 1 in the Executive Summary includes these system costs for the first year of the contract, estimated at \$21.2 million.

The waste collection costs associated with the Preferred Waste Collection System are forecast to be approximately \$3 million lower than the 2011 waste collection budget. The cost savings are attributed to several factors including the increased competitive market in the waste collection industry, technical advances since the last issuance of the City’s waste collection contracts, and improved knowledge of the City’s waste management services related to tonnage collected through each program. The costs for the Internal Costing Team included options for the fleet acquisition/retention taking into consideration the state of the City’s fleet reserve.

The capital costs associated with larger blue boxes and smaller green carts can be accommodated within the existing capital budget.

As a result of the recommended Waste Collection System, the Waste Recycling Program – Vehicle Acquisition and Facility Modifications 2012 Capital Budget Project (P. 534 of 2012 Capital Budget Book 2) will not be required. This project was parked pending receipt of additional information as per item (d)(ii)(i) of the December 1, 2012 General Issues Committee Meeting. It is recommended that Capital Project 5121294500 Recycling Program – Vehicle Acquisition and Facility Modification, parked during the 2012 Capital Budget process be withdrawn from further consideration and

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the 2012 Capital Financing Strategy amended to reduce reliance on Future Fund financing.

As such there are no capital costs associated with the recommendations in this report.

Based on escalation factors only, it is estimated that the seven (7) year costs associated with the Preferred Waste Collection System would be in the order of \$193 million. However it must be noted that other variables may impact on costs such as waste tonnages, growth and CCF contracts.

Staffing: There are no staffing implications associated with the recommendations in this report. The current staff complement will continue to provide those waste collection services delivered by the public forces in the City's 'A' Zones.

Legal: Legal Services staff provided assistance with the RFP preparation and evaluation process and will be involved with the contract preparation and execution of the agreement with Halton Recycling Ltd (dba Emterra Environmental).

An agreement will be finalized with the Successful Proponent, Halton Recycling Ltd. (dba Emterra Environmental), pending approval by Council. RFP C11-30-11 included a draft copy of the agreement which will form the basis of the final agreement in addition to the Successful Proponent's proposal and all applicable clarifications accepted by the City. If the Successful Proponent fails to enter into the Agreement and provide all ancillary documents required under the RFP and the Agreement, the City reserves the right to take other actions which include:

- terminating discussions with the Successful Proponent;
- selecting another Proponent as the Successful Proponent and enter into the Contract discussions to finalize and execute the Agreement;
- revise and reissue the RFP or cancel the RFP; or
- pursue any other rights or remedies available under the RFP.

Legal services will assist with the necessary amendments to the Solid Waste Management By-law (09-067).

HISTORICAL BACKGROUND

The information and recommendations outlined in this report have City wide implications and relate to municipal waste collection services provided across the City.

Appendix C to Report PW11030d includes the historical background leading up to the preparation of this report including:

- Previous Reports
- Current Waste Collection System
- Waste Collection System Review

POLICY IMPLICATIONS

The recommendations in this report are guided by the Public Works Business Plan, 'Innovate Now!', the City's Purchasing Policy, the Solid Waste Management Master Plan (SWWMP), and the Solid Waste Management By-law 09-067.

1. Public Works Business Plan - 'Innovate Now!'

The recommendations in this report support the vision drivers of Processes and People as they provide innovative solutions to creating a more efficient service delivery model to the citizens of Hamilton.

2. City of Hamilton Purchasing Policy

Purchasing Policy 5.4 – Policy for Request for Proposals (\$5,000 and greater): The RFP process was structured in accordance with Policy 5.4 to solicit pricing for the waste collection services.

3. Solid Waste Management Master Plan (SWMMP)

The development of the Waste Collection System complies with several SWMMP recommendations, including:

- Optimizing the landfill capacity through waste diversion (SWMMP recommendation #2);
- Implementing waste diversion programs to help increase the City's waste diversion rate (SWMMP recommendation #3);
- Developing programs to support the continuous improvement of the City's waste management system (SWMMP recommendation #13); and
- Ensuring that contractual arrangements with the private sector provide protection to the City against risk associated with non-performance (SWMMP recommendation #15).

4. Solid Waste Management By-law 09-067

The City's Solid Waste Management By-law 09-067 regulates the requirements for the waste collection programs. Amendments will be required to the By-law related to the proposed changes to the waste collection services including allowing alternative recycling containers, and revisions to the waste collection schedule.

RELEVANT CONSULTATION

A Core Team consisting of staff from Finance, Legal Services Division and Operations & Waste Management was established to oversee the Waste Collection System review. Meetings were held with Senior Management staff throughout the RFP process to keep them informed of the project's progress.

The Internal Costing Team's submission was developed independently by a team including the Transportation, Energy and Facilities Division (Fleet Services Section), Environment and Sustainable Infrastructure Division, Human Resources Department, Procurement Section, CUPE Local 5167 and Operations & Waste Management staff.

Regular updates on the Waste Collection System review were provided to the Solid Waste Management Master Plan Steering Committee and Waste Reduction Task Force at their monthly meetings. The results of the RFP process were reviewed and approved by the Solid Waste Management Master Plan Steering Committee.

The Waste Reduction Task Force, at its meeting on December 7, 2011, expressed concerns that any weekly container limit exceeding one (1) container or bi-weekly container limit exceeding two (2) was a step backward relative to diversion and should not be considered.

ANALYSIS / RATIONALE FOR RECOMMENDATION

The recommended Waste Collection System and Preferred Proponent are expected to provide the City with economic value while providing residents with an improved level of service and continuing to promote waste diversion. As set out in the RFP, the Preferred Waste Collection System will be based on a balance of economic, environmental and social factors.

1. Economic Considerations

The recommended system is the lowest cost Waste Collection System of the six Projects in RFP C11-30-11 that allows the City to retain the marketable capacity at the Central Composting Facility. The estimated annual costs are \$21.2 million in 2011 dollars. As a result of competitive pricing in the marketplace this system can also be provided at a lower cost compared with the \$24.8 million budgeted for collection services in 2011.

As part of Report PW07151d, Council directed staff to consider options to manage the processing capacity at the City's Central Composting Facility (CCF) to retain the revenue source for the City. The recommended Waste Collection System provides the City with the opportunity to maintain the merchant capacity at the City's Central Composting Facility. By collecting leaf and yard waste as a separate stream throughout the year as proposed in the recommended system, the City can process yard waste at the City's leaf and yard waste composting facility at a lower cost than processing this material at the CCF. This in turn allows capacity at the CCF to continue to be used as a revenue generator by processing organic materials from other sources. It also assumes that the current or future clients will need compost processing capacity. The City currently has contracts with Simcoe County and Halton Region.

The City may also see additional revenue from the increased capture of recyclable materials.

2. Environmental Considerations

The recommended system helps to encourage waste diversion since the City's curbside collection for diversion programs (organics, recycling and leaf and yard waste) are provided on a weekly basis throughout the year. Bi-weekly week garbage collection encourages residents to use the weekly diversion programs for their recyclable materials, organics and leaf and yard waste. Increased waste diversion will extend the

lifespan of the City's Glanbrook landfill. From the experience of other municipalities that have implemented bi-weekly garbage collection, they have noticed an increase in their waste diversion after they made the change. For example, Halton Region introduced bi-weekly garbage collection with a six (6) container limit for garbage and achieved 59% residential waste diversion.

As part of the Additional Work staff proposes to include recycling container alternatives as part of the recommended system. The recycling container alternatives are an improvement to the system since residents will have the opportunity to use larger recycling containers. Residents will also be able to use lids for blue boxes to contain materials. These alternative recycling containers help to reduce escaped waste therefore decreasing the amount of litter on streets particularly on windy days.

In the recommended system, the Proponent proposes to use Compressed Natural Gas (CNG) powered vehicles which reduce air emissions.

3. Social Factors

The recommended Waste Collection System will be convenient for residents as it provides service enhancements for:

- Leaf and yard waste collection
- Bulk waste collection
- Container limit for garbage on a bi-weekly basis

Since unlimited leaf and yard waste collection is provided on a weekly basis year round, this represents an increase in service level from the bi-weekly seasonal unlimited collection and weekly two bags of leaf and yard waste with the green cart. Residents will also have the opportunity to call in for bulk waste collection on a bi-weekly basis year round rather than waiting for the seasonal collection period as part of the current system. This service improvement is expected to meet the needs of residents since staff has often received public requests for increased collection of yard waste and bulk waste.

Residents may view bi-weekly garbage collection to be a service reduction so it is important that some flexibility be considered. To increase the acceptability of bi-weekly garbage collection, the container limit is proposed to be changed to allow up to six (6) containers per residential unit on the bi-weekly schedule. The six (6) container limit will eliminate the need for the current Special Consideration policy as well as the three 'grace weeks' held annually which are part of the existing one container limit. At present, most households set out one (1) container of garbage per week and many households may continue to set out a minimum amount of garbage on the proposed bi-weekly collection schedule. The six (6) container limit will allow households to put out additional garbage if necessary during the year.

Overall it is expected that the proposed changes will simplify the system for all residents, provide flexibility, improve diversion and reduce incidents of illegal dumping and escaped waste.

As part of the approval of the recommended Waste Collection System, the focus of the Operations & Waste Management Division's Community Outreach plans for 2013 will include a comprehensive educational campaign on the new Waste Collection System.

ALTERNATIVES FOR CONSIDERATION

In this section of the report the following subsections will be addressed:

- (1) Summary of Request for Proposals (RFP) C11-30-11
- (2) Internal Costing Review
- (3) Evaluation of RFP Proposals
- (4) Conclusion and Recommendations

1. Summary of RFP C11-30-11

The City issued RFP C11-30-11 to solicit prices for waste collection services to be provided under contract. The RFP was issued on August 18, 2011 and closed on October 19, 2011. Six Projects as outlined in Report PW11030d as Appendix A were included in the RFP to obtain costs for various Waste Collection System options. The RFP also included Additional Work to determine costs associated with the following options:

- Weekly collection of two or more containers and bi-weekly collection of three (3) or more containers of garbage per residential unit;
- Adoption of a garbage tag system for additional containers;
- Collection of recycling containers with a lid;
- Bulk waste reuse event either by collection zone or on a per ward basis;
- Supply of front-end bin containers for garbage collection at municipal facilities.

There are three sets of Projects; Projects 1 and 2 representing the status quo system, Projects 3 and 4 representing enhancements to the status quo system, and Project 5 and 6, which includes enhancements as well as bi-weekly collection for garbage and bulk waste. The difference between the Projects in each set is the recycling collection component in the 'A' Zones. In Projects 2, 4 and 6, the Internal Costing Team was asked to provide technical and financial submissions for the collection of recyclable materials in the 'A' Zones. In Projects 1, 3 and 5, the City-wide collection of recyclables is wholly contracted. Otherwise the Projects in each set are identical in terms of the services to be delivered.

The Proponents were required to submit a proposal for each Project as well as supply information on the Additional Work. Alternative proposals were not included in the RFP document due to complex range of services which needed to be priced as part of the main RFP requirements. Six addenda were issued to address adjustments to the RFP document and questions raised by Proponents and the Internal Cost Team. The RFP document included the draft copy of the agreement so that the Proponents could become familiar with the content and submit a Proposal based on that agreement.

A Proponent's meeting was held on August 30, 2011 to provide a summary on the RFP document and background information on the City's Waste Collection System.

Attendance at the Proponent's meeting was optional as it was intended to summarize the City's requirements. There were 25 people in attendance at the meeting representing ten companies. A total of four companies submitted proposals in response to the RFP.

2. Internal Cost Review

An Internal Costing Team was established to develop costs associated with the continued provision of services for the City's 'A' Zones including collection of organic waste, garbage, leaf and yard waste and bulk waste in parallel to the RFP process. The Internal Costing Team was also required to provide pricing for recycling collection by public forces in the City's 'A' Zones as part of Projects 2, 4, and 6.

The Internal Costing Team included staff from the Operations & Waste Management Division with support from Finance, Transportation, Energy and Facilities Division (Fleet Services Section), Environment and Sustainable Infrastructure Division, Human Resources Department, and the Procurement Section. The Internal Costing Team received assistance from HDR Corporation to develop the Internal Cost Team's technical submission. The costing exercise was completed in isolation of the RFP process to ensure impartiality in the process.

The Internal Costing Team generally followed the specifications set out in the RFP. The Internal Costing Team's submission was submitted to the Procurement Section in a similar manner and in the same timeframe as the RFP proponents.

3. Evaluation of RFP Proposals

The City received submissions from four companies including BFI Canada Inc., GFL (Green For Life) Environmental East Corporation, Halton Recycling Ltd. (dba Emterra Environmental), and Modern Landfill Incorporated. The proposals submitted were in compliance with the City's submission requirements as determined by the Procurement Section.

The evaluation process has five separate phases:

- Phase 1 (step 1) - Evaluation of the Technical Submission(s) for each Project submitted by the Proponents;
- Phase 1 (step 2) - Evaluation of the Price Submission(s) for acceptable Proposals;
- Phase 2 - Waste Collection System Analysis;
- Phase 3 - Selection of Preferred Proponent and Preferred Waste Collection System for consideration by Council;
- Phase 4 - Council Award including the approval of the Successful Proponent and Selected Waste Collection System; and
- Phase 5 - Agreement Finalization and Execution.

Information on the evaluation process was included in the RFP document. The technical evaluation criteria is included as Appendix D to Report PW11030d.

3.1 The RFP Evaluation Process

The submissions were reviewed using a two-step evaluation approach, with the first step being the technical evaluation and the second step being the financial evaluation.

3.1.1 Phase 1 (Step 1) - Technical Evaluation

A RFP Evaluation Team comprised of four staff and the City's technical consultant was responsible for reviewing technical submissions. Proposal scores were determined on a consensus basis with input from all members of the RFP Evaluation Team.

The technical submissions were evaluated using the technical evaluation criteria included in the RFP. To pass the technical evaluation, the technical submissions were required to achieve a score of 80% or greater for their operational details (i.e. vehicle requirements), as well as an overall score of 80% or greater for the technical submission. The proposals which achieved the minimum score proceeded to the financial evaluation. Table 2 includes the summary of the results from the technical evaluation and identifies the Acceptable Projects that would move forward to the financial evaluation.

The Internal Costing Team provided technical submissions for the service delivery associated with collection of organic waste, recycling, garbage, leaf and yard waste, and bulk waste in the City's 'A' Zones for Projects 2, 4 and 6. The Internal Costing submission was evaluated but not scored, and was rated as being adequate or inadequate. This process is set out in the RFP document.

Table 2: Technical Evaluation Results

	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6
Company Name	Acceptable Proposal/Submission					
BFI Canada Inc.	Yes	Yes	Yes	Yes	Yes	Yes
GFL Environmental East Corporation	Yes	Yes	Yes	Yes	Yes	Yes
Halton Recycling Ltd. (dba Emterra Environmental)	Yes	Yes	No	No	Yes	Yes
Modern Landfill Incorporated	No	No	No	No	No	No
Internal Cost Submission	N/A	Adequate	N/A	Adequate	N/A	Adequate

3.1.2 Phase 1 (Step 2) - Financial Evaluation

Once the technical evaluation was complete, the Procurement staff released the pricing packages to the Evaluation Team for both the Acceptable Proposals and the Internal Cost submission. The price submission for each Acceptable Project was reviewed and is summarized in Report PW11030d as Appendix E. The Estimated Annual Value was

calculated for each Acceptable Project based on the costs supplied in the price submissions in 2011 dollars.

Table 3 includes the summary of the lowest Estimated Annual Value from the financial analysis for each Project in the RFP process and the Internal Costing. Two Proponents of Acceptable Projects submitted the lowest pricing for all of the Projects. Halton Recycling Ltd. (dba Emterra Environmental) has the best pricing for Projects 1, 2, 5 and 6, while GFL Environmental East Corporation has the best pricing for Projects 3 and 4. The Internal Costing Team's prices for Projects 1, 3 and 5 excluded recycling collection.

Table 3: Financial Evaluation Results (Estimated Annual Contract Value in 2011 \$ Millions)

	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6
Project Cost = Contracted Services + Public Sector Costs	\$19.50	\$21.30	\$21.97	\$23.38	\$20.96	\$22.40

It is important to note that the RFP clearly indicated to Proponents that the lowest overall Estimated Annual Value of a Project would not necessarily identify the Preferred Proponent once the Preferred Waste Collection System was determined.

The results in Table 3 also indicate that the Estimated Annual Value of Projects 1, 3 and 5 are less than their set partners in Projects 2, 4 and 6. This is due to the Internal Costing price to provide recycling collection in the 'A' Zones, associated with the cost of facility requirements for the recycling fleet that does not currently exist.

As a result, only Projects 1, 3 and 5 moved forward to the Waste Collection System Analysis.

3.2 Phase 2 - Waste Collection System Analysis

The Waste Collection System analysis includes consideration of the RFP and Internal Costing results in Table 3 for Projects 1, 3 and 5, the implications of the Additional Work and consideration of operational impacts. In advance of the review of the Additional Works from the RFP and the operational impacts specific to those Additional Works, staff reviewed the impacts of the Projects on the Central Composting Facility pursuant to earlier direction by Council for staff to report back on ways to manage capacity and maintain marketable capacity for the CCF composting materials.

The Waste Collection System analysis includes consideration of the following:

- operational impacts
- social impacts
- environmental impacts
- Additional Work
- smaller green carts
- summary of the Waste Collection System Analysis

3.2.1 Operational Impacts

Earlier reports to Public Works Committee addressed the operating inefficiencies and revenue risks associated with the composting of significant quantities of leaf and yard waste collected in the green cart program at the Central Composting Facility (CCF). Although some minor operational changes have been made in the area of collections to try to ease this situation, this has not achieved tonnages significant enough to ease the capacity issue. Continuous efforts are needed to increase the capture of household organic waste in the curbside and multi-residential programs, to implement the green cart program to the commercial sector and to address growth. The contracts with other municipalities and associated revenues at the Central Composting Facility would have to end to accommodate the City's future needs. This will not only reduce revenues but will also increase processing costs for the City. However the Waste Collection System review and the RFP process offered an opportunity to review services delivered to the public, consider efficiencies and retain the revenue stream.

It is more cost efficient to process the leaf and yard waste at the outdoor windrow leaf and yard waste composting site adjacent to the Glanbrook landfill site. Changes to the waste collection system can address this efficiency. The current waste collection system (status quo system) in Projects 1 and 2 does not facilitate the redirection of the leaf and yard waste. The potential year round collection of leaf and yard waste in Projects 3, 4, 5, and 6 would redirect all leaf and yard waste, except for the permitted top up of the green cart, from the CCF to Glanbrook. There would be some additional costs associated with the handling and transport of the leaf and yard waste from the transfer stations to the composting site at Glanbrook and these have been included in the operational impacts.

The Project costs in Table 4 include the Base Project costs from Table 3, plus the net operating costs/savings associated with the processing of materials at the City's waste management facilities. Since the unit costs in the operating contracts for the CCF, Glanbrook composting site and transfer station operations are confidential within the contracts, the breakdown of costs is not provided.

Table 4: Operational Impacts at Waste Management Facilities (Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Project Cost from Financial Evaluation	\$19,500,300	\$21,967,700	\$20,962,500
Operational Impacts	\$340,000 - \$1,600,000	(\$240,700)	(\$36,000)
Total	\$19,840,300 - \$21,100,300	\$21,727,000	\$20,926,500

The operational impacts associated with Project 1 are the potential lost revenues and increased processing costs at the Central Composting Facility. The \$340,000 is related to one of the current contracts that would need to be forfeited just to meet the City's

current needs. The \$1.6 million represents the value of all of the merchant capacity available based on the City's current processing needs. If the City is to increase the capture of household organic waste in the curbside and multi-residential programs, implement the green cart program to the commercial sector and accommodate growth over the course of the waste collection period of seven (7) years, this merchant capacity and associated revenues will be diminished. As such at least some of the current revenue stream is at risk and the actual amount will be dependent on the City's needs. The revenue retention also assumes that our current partners are interested in continuing to acquire capacity from the City however there is currently a shortage of organics processing capacity in Ontario.

Another alternative for future consideration may be a long term partnership with another municipality that would facilitate an expansion to the CCF.

The operational impacts associated with Project 3 represent the cost of handling, transfer and processing of the leaf and yard waste that can be redirected to the windrow composting facility adjacent to the Glanbrook landfill site. The operational impacts in Project 5 relate to the redirection of leaf and yard waste and increased organics processing resulting from bi-weekly garbage collection.

3.2.2 Social Impacts

The social impacts considered include public acceptability, communicating waste collection services and impacts on illegal dumping.

The current Waste Collection System in Project 1 has posed problems for residents around convenience around the garbage limit and the seasonal leaf and yard and bulk waste collection. It is considered that these inconveniences may be contributing to illegal dumping. Seasonality and bi-weekly leaf and yard waste collection have resulted in some resident confusion. Project 1 does not contribute to waste diversion.

Project 3 would provide residents with the highest possible level of convenience although the weekly garbage collection aspect would not promote waste diversion. It would be easy to communicate this system as all programs would be weekly. Project 3 may contribute to a reduction in illegal dumping of leaf and yard and bulk waste, and garbage subject to any container limit adjustments determined in the analysis of Additional Work.

Project 5 is intended to encourage waste diversion and would provide residents with convenient weekly collection in all waste diversion programs (recycling, organics and leaf and yard waste). The bi-weekly collection of garbage and organics may be considered less convenient however the garbage limit would not be reduced as the bi-weekly container limit would be at least two (2) containers subject to any container limit adjustments determined in the analysis of Additional Work. Year round collection of leaf and yard and bulk waste should contribute to a reduction in illegal dumping. Communicating the waste collection services would be similar to the current in that a schedule would be required for bi-weekly garbage, similar to the current leaf and yard waste schedule.

3.2.3 Environmental Impacts

The environmental impacts considered include waste diversion, waste processing and the size and nature of the waste collection fleet.

Projects 1 and 3 have limited impact on waste diversion. In Project 5, the bi-weekly collection of garbage encourages residents to more fully participate in the weekly diversion programs, with the potential result estimated to be a 6% increase in waste diversion. This is the single most important action that could be taken to increase curbside waste diversion.

Project 1 does not contribute to efficiencies in waste processing. The ability to redirect the leaf and yard waste in Projects 3 and 5 away from the CCF to the outdoor windrow facility at Glanbrook makes better use of the lower technological processing facility.

The overall size of the fleet required for all three (3) Projects is about the same, with Project 1 requiring a fleet of 58 and Projects 3 and 5 requiring 60 vehicles each. In Projects 1 and 5 the Proponent proposes to use vehicles powered with compressed natural gas (CNG). The use of CNG significantly reduces air emissions compared with the use of diesel. Emission of particulate matter, nitrous oxide (NO_x) and carbon monoxide (CO₂) are reduced. The Proponent of Project 3 proposes to use vehicles powered with diesel and biodiesel. The biodiesel fuel reduces greenhouse gases and produces lower hydrocarbon emissions than CNG. The vehicles and fuels in all Projects offer environmental benefits compared to full diesel fuelled fleets.

3.2.4 Additional Work

The RFP process also included Additional Work that was directed by General Issues Committee on July 6, 2011. In addition to the RFP requirements for the current service levels, the RFP and Internal Costing processes also solicited additional costs to provide the following additional work:

- increased container limit for garbage
- garbage tag system
- recycling container alternatives (larger blue boxes, lids)
- bulk waste reuse events
- supply of front end bin containers for municipal facilities

A number of tables below show the costs associated with the Additional Works including the pricing from the RFP and Internal Costing. The Additional Works in these tables represent a menu of available options that could be selected for inclusion in the overall work. Not all options would necessarily be selected for implementation, e.g. additional garbage containers would not necessarily be combined with a garbage tag system.

Comments related to the merits of each item of Additional Work and a recommended disposition on each item are included.

Table 5: Additional Work - Additional Garbage Containers (Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Price for Additional Containers	\$269,100	\$297,000	\$237,300
Operational Impacts	\$11,000	\$11,000	\$11,000
Total	\$280,100	\$308,000	\$248,300

One of the items of Additional Work in the RFP was consideration of increasing the container limit for garbage. Recognizing that the one container limit is considered to be associated with illegal dumping, this option was included in the RFP as an Additional Work item. The RFP requested pricing for two containers or more of garbage, to provide the City with some flexibility although some residents will view this as contrary to the City's waste diversion efforts. The operational costs are associated with the transfer and disposal costs for landfilling additional garbage. Increasing the container limit for garbage may result in reduced illegal dumping.

In the weekly collection of garbage, the increase could be to two containers. This would provide some flexibility for residents and may remove the need for the amnesty days. However it would not contribute to increased waste diversion and it would not eliminate the need for Special Considerations to address families with small children or medical circumstances, home day care facilities or agricultural properties.

The option for bi-weekly garbage collection may facilitate more flexibility while continuing to improve waste diversion. Halton Region achieved 59% waste diversion with bi-weekly garbage collection and a six (6) container limit for garbage. It is noted that Halton Region has recently approved a bi-weekly three (3) container limit with the option of buying tags for additional bags. Bi-weekly garbage collection promotes waste diversion as residents opt to use the waste diversion programs that continue to be offered on a weekly basis.

The pricing for this Additional Work is slightly higher in Projects involving weekly collection of garbage. In Hamilton, a six (6) container limit would eliminate the need for amnesty days or Special Considerations. Special Consideration households have been in the order of 1000 per year since 2009 (many are renewals, but the process for renewals is the same as new applications). The applications are received either on-line or by mail, processed, documented and letters sent to applicants. The effort is about 0.25 of an FTE. If Special Considerations were not necessary as a result of more flexible container limits, the staff time would be allocated to other activities such as expediting road and alley closure applications.

TABLE 6: ADDITIONAL WORK - GARBAGE TAG SYSTEM (Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Price for Garbage Tag System	\$68,000	\$297,000	\$57,000
Operational Impacts	\$210,000	\$210,000	\$210,000
Total	\$278,000	\$507,000	\$267,000

The other consideration around garbage collection was the possible implementation of a bag tag system. Similar to increasing the garbage container limit, a tag system for garbage containers could provide some flexibility, but may not have a significant impact on the reduction in illegal dumping. The City may have increased transfer and disposal costs associated with landfilling additional garbage however quantifying this is not possible and operational impacts have not been included in the costs.

The majority of the costs associated with the operational impacts are based on the provision of twelve (12) free tags per household per year and 104 free tags for Special Consideration households. These costs include \$170,000 for the production of the tags and \$40,000 for distribution and promotion and education. The administrative costs (staffing) associated with the Special Considerations would continue to be required in this process. Communicating the tag system would be undertaken as part of the Divisional Community Outreach work plan and budget.

A tag system will not contribute to waste diversion and some residents will view a tag system as contrary to the City's waste diversion efforts.

Although a system of user pay for tags for additional bags of garbage is expected to be cost neutral, the concept of user pay has historically not been well received by Council and is not proposed to be considered further.

Table 7: Additional Work - Recycling Container Alternatives (Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Price for Alternative Recycling Containers	\$0	\$342,600	\$0
Operational Impacts	\$0	\$0	\$0
Total	\$0	\$342,600	\$0

Discussions have been on-going for several years about blue box capacity and windblown blue box materials. In the RFP and process, an item of Additional Work was included to obtain pricing on the impact of including a lid for blue boxes. The use of larger blue boxes and plastic bags for recyclable materials was also considered, however the cost impacts in the pricing are predominantly associated with the removal and return of the lids.

The Proponents of Projects 1 and 5 did not include any increased cost associated with alternatives to the blue box, while the Proponent of Project 3 included \$342,600 for the

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collection of alternative containers. It would appear that this additional cost is based on almost all households using a blue box with a lid.

Information on alternative recycling containers was included in Report PW11030c. The capital cost of purchasing a lid for a blue box is about two dollars (\$2.00). It is not proposed that the City purchase lids for blue boxes but that blue boxes with lids be an acceptable container for recyclables and that Waste Management By-law 09-067 be amended to reflect this change. Covering or containing recyclable materials can reduce the amount of moisture in the containers.

The use of larger blue boxes with a 22 gallon capacity would only result in cost increases in Project 3. These larger blue boxes have been introduced in Durham Region for containers only and the program is considered to be quite successful. Blue boxes that are 16-gallon in size cost approximately \$5.00, and 22-gallon sized blue boxes are approximately \$5.75. The City may consider distributing slightly larger blue boxes in the event that the City continues to supply blue boxes to residents in the future. The 2012 capital budget for blue box replacement is \$235,000. This would buy either 47,000 boxes at the current size or about 41,000 at the larger size.

It is expected that the number of blue boxes required, regardless of size, can be adequately managed within the existing capital budget for container replacement. It is therefore proposed that larger blue boxes be acquired with the intent that they be used for recyclable containers. Residents may also have the option to purchase acceptable larger recycling containers and boxes with a lid from retail locations. The City will need to develop community outreach information to describe the types of recycling containers that can be used for the City's recycling program. The Solid Waste Management By-law will also require amendment to include lids and larger sizes as acceptable recycling containers.

With regard to the use of plastic bags for recyclable materials, these have been an acceptable container for recyclable materials for some time. They have not been promoted because of our practice to minimize plastic bags for waste diversion programs (recycling, leaf and yard waste and organics). Although there are no additional costs associated with the collection of recyclable materials in plastic bags, any substantial increased use of them would require a bag breaker at the Materials Recycling Facility (MRF). At present bags are received at the MRF, they are being managed manually (ripped and sorted) as part of the contract cost. However if the number of bags continues to increase, it may be necessary to install the equipment to manage the volume of bags. The capital cost of a bag breaker is in the order of \$200,000. The maintenance costs of the equipment are significant because of breakdowns caused by the plastic bags, however any adjustments in operating costs would need to be discussed and negotiated with the MRF operator, Canada Fibers Limited. It is not proposed that the use of plastic bags in the recycling program be promoted or encouraged, although they will remain as an acceptable container at this time.

Changes to containers for recyclable materials may increase waste diversion.

Table 8: Additional Work - Supply of Front-End Bin Containers for Municipal Facilities (Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Price for Front-End Bins	\$17,900	\$19,900	\$17,900
Operational Impacts	\$0	\$0	\$0
Total	\$17,900	\$19,900	\$17,900

Another item of Additional Work in the RFP was for the provision of front-end bin containers for municipal facilities. A portion of the front-end bin containers at municipal facilities are leased or rented. The cost associated with the current bin rental rates is higher than the costs provided by any of the Proponents for Projects 1, 3 or 5. The supply of front-end bin containers for garbage collection at municipal facilities is proposed since the cost from RFP C11-30-11 is considerably lower than the current rental arrangements at several municipal facilities.

The RFP provides opportunities to provide cost savings for municipal operations as part of economies of scale. As leasing arrangements end, the bins would be replaced by the Successful Proponent. The pricing is based on all bins being replaced and would be a one time cost over the life of the contract. Although some savings may be realized in the operating budgets for leasing costs at the various facilities, the timing and amount of any savings is difficult to project at this time.

The inclusion of this Additional Work item would also centralize the provision of municipal bins with one (1) supplier.

Table 9: Additional Work – Bulk Waste Reuse Events (Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Price for Bulk Events	\$44,100	\$39,400	\$27,000
Operational Impacts	\$25,000	\$25,000	\$25,000
Total	\$69,100	\$64,400	\$52,000

Council directed that pricing be received for bulk events in each waste collection zone. In addition to the zone pricing the RFP also solicited pricing for events by ward. The pricing above reflects the cost of bulk events by waste collection zone.

Bulk events may provide reuse opportunities although some residents may view them as nuisances related to potential increases in traffic and litter in their neighbourhoods. The amount of materials that go to reuse cannot be quantified or included as waste diversion. These events result in scavenging, sending mixed messages around Waste Management By-law 09-067 which prohibits scavenging.

There may also be operational impacts at the Transfer Stations during event weeks however it is difficult to quantify the impact.

The inclusion of bulk events is only critical to Project 1 where the seasonal collection would continue to be offered. With the weekly collection of bulk offered in Project 3 or

the bi-weekly collection of bulk in Project 5, both spread evenly throughout the year, there should be no need for separate events to be held and staff is not recommending these events at this time.

It is however suggested that bulk collection be monitored together with incidences of illegal dumping as the contract starts and that subject to the reasonable escalation in pricing, these events could be included at any time during the contract.

3.2.5 Smaller Green Carts

Options for smaller green carts did not require separate pricing as there are already smaller carts being used in some areas of the City. The prices submitted include cost for both manual and semi-automated collection of larger carts.

Staff is recommending that the use of smaller carts be phased in during this contract period for use in single family collection of organic waste. Smaller carts would range from 45 to 80 litres.

Use of smaller carts that can be collected manually provides a number of benefits. These include: reduced storage space requirements for homeowners, lower replacement costs, ensuring that the primary use of the carts is for household organic waste thereby maximizing the effectiveness of the leaf and yard waste program, and potentially reduced collection costs for the next collection period based on manual collection only. It is expected that the larger 120 litre carts will continue to be used for multi-residential and commercial collection.

It is expected that cart replacement requirements will be 10% per year by 2013. Smaller cart costs range from \$25 to \$35, while the larger cart costs range from \$40 to \$50. As such the capital replacement cost of carts may be reduced in future as smaller carts are phased in.

3.2.6 Summary of Waste Collection System Analysis

Table 10 shows the cost of the three systems based on the results of the RFP for each Project, Internal Costing, the recommended Additional Work and any associated Operational Impacts. Project 3 is a higher cost in that the leaf and yard waste collection service level is increased over Project 1 and the frequency of garbage and bulk collection is weekly compared with the bi-weekly collection in Project 5.

Table 10: Summary of RFP Financial Evaluation and Recommended Additional Work(Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Project Cost from Financial Evaluation + Operational Costs	\$19,840,300 - \$21,100,300	\$21,727,000	\$20,926,500
Additional Garbage Containers	\$280,000	\$308,000	\$248,300
Alternative Recycling Containers	0	\$342,600	0

Table 10: Summary of RFP Financial Evaluation and Recommended Additional Work(Estimated Annual Cost in 2011\$)

Description	Project 1	Project 3	Project 5
Supply Front End Bins	\$17,900	\$19,900	\$17,900
Total	\$20,138,200 \$21,398,200	\$22,397,500	\$21,192,700

Project 3 provides for a full and robust suite of waste collection services and the cost reflects these services.

The differences between Project 1 and Project 5 vary depending on the City's ability to maintain marketable capacity at the Central Composting Facility while accommodating organic waste from the City's green cart program. Project 5 provides more certainty than Project 1 in eliminating the risk associated with losing the revenue stream for the merchant capacity at the CCF. Current contracts can continue with Project 5, resulting in this being the lowest cost system.

The system analysis also considers the environmental and social benefits of the various systems. Table 11 provides an overview of the three systems including all three aspects that were considered.

Table 11: Waste Collection System Analysis - Overview

Consideration	Project 1 (Current System)	Project 3 (Current System + Enhancements)	Project 5 (Bi-weekly Garbage Collection + Enhancements)
Financial Total system costs	✓	✗	✓✓
Environmental Diversion potential, ability to expand green cart program, green fleet	✗	✓	✓✓
Social Results in service level improvements, ease of use, addresses illegal dumping concerns, provides flexibility	✗	✓	✓✓

3.3 Phase 3 - Determination of Preferred Proponent and Preferred Waste Collection System

The Preferred Waste Collection System is Project 5 based on the results of the Waste Collection System analysis. This system includes the following main collection services and Additional Work:

Collection Services

- (1) Weekly co-collection of organic waste and leaf and yard waste – Co-collection vehicles would be used to collect organic waste and leaf and yard waste simultaneously as two separate streams.
- (2) Bi-weekly collection of curbside garbage.
- (3) Bi-weekly call-in service for bulk waste collection for curbside residential properties, and weekly call-in service for high-rise multi-residential properties.
- (4) Weekly curbside recycling collection, automated recycling cart collection, and recycling collection for festivals and special events. Recycling collection would be a contracted service City-wide.
- (5) Supply of front-end bin containers for recyclable fibres and bin service for recyclable fibres collection for eligible properties including schools and municipal facilities.
- (6) Bin service for garbage collection for eligible properties including multi-residential properties and municipal facilities.

Additional Work

- (1) Bi-weekly collection of two or more (6) containers of garbage per curbside residential unit;
- (2) Alternative recycling containers to reduce escaped waste; and
- (3) Supply of front-end bin containers for garbage collection at municipal facilities.

Preferred Waste Collection System

The estimated cost for this Waste Collection System and related operating impacts is estimated to be \$21.2 million in the first year based on Project 5, recommended Additional Work and cost implications for the City's waste facilities. Halton Recycling Ltd. (dba Emterra Environmental) is the Preferred Proponent of Project 5.

3.4 Phase 4 - Selection of Successful Proponent through Council Award

This report forms the basis for Council's to make decisions on the delivery of waste collection services. The selection of the Preferred Waste Collection System and a Successful Proponent and the award of the contract for any of the Projects will be based on Council's decisions respecting the options for the delivery of services. The Successful Proponent will be notified that it has been selected in accordance with the requirements of the RFP.

3.5 Phase 5 - Contract Finalization and Execution

The final phase involves the City finalizing and executing the Agreement with the Successful Proponent, Halton Recycling Ltd. (dba Emterra Environmental), for the services pursuant to the requirements of the RFP.

4. Conclusion and Recommendations

The City has received positive results from the issuance of RFP C11-30-11 since the cost for the future Waste Collection System will be provided at a competitive price, which ensures best value for the City. The recommended system is based on Project 5

with Additional Work including recycling container alternatives, increased garbage container limit, and supply of front-end garbage bin containers for municipal facilities.

The recommended Waste Collection System includes several service enhancements, which provide benefits for the community, flexibility for residents and help the City to increase its waste diversion rate and maintain capacity at the City's landfill.

The Waste Collection System should also contribute to a reduction in illegal dumping. The recommended system also allows the City to continue to maintain marketable capacity at the Central Composting Facility.

CORPORATE STRATEGIC PLAN

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Skilled, Innovative & Respectful Organization

- ◆ A skilled, adaptive and diverse workforce, i.e. more flexible staff
- ◆ More innovation, greater teamwork, better client focus
- ◆ An enabling work environment - respectful culture, well-being and safety, effective communication

Financial Sustainability

- ◆ Financially Sustainable City by 2020
- ◆ Effective and sustainable Growth Management
- ◆ Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner
- ◆ Full life-cycle costing for capital

Environmental Stewardship

- ◆ Natural resources are protected and enhanced
- ◆ Reduced impact of City activities on the environment
- ◆ Aspiring to the highest environmental standards

Healthy Community

- ◆ Plan and manage the built environment

APPENDICES / SCHEDULES

- Appendix A - RFP C11-30-11 Project Details
- Appendix B - City's waste collection zones
- Appendix C - Historical Background
- Appendix D - Evaluation Process
- Appendix E - Estimated Annual Value for Acceptable Projects

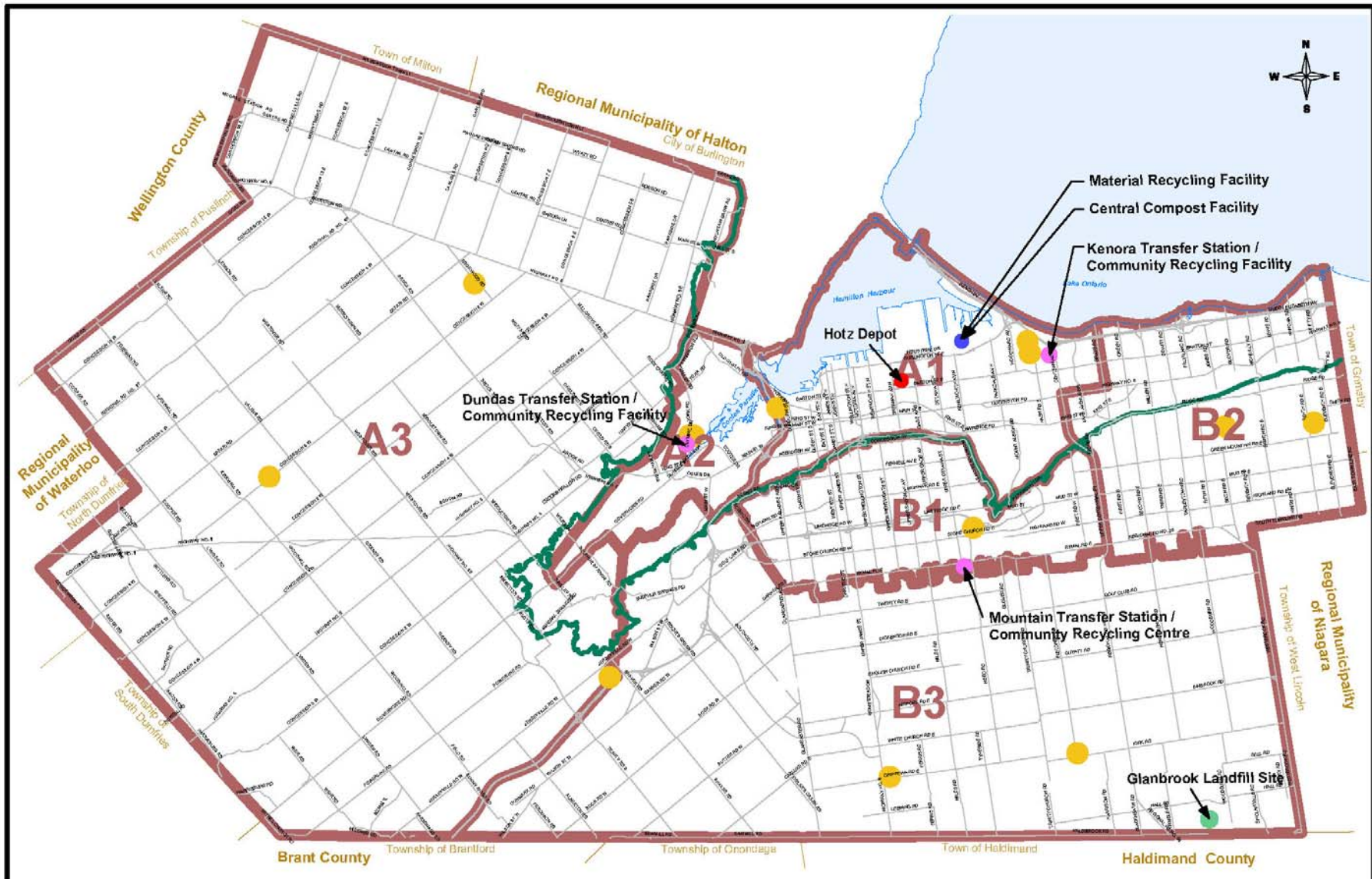
**Waste Collection Services RFP C11-30-11
List of Projects**

Project	Collection Services to be Provided
Project 1	<ul style="list-style-type: none"> (a) Weekly collection of Organic Waste plus up to two containers of Leaf and Yard Waste in Zones B1, B2, B3 (b) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3 (c) Seasonal unlimited Bi-Weekly Leaf and Yard Waste collection in Zones B1, B2, B3 (d) Seasonal weekly call-in Bulk Waste Collection in Zones B1, B2, B3 (e) Two-stream collection of Recyclable Materials City-wide (f) Weekly two-stream Automated Recycling Cart Collection City-wide (g) Weekly front-end Bin Service for Garbage collection City-wide (h) Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection City-wide (i) Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers in Zones B1, B2, B3
Project 1 Additional Work	<ul style="list-style-type: none"> (1) Weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3, in lieu of (b) above. (2) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3, plus additional containers through a Garbage tag system, in lieu of (b) above. (3) Manual collection of Recycling Containers (up to 135 litres) with lids, assuming that over the course of the Agreement all eligible units will convert to use at least one Recycling Container with a lid, as an adjustment to the curbside/roadside component of (e) above. (4) Scheduled Bulk Waste collection reuse event in Zones B1, B2, B3, in addition to (d) above. (5) Supply of front-end Bin Containers for Bin Service for Garbage collection City-wide in addition to (g) above.
Project 2	<ul style="list-style-type: none"> (a) Weekly collection of Organic Waste plus up to two containers of Leaf and Yard Waste in Zones B1, B2, B3. (b) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3. (c) Seasonal unlimited Bi-Weekly Leaf and Yard Waste collection in Zones B1, B2, B3. (d) Seasonal weekly call-in Bulk Waste Collection in Zones B1, B2, B3. (e) Two-stream collection of Recyclable Materials in Zones B1, B2, B3. (f) Weekly two-stream Automated Recycling Cart Collection City-wide. (g) Weekly front-end Bin Service for Garbage collection City-wide. (h) Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection City-wide. (i) Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers in Zones B1, B2, B3.

Project	Collection Services to be Provided
Project 2 Additional Work	<ul style="list-style-type: none"> (1) Weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3, in lieu of (b) above. (2) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3, plus additional containers through a Garbage tag system, in lieu of (b) above. (3) Manual collection of Recycling Containers (up to 135 litres) with lids, assuming that over the course of the Agreement all eligible units will convert to use at least one Recycling Container with a lid, as an adjustment to the curbside/roadside component of (e) above. (4) Scheduled Bulk Waste collection reuse event in Zones B1, B2, B3, in addition to (d) above. (5) Supply of front-end Bin Containers for Bin Service for Garbage collection City-wide, in addition to (g) above.
Project 3	<ul style="list-style-type: none"> (a) Weekly collection of Organic Waste in Zones B1, B2, B3 (b) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3 (c) Weekly Leaf and Yard Waste collection in Zones B1, B2, B3 (d) Weekly call-in Bulk Waste Collection in Zones B1, B2, B3 (e) Weekly two-stream collection of Recyclable Materials City-wide (f) Weekly two-stream Automated Recycling Cart collection City-wide (g) Weekly front-end Bin Service for Garbage collection City-wide (h) Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection City-wide (i) Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers in Zones B1, B2, B3
Project 3 Additional Work	<ul style="list-style-type: none"> (1) Weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3, in lieu of (b) above. (2) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3, plus additional containers through a Garbage tag system, in lieu of (b) above. (3) Manual collection of Recycling Containers (up to 135 litres) with lids, assuming that over the course of the Agreement all eligible units will convert to use at least one Recycling Container with a lid, as an adjustment to the curbside/roadside component of (e) above. (4) Scheduled Bulk Waste collection reuse event in Zones B1, B2, B3, in addition to (d) above. (5) Supply of front-end Bin Containers for Bin Service for Garbage collection City-wide, in addition to (g) above.

Project	Collection Services to be Provided
Project 4	<ul style="list-style-type: none"> (a) Weekly collection of Organic Waste in Zones B1, B2, B3. (b) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3. (c) Weekly Leaf and Yard Waste collection in Zones B1, B2, B3. (d) Weekly call-in Bulk Waste Collection in Zones B1, B2, B3. (e) Weekly two-stream collection of Recyclable Materials in Zones B1, B2, B3. (f) Weekly two-stream Automated Recycling Cart collection City-wide. (g) Weekly front-end Bin Service for Garbage collection City-wide. (h) Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection City-wide. (i) Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers in Zones B1, B2, B3 .
Project 4 Additional Work	<ul style="list-style-type: none"> (1) Weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3, in lieu of (b) above. (2) Weekly collection of one container of Garbage per residential unit in Zones B1, B2, B3, plus additional containers through a Garbage tag system, in lieu of (b) above. (3) Manual collection of Recycling Containers (up to 135 litres) with lids, assuming that over the course of the Agreement all eligible units will convert to use at least one Recycling Container with a lid, as an adjustment to the curbside/roadside component of (e) above. (4) Scheduled Bulk Waste collection reuse event in Zones B1, B2, B3, in addition to (d) above. (5) Supply of front-end Bin Containers for Bin Service for Garbage collection City-wide, in addition to (g) above.
Project 5	<ul style="list-style-type: none"> (a) Weekly collection of Organic Waste in Zones B1, B2, B3 (b) Bi-Weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3 (c) Weekly Leaf and Yard Waste collection in Zones B1, B2, B3 (d) Bi-weekly call-in Bulk Waste Collection in Zones B1, B2, B3 (e) Weekly two-stream collection of Recyclable Materials City-wide (f) Weekly two-stream Automated Recycling Cart collection City-wide (g) Weekly front-end Bin Service for Garbage collection City-wide (h) Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection City-wide (i) Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers in Zones B1, B2, B3

Project	Collection Services to be Provided
Project 5 Additional Work	<ul style="list-style-type: none"> (1) Bi-weekly collection of three or more containers of Garbage per residential unit in Zones B1, B2, B3. (2) Bi-weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3, plus additional containers through a Garbage tag system, in lieu of b) above. (3) Manual collection of Recycling Containers (up to 135 litres) with lids, assuming that over the course of the Agreement all eligible units will convert to use at least one Recycling Container with a lid, as an adjustment to the curbside/roadside component of (e) above. (4) Scheduled Bulk Waste collection reuse event in Zones B1, B2, B3, in addition to (d) above. (5) Supply of front-end Bin Containers for Bin Service for Garbage collection City-wide, in addition to (g) above.
Project 6	<ul style="list-style-type: none"> (a) Weekly collection of Organic Waste in Zones B1, B2, B3. (b) Bi-Weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3. (c) Weekly Leaf and Yard Waste collection in Zones B1, B2, B3. (d) Bi-weekly call-in Bulk Waste Collection in Zones B1, B2, B3. (e) Weekly two-stream collection of Recyclable Materials in Zones B1, B2, B3. (f) Weekly two-stream Automated Recycling Cart collection City-wide. (g) Weekly front-end Bin Service for Garbage collection City-wide. (h) Supply of front-end Bin Containers for Recyclable Fibres and weekly front-end Bin Service for Recyclable Fibres collection City-wide. (i) Multi-day collection of Public Space Litter Containers and Public Space Recycling Containers in Zones B1, B2, B3.
Project 6 Additional Work	<ul style="list-style-type: none"> (1) Bi-weekly collection of three or more containers of Garbage per residential unit in Zones B1, B2, B3. (2) Bi-weekly collection of two containers of Garbage per residential unit in Zones B1, B2, B3, plus additional containers through a Garbage tag system, in lieu of b) above. (3) Manual collection of Recycling Containers (up to 135 litres) with lids, assuming that over the course of the Agreement all eligible units will convert to use at least one Recycling Container with a lid; as an adjustment to the curbside/roadside component of (e) above. (4) Scheduled Bulk Waste collection reuse event in Zones B1, B2, B3, in addition to (d) above. (5) Supply of front-end Bin Containers for Bin Service for Garbage collection City-wide, in addition to (g) above.



**City of Hamilton
Collection Zones**

Legend

- Glanbrook Composting and Landfill Site
- RRC (Material Recycling and Compost Facility)
- Hotz Depot
- Closed Landfill Site
- Transfer Stations/Community Recycling Centers
- Waste Collection Zones

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HISTORICAL BACKGROUND

This appendix provides information on the background reports and outline of the waste collection review process for services to be provided for 2013-2020.

1. Previous Reports

Several reports related to waste collection services preceded this report. These reports include:

- (June 2010) Public Works Committee Report PW07151c - Status of Solid Waste Management Master Plan, Options for Increasing Diversion and Landfill Capacity - Follow Up Report on Additional Diversion Options to Reach 65% Waste Diversion – This report included information on opportunities to increase the City’s waste diversion rate through several methods including the expansion of the green cart program to commercial properties.
- (February 2011) Public Works Committee Report PW07151d - Budget Report on Follow-up to Options for Increasing Diversion and Landfill Capacity -Additional Diversion Options to Reach 65% Waste Diversion – This report included recommendations to optimize the operation of the City’s Central Composting Facility through service changes to the leaf and yard waste collection program.
- (April 2011) Public Works Committee Report PW04113a – Activity Based Costing for Public Sector Waste Collection 2013-2020. This report included recommendations to initiate an internal costing process for waste collection services in the City’s A zones and issue a Request for Proposals (RFP) for contracted waste collection services.
- (April 2011) Information Report PW11030 – Waste Collection and Recycling Processing Procurement Processes for 2013-2020. This report provided information on the proposed approach for the internal costing and RFP procurement processes for waste collection and recycling processing for 2013-2020.
- (July 2011) Public Works Committee Report PW11030a – Waste Collection and Recycling Processing Procurement Processes for 2013-2020. This report included the proposed waste collection service methods for the internal costing and RFP for contracted services.
- (November 2011) Public Works Committee Report PW11030b – Recycling Processing Procurement Process – Contract Extension Negotiations with Canada Fibers Limited 2013-2020. This report approved the continuation of the City’s two-stream processing system and recommended the contract extension with the City’s current Materials Recycling Facility operator.
- (November 2011) Public Works Committee Report PW11030c – Waste Collection and Recycling Processing Procurement Processes for 2013-2020 – Waste Collection System Refinements. This report provided information on various enhancements to the City’s waste collection services including alternative recycling containers, green cart options, garbage container limits, and a garbage tag system.

2. Current Waste Collection System

The City has operated a public/private waste collection service model since 2002 for curbside collection services, except recycling. To facilitate the collection services and comparison of performance and costs, the City is divided into six zones, with two urban zones (A1, B1), two suburban zones (A2, B2), and two rural zones (A3, B3). A map outlining the City's waste collection zones is included in Appendix A.

Public forces collect organic waste, garbage, leaf & yard waste, and bulk waste in Zones A1, A2, A3 and a contractor collects the same material streams in Zones B1, B2, and B3. The City developed an Activity Based Costing model to compare the performance and collection costs between the public sector and private sector. Recycling collection and front-end bin collection has been provided under contract for the City's communities since prior to amalgamation.

On April 27, 2011, Council approved the continuation of the public/private service delivery model for the waste service period from 2013 to 2020 as outlined in Report PW04113a. Council also provided direction to establish an Internal Costing Team to develop pricing for recycling collection by public forces in the City's A zones. This would extend the collection model to all curbside collection services. The recommendations were based on the competitive costs between the public and private sector for 2007-2010. The results show that the split collection model is providing long term best value for the City through a competitive environment.

The City's current waste collection contracts will expire on March 31, 2013. The City currently has three separate contracts for waste collection services. The collection of organic waste, garbage, leaf and yard waste, bulk waste in the City's B zones, along with City-wide bin service for garbage collection is currently under contract with GFL-Environmental East Corporation. The City has a separate contract with GFL-Environmental East Corporation for City-wide collection of curbside recyclable materials (blue box), automated recycling cart collection, and recycling collection for special events. The supply and collection of front-end bin containers for recyclable fibres is provided under contract with BFI Canada Inc.

3. Waste Collection System Review

In 2010, staff initiated a comprehensive review of various waste collection systems to develop a short-list of options for the City's waste management system for 2013 to 2020. The Request for Proposals process allowed the opportunity to consolidate the existing waste collection services provided under contract as an opportunity to improve service delivery. The waste collection system review was summarized in Information Report PW11030, which included the details on the waste collection system options and preferred systems to be considered as part of the Request for Proposal and internal costing review process. A decision on the waste collection system options could not be reached at the Council meeting on April 27, 2011.

Additional information on the waste collection system alternatives was subsequently provided in Report PW11030a in July 2011. On July 7, 2011, Council provided direction on the options to be included in the Request for Proposals and internal costing review process, which included the following:

APPENDIX "C"
REPORT PW11030d

- (1) Current System:
 - (a) weekly two-stream Recyclable Material collection of Recyclable Fibres and Recyclable Containers, co-collected;
 - (b) weekly Garbage collection (one container per residential unit) and Green Cart collection, co-collected;
 - (c) seasonal bi-weekly collection of Leaf and Yard Waste;
 - (d) seasonal weekly call-in collection of Bulk Waste when Leaf and Yard Waste is not collected.
- (2) Current System with Enhancements:
 - (a) weekly two-stream Recyclable Material collection of Recyclable Fibres and Recyclable Containers, co-collected;
 - (b) weekly Green Cart and Leaf and Yard Waste, co-collected;
 - (c) weekly Garbage collection (one container per residential unit) and call-in Bulk Waste collection, collected together.
- (3) Alternate Week Garbage collection with Enhancements:
 - (a) weekly two-stream Recyclable Material collection of Recyclable Fibres and Recyclable Containers, co-collected;
 - (b) weekly Green Cart and Leaf and Yard Waste, co-collected;
 - (c) bi-weekly Garbage (two or more containers per residential unit) and call-in Bulk Waste, collected together.

In addition to the waste collection systems, Council requested further information on refinements to waste collection practices, including:

- (1) Alternatives for recycling collection to reduce escaped waste;
- (2) Consideration of a tag system for garbage collection;
- (3) Options for container limits for weekly and/or bi-weekly garbage collection;
- (4) Consideration of a reuse event for bulk waste; and
- (5) Options for smaller green carts.

Six projects as outlined in Appendix B were included in the RFP document for which proponents were required to provide a Technical Submission and Price Submission. These projects were based on Council's direction on the above noted options and as well as service delivery alternatives for the provision of curbside/roadside recycling collection either City-wide or solely in the City's 'B' zones. To address the refinements to waste collection practices, RFP C11-30-11 incorporated these refinements as "Additional Work" to the waste collection system. Options for smaller green carts did not require separate pricing as there are already smaller carts being used in some areas of the City.

Both the internal costing team and Proponents were required to submit information on the costs and operational considerations to provide these services.

The recycling collection service delivery did not include single stream recycling as a result of the capital requirements necessary to reconfigure the processing system at the City's Materials Recycling Facility (MRF) in addition to the time constraints to make the system changes at the MRF as outlined in Report PW11030a. Direction was provided to negotiate a contract extension with the current operator and on November 30, 2011

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Council approved the continuation of the City's two-stream recycling processing system as noted in Report PW11030b.

RFP C11-30-11 was developed by a staff team comprised of representatives from the Procurement Section, Operations and Waste Management Division, and Legal Services Division. The staff team received technical assistance from Stantec Consulting Ltd. Further information on the results of RFP C11-30-11 is provided in the Analysis section of this report.

APPENDIX "D"
REPORT PW11030d

RFP Evaluation Process

Technical Evaluation Criteria RFP C11-30-11

PART	DESCRIPTION	Points
A	COMPANY CAPABILITIES AND CREDENTIALS	250
	1.1 Company Structure 1.2 Experience 1.3 References 1.4 Management Staff Requirements 1.5 Certificates(s) of Approval 1.6 Operations Staff Requirements	
B	OPERATIONAL DETAILS	650
B1	VEHICLES AND EQUIPMENT	300
	2.1 Vehicle Type, Quantity and Size 2.2 Fleet Maintenance Plan 2.3 Fuel and Environmental Issues	
B2	WORK PLAN	350
	3.1 Start-Up Plan 3.2 Operating Plan 3.3 Communication and Customer Service 3.4 Contingency Plan 3.5 Staff Training Plan 3.6 Quality Control / Quality Assurance 3.7 Facilities	
C	PROPOSAL QUALITY	100
	4.1 Clarity 4.2 Understanding the City's Requirements	
	Total Possible Points	1000

Appendix "E"
REPORT PW11030d

**YEAR 1 ESTIMATED ANNUAL VALUE FOR ACCEPTABLE PROJECTS
(2011 \$ MILLIONS)**

PROJECT	Halton Recycling Ltd. (dba Emterra Environmental)	GFL Environmental East Corporation	BFI Canada Inc.
Project 1			
Proponent Costs	13.34	14.09	15.66
Internal Costs	6.16	6.16	6.16
Total	19.50	20.25	21.82
Project 2			
Proponent Costs	10.29	10.68	12.29
Internal Costs	11.01	11.01	11.01
Total	21.30	21.69	23.30
Project 3			
Proponent Costs	N/A	14.50	16.13
Internal Costs	7.46	7.46	7.46
Total	N/A	21.96	23.59
Project 4			
Proponent Costs	N/A	11.17	12.75
Internal Costs	12.21	12.21	12.21
Total	N/A	23.38	24.96
Project 5			
Proponent Costs	14.59	14.72	17.15
Internal Costs	6.37	6.37	6.37
Total	20.96	21.09	23.52
Project 6			
Proponent Costs	11.69	11.28	13.78
Internal Costs	11.12	11.12	11.12
Total	22.81	22.40	24.90