CITY OF KELOWNA

MEMORANDUM

Date: Dec.12, 2007

File No.: 5360-00

To: City Manager

From: Environment & Solid Waste Manager

Subject: **Proposed Automated Curbside Yard Waste Pick-Up (2009), Automated Pilot Program, RFP Update and Automated Curbside Cost Estimate.**

RECOMMENDATION:

THAT Council approves the proposed automated curbside yard waste pick-up changes for the new contract (2009-2016) time frame as outlined in the Environment & Solid Waste Manager's Report dated December 12, 2007.

Background Report with Update:

At the Council meeting on Oct.1, 2007 Council authorized staff to proceed with automated curbside collection program for garbage and recycling. In subsequent meetings (Nov. 5 and 19) Council received updates and endorsed rate increases for the interim collection periods (for Garbage, Yard Waste and Recycling Collection-processing) before the new contract begins in March 2009.

Yard Waste Change: Staff has evaluated our current yard waste system and now proposes to have 18+ pick-ups per year as part of the curbside automated program up from the current 6 pick-ups per year for the following reasons:

1. Elimination of plastic bag contamination in yard waste. Plastic bags and composting are not compatible. Cost savings to contractor ($70,000 estimated for labor intensive debagging and $10,000 for equipment support) and to homeowner ($30 to $65/year in plastic bag purchases).
2. Reduced traffic for self-haul to landfill with more frequent pick-ups at curb.
3. Most residents would prefer more frequent pick-up of yard waste at curbside (attach1; Pilot Program Report, survey information is included in the report).
4. Meets Solid Waste Management Plan objectives by reducing yard waste in garbage and increasing yard waste tonnage recycled as compost.
5. Business Case (CH2MHill and WRO Information): The cost per automated pick-up for yard waste will be similar to recycle cost (estimate for manual pick-up per year is $17/6 pick-ups and $27/18 automated pick-ups).Yard Waste pick-up also matches the new automated equipment for curbside pick-up and the recycle pick-up for alternate week service.
6. Environment Case: Environmental impacts are reduced with more yard waste reuse(compost), less garbage contamination with yard waste saves landfill space, less GHG production from traffic to landfill and less plastic bag contamination of yard waste.

7. Social Case: Convenience-The pilot program demonstrated a high customer service satisfaction level for all automated curbside service especially the yard waste component. Reduced landfill traffic on weekends may be another benefit.

In considering the above benefits staff has concluded that the yard waste component is a vital part of the automated curbside program and has included it in the RFP.

RFP Update: The Automated Collection Report (Oct.1) detailed the timeline required to get automation in place including the Request for Proposal timeframe, Contract Award, Cart tendering and Contract start-up. To date the RFP for the Collection Services Required has been prepared with the changes to the Yard Waste collection included. Should Council not approve an increase to yard waste collection service, changes to the RFP can still occur through addenda during the month of January. The evaluation of the proposals will occur in February 2008.

Automated Curbside Cost Estimate:

- Currently all costs for curbside manual pick-up (garbage, yard waste and recycle), landfill management and waste reduction services are $121.30/year as of July 1, 2008. It is anticipated that the full cost of a curbside manual program would increase costs to be in excess of $145.00/year (plus homeowner plastic bag costs).
- Automated curbside service will increase costs to approximately $155.00/year (including cart purchase) with a much higher level of service and customer satisfaction and homeowner saving additional plastic bag costs.

Other Costs

Organic waste hauled to landfill including curbside pick-up is up 32% over 2006 figures (42,500 tonnes of which 6000 is curbside). Evaluation of costs of handling organics will be presented in a separate report.

INTERNAL CIRCULATION TO:

Finance Dept.

Considerations not applicable to this report:

LEGAL/STATUTORY AUTHORITY: Essential Service
LEGAL/STATUTORY PROCEDURAL REQUIREMENTS: N/A
EXISTING POLICY: N/A
TECHNICAL REQUIREMENTS: N/A
EXTERNAL AGENCY/PUBLIC COMMENTS: N/A
ALTERNATE RECOMMENDATION: N/A

Mark Watt,
Environment and Solid Waste Manager

Approved for inclusion: John Vos, Director Works & Utilities

Attach 1: Pilot program Report

REGIONAL DISTRICT of CENTRAL OKANAGAN

Report
Solid Waste Technical Committee

From: Carol Suhan, MBA
Regional Waste Reduction Manager

Date: December 11, 2007

Re: Automated Collection Pilot Project Summary Report

In spring 2007 Waste Reduction Office staff was given approval to proceed with a pilot project to test the efficacy of an automated collection garbage, yard waste and recyclables collection system. The pilot project was designed to test residents' preference for the size of waste carts and the level of acceptance of an automated system, not the working operations of automated collection trucks[1]. (Hundreds of other communities throughout North America, including those in mountainous regions with winter conditions, have been using automated collection for more than a decade and have found automated trucks work well.) A secondary objective of the pilot project was to determine the levels of residents' interest in having regular bi-weekly yard waste collection.

The 13-week pilot project ran from September 17 to December 14. Five hundred and five homes and businesses were chosen from three areas in the region: parts of old and new Glenmore, two neighbourhoods off of Westlake Road on the Westside, and the downtown area of Peachland. These regions were chosen as they represented the areas and homes that could present the greatest challenges to haulers and/or residents, including: limited storage space in small multi-family units (seniors and families), long drive-ways, steep terrain, narrow streets with tight turn space, mixed use (small business and residential), back alleys, large lot sizes and homes, and multi age and socio-economic backgrounds.

During the second week of September three carts were delivered to each home/business in the identified areas. The carts included a grey-lidded 135 litre cart for garbage, a 250 litre green-lidded cart for yard waste and a 250 litre blue-lidded cart for recycling. WRO staff and volunteers accompanied the crew delivering the carts to drop off instructional information and answer any questions residents might have. The delivery took two 12 hour days and was without mishap.

About ten homes initially rejected participation in the pilot project but within one week all those residents, with the exception of one, requested participation. Some multi-family residences did not

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[1] To help save money, the pilot project utilized the local hauler's existing semi-automated trucks. Although these vehicles were able to collect the carts, the collection was considerably slower than would be provided by fully-automated collection trucks.

have the space for all the carts and self-determined the number of carts needed. WRO staff changed out the carts as needed.

In order to determine residents' levels of interest and attitudes pre and post pilot project, survey tools were used. The pre pilot survey was conducted in mid-August prior to the announcement of the program and its results provide the base line data for the pilot project surveys.

Outside of the initial roll-out of the carts, there were virtually no calls from participants to the WRO during the program implementation. Five participants emailed or called to say they loved the program and no one registered a complaint. Six residents living outside of the pilot project areas emailed or called to register their disapproval of the proposed program.

In week ten of the pilot project a second survey was sent to participants. As of mid-December, 285 households responded to the follow-up survey (accuracy rating of +/- 4%, 19/20 times). The most striking response from pilot project participants was the extraordinary support for the automated collection system. Ninety-four percent of respondents strongly support the new collection system, two percent somewhat support the system, and three percent are neutral. Only one respondent (.5%) somewhat disagreed and one strongly disagreed (.5%) with the system.

The second most salient response from participants was their preference for regular yard waste collection. In the baseline survey, 81 percent of respondents said they would like increased frequency of yard waste collection with 33 percent of respondents saying they would like weekly yard waste collection and 17 percent saying they like bi-weekly collection. The follow-up survey found similar results with 66 percent saying they would be willing to pay $15 or more on their taxes annually to get that extra service (9% said they would pay more than $50/year).

The other significant finding of the survey was that 84% of respondents saved money (between $35-60 per year) because they didn't have to buy bags.

Support and response to all questions, with the exception of the value of bags purchased (Peachland was lower), were consistent from community to community.

The following are some of the additional highlights of the survey:

- 83% of respondents felt that the garbage containers were an adequate for their needs. 9% were somewhat in agreement and 6% somewhat or strongly disagreed. About 20% of participants did have to place out extra garbage occasionally during the pilot project program.
- 96% of respondents found the carts easy to store, 3% responded neutrally and 1% strongly disagreed.
- 99% of respondents found the carts easy to move and 1% responded neutrally.
- 65% of respondents said they recycled more with the cart system in comparison with the blue bag program, 12% responded neutrally and 23% said they recycled about the same.
- 75% of respondents said they placed out more yard waste for collection, 8% responded neutrally and 17% said that they placed out about the same amount as usual.

- 7% of respondents took extra garbage to the landfill for disposal during the pilot project time period; 93% did not. By comparison, 12% of respondents in the first survey regularly took garbage to the landfill (more than 6 times a year) and 81% occasionally took garbage to the landfill.
- 17% of respondents took extra yard waste to the landfill for composting during the pilot project time period; 83% did not. By comparison, 22% of respondents in the first survey regularly took yard waste to the landfill and 51% took yard waste to the landfill three to five times a year. 18% also put yard waste out as part of their garbage regularly during the growing season and 30% occasionally did so.
- 10% of respondents took extra recyclables to a recycling depot during the pilot project time period; 90% did not. By comparison, 43% of respondents in the first survey regularly took recyclables to a recycling depot and 50% occasionally took recyclables to a depot.

Throughout the implementation of the pilot project, data was collected on the volumes of materials collected. Residents participating in the pilot project consistently placed more recyclables out for collection (50 percent). Although it is more difficult to compare yard waste volumes because of service delivery methods, pilot project participants placed out 53 kgs of yard waste per household throughout the course of the program, compared with 41kgs placed out by residents with manual collection (27%). Although there were variations with garbage disposal, the final data shows the same set-out rate between the two collection systems. (Note: other jurisdictions introducing automated collection to a manual collection bag program have seen about a 35% increase in recyclables and 20% decrease in garbage disposal.)

	Pilot Project					**All Households**			
	Sept	Oct	Nov	kgs/hhld		Sept	Oct	Nov	kgs/hhld
yard waste (3 mos.)	7.9	10.56	8.3	0.053			953	1000	0.040
Recycling (/mo)	5.7	14.36	11.7	0.021		364	817	821	0.014
Garbage (/mo)	11	25.72	22.7	0.039		1199	2392	2082	0.039