

COUNCIL ACTION FORM

**SUBJECT: FLEET REPLACEMENT PROGRAM ACQUISITION OF WHEEL
LOADER AND CLAM-TYPE BUCKET**

BACKGROUND:

There are four rubber-tired wheel loaders in the City's fleet. Two are used primarily at Resource Recovery, one is used at the coal yard, and one is used for street maintenance. One of the loaders used at Resource Recovery is scheduled for replacement in August 2012.

In years past, the loaders at Resource Recovery have been purchased with a new clam-type bucket. After 2 years of service, the loader and bucket have been returned to the vendor, under the guaranteed buy-back option.

Because these clam-type buckets have some custom guards installed and cost around \$17,000 new, they have very little value on the buy-back option. Fleet Services has evaluated buying the bucket separately and replacing it on a separate life cycle. This evaluation determined that:

1. These buckets currently cost between \$15,000 and \$17,000.
2. The buckets are usually in good shape when they are returned.
3. The equipment dealers have a hard time reselling a used bucket.
4. The value of the bucket (which is included in the buy-back option) is between \$0 and \$5,000.
5. The bucket can be purchased separately from the loader, and put on a separate and longer replacement program. This will reduce the cost of equipment for RRP and the City by approximately \$48,000 over the next 10 years.

To establish this bucket replacement program, a new bucket will need to be purchased on this bid and retained, returning just the loader on the buy-back in 2 years. This will then establish the new replacement program for the bucket. Once established, a new bucket will be purchased every other year from then on. The estimated net savings per bucket is around \$12,000. There will be four fewer buckets purchased over 10 years, and in today's dollars that is an estimated \$48,000 savings.

Bids for a new machine were solicited with a new bucket and for guaranteed buy-backs with and without the bucket.

Bids for a new machine were received as follows:

With a guaranteed buy-back amount for loader only:

<u>Bidder</u>	<u>Machine</u>	<u>Base Bid</u> (includes bucket & loader)	<u>Buy- Back</u> After 2 Years, without bucket	<u>Fuel Use</u> over life of machine	<u>Net Cost</u>
Murphy	JD 624K	\$143,100	\$ (105,000)	\$ 31,000	\$ 69,100
Ziegler	CAT 938K	\$180,869	\$ (125,000)	\$ 22,800	\$ 78,669
Titan	Case 721FX	\$161,085	\$ (92,000)	\$ 20,700	\$ 89,785

With a guaranteed buy-back amount for loader and bucket

<u>Bidder</u>	<u>Machine</u>	<u>Base Bid</u> (includes bucket & loader)	<u>Buy- Back</u> After 2 Years, with bucket	<u>Fuel Use</u> over life of machine	<u>Net Cost</u>
Ziegler	CAT 938K	\$180,869	\$ (135,000)	\$ 22,800	\$ 68,669
Murphy	JD 624K	\$143,100	\$ (105,000)	\$ 31,000	\$ 69,100
Titan	Case 721FX	\$161,085	\$ (102,000)	\$ 20,700	\$ 79,785

These bids were evaluated to determine the net low evaluated cost by using the cost of the machine, less the guaranteed buy-back amount with and without the bucket, plus the projected cost of the fuel over the life of each machine. Fuel consumption is based on each machine's published fuel efficiency rate. Fuel evaluation is as follows:

<u>Make/Model</u>	<u>Fuel Efficiency Rating</u>	<u>Fuel Price x Est. Gallons</u>	<u>Fuel Cost</u>	<u>CO2 Footprint</u>
Case 721	2.1 GPH	\$2.50/gal x 8,280 =	\$20,700	88 T. of CO2
CAT 938	2.3 GPH	\$2.50/gal x 9,120 =	\$22,800	97 T. of CO2
JD 624	3.1 GPH	\$2.50/gal x 12,400 =	\$31,000	132 T. of CO2

The net low evaluated bid is from Ziegler for a CAT 938K. However, this machine does not meet specifications, as it does not have the required differential lock that is required for good traction; plus this bid includes returning the bucket in 2 years, which does not support the proposed bucket replacement program.

The second net low evaluated bid is from Murphy for a JD (John Deere) 624K, either with or without the bucket being returned. This machine meets all specifications and provides a bucket for the proposed bucket replacement program at no cost to the City. However, the John Deere consumes the most fuel and produces the most CO2.

The wheel loader with the best fuel efficiency is the Case 721FX. The Case is the net high evaluated bid. The Case will use 4,120 gallons less fuel over its 2 year life cycle than the John Deere. That is 30% less, and saves 44 tons of carbon emissions. The Case has the highest base bid costing \$18,000 more than the John Deere at purchase and returns \$13,000 less in buy-back (with the City retaining the bucket). The cost savings on fuel over two years will be \$10,300. The total extra cost of \$31,000, less fuel

savings of \$10,300, equals \$20,700 of the total extra cost for the Case over the John Deere, over two years.

The budget for this acquisition is \$150,000. The fleet replacement fund will have a balance of \$162,477 in August 2012 for purchase of this machine.

ALTERNATIVES:

1. Award this bid, as the net low evaluated bid, to Murphy Tractor & Equipment, Altoona, IA, for one John Deere 624K and bucket for \$143,100, and approve the buy-back guarantee for the loader only of \$105,000, **without** returning the bucket, after two years.
2. Award this bid, as an acceptable machine with the best fuel efficiency, to Titan Machinery, Ankeny, Iowa, for one Case 721E-Z bar wheel loader and bucket for \$161,085, and approve the buy-back guarantee for the loader only of \$92,000, **without** returning the bucket, after two years.
3. Direct staff to analyze bids for other options.
4. Reject all bids.

MANAGER'S RECOMMENDED ACTION:

The Fleet Services Director and the Resource Recovery Superintendent have reviewed the analysis and support the proposed bucket replacement program, as a cost saving measure that will not affect the function and service of this equipment.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving to award this bid, as the net low evaluated bid, to Murphy Tractor & Equipment, Altoona, IA, for one John Deere 624K and bucket for \$143,100, and approve the buy-back guarantee for the loader only of \$105,000, **without** returning the bucket, after two years.