



MEMORANDUM

TO: ROBERT A. KUNTZ, CITY ADMINISTRATOR

FROM: GARY R. KRAMER, P.E., CITY ENGINEER/DIRECTOR OF PUBLIC WORKS *GJK*

DATE: FEBRUARY 11, 2014

SUBJECT: BACKHOE REPLACEMENT

The 2014 budget includes the replacement of a 2004 CAT backhoe with 3,261 hours of operation. Since 2011 we have spent \$13,829 with the following known repairs still needed:

1. Backhoe arm joints, bushing, and pins need replacement (\$9,500).
2. The frame that supports the front-mount engine is severely rusted due to prior use loading salt (cost not known).
3. The radiator cooling fan support is completely rusted (cost not known).
4. Replacement of all 4 tires (\$3,200).

Below are the State bids. Purchasing through the State program does not provide for trade-in of the old backhoe. We anticipate selling the old backhoe for at least \$35,000.

	Model	Cost
Luby Equipment	Case 590 Super N	\$94,610.00
Erb Equipment	John Deere 410K	\$96,150.00
John Fabick	Cat 430F ST	\$106,105.00
Budget		\$106,500.00

The CASE backhoe, offered by the low bidder, Luby Equipment, is not recommended for the following reasons:

1. CASE only offers keyed engine start. This means that any CASE key will start the backhoe. The other bidders' backhoes include keyless start. We believe keyless start is a safety and security necessity.
2. CASE uses a hydraulic controlled locking device to secure the backhoe boom in transport. The other bidders' backhoes use a mechanical pinning device that is set by the operator. We believe that the operator pinned device is more reliable than a hydraulically controlled device.
3. CASE backhoe arm is made of ductile iron which is more prone to cracking than steel. The other bidders' backhoe arms are made of steel.

RECOMMENDATION: For the reasons listed above, we recommend purchasing a new backhoe from the second low bidder, Erb Equipment, AND sell the old backhoe on GovDeals.