

ITEM #: 19
DATE: 10-24-23
DEPT: FLEET

COUNCIL ACTION FORM

SUBJECT: FLEET REPLACEMENT PROGRAM – PURCHASE OF THREE TRACTOR-LOADER-BACKHOES

BACKGROUND:

The City's fleet has three tractor-loader-backhoes (TLBs) operated by Public Works Street and Utility divisions. All three machines are scheduled to be replaced in FY 2023/24.

In 2022, prices for TLB equipment increased significantly, outpacing the funding collected from the using department by Fleet Services as escrow for the replacement of the existing equipment. Public Works and Fleet staff discussed ways to best approach acquisition of new machines for the most fiscally responsible outcome. In the past, these three TLBs were purchased separately and each sized differently. Having different makes and sizes created some inefficiencies, since the accessory components such as pavement breakers and tampers were not completely interchangeable.

Public Works and Fleet staff analyzed the usage and cost of ownership of these three TLBs and determined the three TLBs will best serve the City if sized uniformly and of the same make. Therefore, bidders were requested to provide a price to purchase or lease three like TLBs, and to provide a trade-in offer for each of the City's existing three TLBs. The solicitation also gave bidders the option to provide a guaranteed buyback offer for the new machines in five years, with 6,000 hours.

The evaluation process for determining the most cost-effective purchase involves several steps beyond simply comparing the base bids. To identify a **Net Low Bidder**, factors that were compared include the purchase price (or lease price and terms), trade-in offer for the existing three units, buyback offers for the three new machines at the end of five years, warranty options, estimated maintenance and repair costs, fuel usage, stated biodiesel compatibility, and optional accessories.

The buyback credit evaluation involves comparing the proposed buyback amount to the amount staff expects to receive if the City was to sell the equipment itself after five years. Staff's experience is that equipment of this nature can be sold for approximately 35% of the original purchase price after five years. Therefore, the numbers shown in the buyback credit evaluation are the amounts by which the bidder's buyback guarantee exceeds 35% of the base bid price. If there was no buyback offer or if the buyback offer is less than 35% of the base bid, then the table shows a zero for that vendor, since staff expects to receive better sales terms if the City sold the equipment instead of accepting the buyback offer.

Bids for purchase of three Tractor-Loader-Backhoes were received from three vendors. Only one of the three bidders also supplied an alternative proposal for a lease of three replacement machines. Staff evaluated the lease, but after consultation with Legal and Finance staff, it appears that a lease in this instance would be complex or infeasible under Iowa Code requirements pertaining to the value and length of this potential lease. **Therefore, staff believes the outright purchase is a better alternative than the proposed lease.** The bids for the purchase are described in Table 1, below:

TABLE 1. Bid Evaluation

| Bidder | Machine Make Model & Year | Base Bid for 3 TLBs | Trade-in Offer for 3 units | Amount by which the Buyback Credit exceeds 35% of bid price for 3 units | Bid for 3 TLBs less Trade-in and Buyback Credit |
|---------------------|---------------------------|---------------------|----------------------------|---|---|
| Titan Machinery | 2024 Case 590SN | \$ 426,210 | \$ (137,240) | \$ (0) | \$ 288,970 |
| Ziegler Caterpillar | 2023 CAT 430 | \$ 465,000* | \$ (130,900) | \$ (8,231) * | \$ 325,869 |
| Murphy Tractor | 2024 John Deere 410P | \$ 467,712 | \$ (114,000) | \$ (28,063) ** | \$ 325,649 |

*\$465,000 - \$15,000 has been deducted from the Ziegler's \$480,000 base bid for the \$5,000 per machine price reduction if machines are received in 2023 - as offered by Ziegler Caterpillar.

** \$(22,310) – Murphy's buyback requires an additional year of extended comprehensive warranty to be paid for by the City. The table shows the net credit after deducting the additional year of warranty cost.

The Buyback Credit is the buyback dollar amount exceeding 35% of the base bid. There were two buyback offers:

Murphy Tractor's was 40.9% of the base bid for a 5.9% bid credit, or \$28,063.

Ziegler Caterpillar's was 36.8% of the base bid for a 1.8% bid credit, or \$8,231.

It is important to note that the Buyback Credit is a calculation used as a bid evaluation tool. Since the amount is an estimate of the funds that would be collected at the time the new units are sold, the cost for the three units being purchased does not contain the buyback credit.

Table 2, below, contains the estimated operational costs of each unit. This evaluation is based on expected usage over a five-year period and 5,000 hours of use. Estimated repair and maintenance costs exceeding the limits of the included extended powertrain & hydraulic (PT&H) warranty is included in this evaluation. It should be noted that the Case 590SN is not recommended for biodiesel blends over 5%. The CAT and John Deere machines offered by Murphy and Ziegler are recommended for biodiesel blends of 20%. These machines therefore are more in line with the bid specification and better support the City's sustainability goals.

TABLE 2. Operational Cost Evaluation

| Machine Make/Model | Fuel use Gal./Hr. Avg. | Fuel Use Gal. 5,000 hours ea. unit | Fuel Cost @ \$3/gal ea. unit | Maintenance and Repair w/ PT&H warranty, ea. unit | TOTAL Maintenance, Warranty, & Fuel Cost, ea. unit |
|--------------------|------------------------|------------------------------------|------------------------------|---|--|
| Case 590SN | 1.9 | 9,500 | \$ 28,500 | \$ 59,228 | \$ 87,728 |
| CAT 430 | 1.4 | 7,000 | \$ 21,000 | \$ 44,250 | \$ 65,250 |
| JD 410P | 1.6 | 8,000 | \$ 24,000 | \$ 58,700 | \$ 82,700 |

Finally, the bid information from Table 1, and the Operational Costs from Table 2 are combined to determine the Net Low-Cost Evaluation, in Table 3.

Table 3. Net Low-Cost Evaluation

| Machine Make/Model | TOTAL Maint., Warranty, & Fuel Cost, ea. unit (From Table 2) | | TOTAL Maintenance, Warranty, & Fuel Cost 3 units | Bid for 3 TLBs less Trade-in and Buyback Credit (From Table 1) | TOTAL Net Low Bid |
|--------------------|--|-----------|--|--|-------------------|
| Case 590SN | \$ 87,728 | x3 units= | \$ 263,184 | \$ 288,970 | \$ 552,154 |
| CAT 430 | \$ 65,250 | x3 units= | \$ 195,750 | \$ 325,869 | \$ 521,619 |
| JD 410P | \$ 82,700 | x3 units= | \$ 248,100 | \$ 325,649 | \$ 573,749 |

Based on the data provided above, the net low-cost evaluation indicates that the bid from Ziegler Caterpillar, for the purchase of three (3) CAT 430 TLBs, is the most cost-effective purchase option.

The above evaluation used the extended powertrain & hydraulic warranties from each vendor. These warranties are the type the City has typically purchased for heavy equipment. Staff has experienced increases in repair costs in recent years due to emissions components. For this reason, staff also obtained prices to upgrade each machine’s warranty to a comprehensive warranty, which would cover repairs to emissions components.

The warranty upgrades would cost an additional total of \$31,290 for the Ziegler (CAT) bid, an additional \$92,700 for the Titan (Case) bid, and an additional \$35,148 for the Murphy (John Deere) bid. **Including the cost of the comprehensive warranty upgrade, Ziegler Caterpillar remains the net low cost bid for the purchase of three (3) CAT 430 TLBs.**

Funding for this purchase will come from the trade-in and the available replacement funds. To address the shortfall in funding for the purchase, unspent funds in the FY 2023/24 Public Works operating budget will be reallocated to finance the remainder:

Purchase Price

| | |
|---|-------------------|
| Ziegler's (CAT) base price of the 3 Tractor-Loader-Backhoes | \$ 465,000 |
| Upgrade cost for 3 comprehensive 5-yr warranties | 31,290 |
| Total Purchase Costs | \$ 496,290 |

Available Funding

| | |
|---|-------------------|
| Fleet replacement funds available on 12/1/2023 | \$ 342,743 |
| Public Works FY 2023/24 operating budget (reallocation) | \$ 22,647 |
| Accept Ziegler's trade-in offer for City's 3 units | 130,900 |
| Total | \$ 496,290 |

ALTERNATIVES:

1. Award a contract to Ziegler Caterpillar of Minneapolis, MN, for the purchase of 3 new, 2023 Caterpillar 430 Tractor-Loader-Backhoes, with comprehensive 5-year warranty for a total of \$496,290, accept Ziegler's trade-in offer of \$130,900 for the City's three existing Tractor-Loader-Backhoes for a net cost of 365,390, and accept Ziegler's buyback offer for \$57,000 for each machine in 5 years/6000 hours should the City choose to exercise the buyback option.
2. Direct staff to award the contract to one of the other bidders.
3. Reject the bids.

CITY MANAGER'S RECOMMENDED ACTION:

Fleet Services and Public Works agree the 2023 Caterpillar 430 Tractor-Loader-Backhoes, with full warranty, meet the City's needs as specified, at the lowest price. Therefore, purchasing these three machines will provide the best and most economical equipment. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No.1, as described above.