CITY COUNCIL COMMUNICATION:

00-124

AGENDA:

APRIL 3, 2000

SUBJECT:

SOLID WASTE PACKER BODIES

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

WILLIAM G. STOWE
PUBLIC WORKS DIRECTOR
DESIGNEE

REVISED

ITEM ____

OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA

SYNOPSIS -

The Public Works Department's Sanitation Division operates a fleet of 36 heavy-duty refuse compaction units. The units are replaced approximately every seven years due to wear. Heavy-duty equipment specifications including a compaction rate of 1,000 pounds per cubic yard and hopper capacity of 2.7 cubic yards are used to help ensure maximum performance and the lowest possible life cycle cost for these units.

The Public Works Department has taken bids for eight replacement refuse compaction units to be used in solid waste collection activities. Six bids were received; however the two lowest bids did not meet minimum specifications. Consequently, the third lowest bid is recommended.

FISCAL IMPACT -

Funding ($257,401 after trade-in) for purchase of the equipment is provided for in the Solid Waste Enterprise Account, Vehicle Replacement Fund. Purchase of the refuse packer bodies will not impact the General Fund.

RECOMMENDATION -

It is recommended that the bid be awarded to the lowest compliant bidder, Elliott Equipment Company (60 NW 54th Avenue, Des Moines, Iowa, Gene Elliott, Vice President), for Leach 2RII compaction bodies. These units are comparable to those currently in operation in the City.

BACKGROUND -

The City has been providing solid waste collection services since January 1, 1976. During that time, the same basic equipment specifications have been used for refuse compaction bodies to ensure maximum life at the lowest possible maintenance cost.

To ensure the lowest possible cost of the equipment, the City takes bids on refuse compaction bodies separate from the chassis on which they will be mounted. On March 20, 2000, by Roll Call No. 00-762, Council approved award of the bid for packer chassis, 56,000 Gross Vehicle Weight Rate (GVWR), to the lowest compliant bidder, O'Halloran International.

The bid proposals received on packer bodies included non-compliant bids from Eddy-Walker Equipment Company for a New Way Cobra unit and from Elliott Equipment Company for a Leach Beta unit. These specifications called for a compaction rate of 1,000 pounds per cubic yard, a hopper capacity of 2.7 cubic yards, and a user's list demonstrating at least 30 units in service for a minimum of 18 months. Information provided by Scranton Manufacturing Company, the producer of the New Way Cobra, failed to show that the Cobra model has a compaction rate of 1,000 pounds per cubic yard or the required hopper capacity, nor has it been possible to confirm that the manufacturer has 30 Cobra units in service for a minimum of 18 months.

The second low bid, submitted by Elliot Equipment Company for a Leach Beta, did not meet specifications on the thickness of the steel used for the floor, sides, and walls of the compaction body. Following is a comparison that shows the physical difference between the non-compliant New Way Cobra and Leach Beta units and the Leach 2RII compaction bodies which are being recommended:

COMPARISON OF SOLID WASTE COMPACTION UNITS
TO DEMONSTRATE PHYSICAL DIFFERENCES

Specification	**New Way Cobra**	**Leach Beta**	**Leach 2RII**
Weight	11,227 lbs.	11,625 lbs.	14,495 lbs.
GVWR Recommendation	33,000 lbs.	33,000 lbs.	46,000 lbs.
Hopper Opening Width	74 inches	84 inches	80 inches

Body Length 244.5 inches 232 inches 249 inches
Body Height 83 inches 90 inches 97 inches

These measurements demonstrate the physical differences between the compaction bodies. The New Way Cobra and Leach Beta are smaller, lighter weight bodies designed to be carried by a smaller truck chassis. The truck chassis currently used on other solid waste compaction trucks in the City fleet are heavy-duty 56,000 GVWR units designed to better withstand loads.

The difference in hopper size also becomes significant when analyzing daily and life cycle operations. The 2.5 cubic yard capacity of the New Way Cobra is a full 40 gallons smaller than required. When collecting refuse from over 700 homes each day, and having to cycle the compaction blade more frequently because of the smaller hopper capacity, a conservative estimate of 25 additional cycles each day results in over 35,000 additional cycles required over the life of the unit. This results in additional wear of associated components.

The difference in cost of the low non-compliant bid submitted by Eddy-Walker Equipment Company in the amount of $ 216,759 and the second lowest non-compliant bid submitted by Elliott Equipment Company in the amount of $250,761 after trade-in and the third lowest bid submitted by Elliott Equipment Company for a Leach 2RII packer body ($257,401 after trade-in) is $40,642 and $6,640 respectively. The $40,642 between the non-compliant bid of Eddy-Walker and the third lowest bid of Elliott Equipment Company equates to approximately one cent per household per month in solid waste fees. It is anticipated that the overall savings in maintenance associated with purchasing the more heavy-duty Leach 2RII packer body units will more than make up for the additional up-front cost.