## RESOLUTION NO. Roy 18

# RESOLUTION ACCEPTING BID FOR THE PURCHASE OF AN AUTOMATED SIDE LOAD REFUSE TRUCK

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE CITY FORT SMITH, ARKANSAS, THAT:

The bid, as indicated by enclosure for the purchase of an automated side load refuse truck from Shipley Motor Equipment, for \$278,800, is accepted.

This Resolution adopted this \_\_\_\_\_\_ day of April, 2018.

APPROVED:

ATTEST:

CITY CLERK

Approved as to form:

No Publication Required

□ Publish \_\_\_\_ Times

### **Interoffice Memorandum**

**TO:** Carl Geffken, City Administrator

**COPY TO:** Jeff Dingman, Deputy City Administrator

**FROM:** Alie Bahsoon, Purchasing Manager

**SUBJECT:** Purchase of Automated Side Loader

**DATE:** April 11, 2018



Enclosed you will find the bid tabulation for the purchase of an automated side loader for use by the Department of Sanitation, Residential Collection Division. As indicated in the enclosed memorandum from the Residential Division Manager, Mr. Mitchell Parker, this truck will be replacing a 2008 Mack (Asset 102). This unit will be kept for spare parts and eventually sold in the city's auction.

Because of the capital equipment improvement plan recommendations by the Arcadis rate study in 2017, the Residential Collection Division of the Department of Sanitation (Program 6302) budgeted \$270,000 for this purchase and funding for the truck is coming out of the Sanitation's Sinking Fund planned purchases.

City staff recommends that we purchase this truck from Shipley Motor Equipment of Fort Smith in the amount of \$278,800. The two low bids submitted by The Larson Group are being declared non-responsive to the specifications as noted in the enclosed memorandum from Mr. Terry Rankin, Fleet and Grounds Maintenance Supervisor.

This purchase fulfills the purchasing obligations as mandated by both state and local purchasing requirements and I am recommending the bid noted by enclosure on the attached bid tabulation is accepted and approved by the Board.

Please let me know if you should have any questions.

Tabulation of Bids - City of Fort Smith
Automated Side Load Refuse Truck - Bid Tab #6302-SL-BA

	Shipley Motor Equipment Fort Smith, AR	The Larson Group Van Buren, AR	The Larson Group Van Buren, AR
Cab Year	2019	2019	2019
Cab Make	Mack	Peterbilt	Peterbilt
Cab Model	LR 64R-LR 613	520	520
Cost of C&C	\$142,681	\$135,446	\$135,446
Body Make	HEIL	Amrep	Loadmaster
Body Model	Dura Pack-Python	HX450 ASL	Eclipse
Body Price	\$132,902	\$111,180	\$106,602
Engine Warranty-5 yrs	\$2,195	Included	Included
Transmission Warranty-5 yrs	\$1,022	Included	Included
Delivery Terms	150 days	250-270 days	210 days
Total price	\$278,800 ✓	\$246,626*	\$242,048*

✓ Bid Award

\*Does not meet bid specifications

Bids Advertised: 02-25-18 Bids Opened: 03-19-18





Department of Sanitation 5900 Commerce Road P.O. Box 1908 Fort Smith, AR 72916

### **MEMORANDUM**

April 12, 2018

To: Jeff Dingman, Interim Sanitation Director

From: Mitchell Parker, Residential Collection Manager

Subject: Truck Purchase – Automated Side Loader

The 2018 Budget for the Department of Sanitation's Residential Collections Division (Program 6302) includes replacement of a 2008 Mack truck automated side loader (Asset 102) with a new automated side loader. The new side loader will support the existing automated residential collections program areas.

Asset 102 currently has 91,495 miles. The packer body is worn and suffers with metal fatigue to all plates, sweeps, and panels, and requires hydraulic cylinder repairs and/or replacements.

Please contact me should you have any questions or would like additional information regarding this request.



Department of Sanitation 5900 Commerce Road P.O. Box 1908 Fort Smith, AR 72902

#### INTEROFFICE MEMORANDUM

March 20,2018

To: Jeff Dingman, Deputy City Administrator

From: Terry Rankin, Fleet and Grounds Maintenance Supervisor

Subject: Automated Side Loader Truck Recommendation

The Department of Sanitation is scheduled to purchase an automated side loader in 2018, according to the department's equipment replacement plan. It is staff's recommendation to purchase the Mack truck with the Heil body at a purchase price of \$278,800 from Shipley Motor.

There were three (3) bidders for the side loader:

- 1. The Larson Group bid a Peterbilt chassis with a Loadmaster Eclipse body for \$242,048;
- 2. The Larson Group bid a Peterbilt chassis with an Amrep body for \$246,626; and,
- 3. Shipley Motor Equipment Co. bid a Mack chassis with a Heil body for \$278,800.

The Peterbilt with the Loadmaster Eclipse body does not meet the specifications that were listed. It is a tip-to-dump set up, meaning you have to raise the body up to allow the trash to slide out. This is a safety hazard. This type of body is designed to be dumped on a concrete or solid foundation, such as a transfer station. We are set up to dump on the landfill where there are possible soft spots that may allow the truck to lean, causing the truck to roll over with a lot of the weight being on the upper end of the body (top heavy). The grabber arm slides out from the body on a rail with rollers. The specifications indicate a grabber arm that has pins and bushings allowing the arm to fold up and be stored between the cab and body. With the grabber being stored between the cab and chassis, this allows the technician easier access to repairs made under the body. According to the specifications, the packing force requires a minimum of 83,000 pounds. The Loadmaster has a minimum of 77,000 pounds of packing force.

The Peterbilt with the Amrep HX450ASL body does not meet the specifications that were listed, as follows:

- 1. The Amrep body has an outside width of 102", whereas the specified maximum width is 96", a difference of 12".
- 2. The hopper length is 4.5" shorter and the hopper depth is 35" shallower than what is specified, resulting in significantly less hopper capacity.

- 3. The body floor has rounded corners instead of squared-off corners. If the floor needs to be repaired, a piece of sheet metal will need to be fabricated to match the curved corners of the floor.
- 4. The specifications require that an access door opening on the left-hand side wall and measuring at least 26.75" x 36.25" shall be provided, and a folding ladder and grab handles shall be provided for easy access into the hopper. The Amrep does not provide the required access door and ladder setup, and did not provide an alternative to this specification.
- 5. The specifications require proximity switches, which operates automatically by way of a magnetic field, for the automatic reversing of the packing cycle. The Amrep does not have proximity switches available, it uses mechanical limit switches instead. The mechanical limit switches will wear out much faster and do not last as long as the proximity switches.
- 6. The Amrep does not have guide rails for the packer mechanism that run the full interior length of the body as specified.
- 7. There are no wear strips provided on the Amrep body for the press to slide on, as required. This will cause machine's normal operation to wear out actual parts much faster, requiring more expensive maintenance or repair than simply replacing a sacrificial wear strip. There is not an alternative offered for this part of the specification.
- 8. According to the specifications, the packing force requires a minimum of 83,000 pounds. The Amrep has a minimum of 80,000 pounds of packing force. The higher the packing force limit, the stronger the equipment, resulting in less failure and repair.
- 9. The lifting mechanism is totally different than what is specified. It is a slide mechanism rather than an articulating arm, resulting in less maneuverability. The specification requires that the lift base shall support the lift arm, the dump arm, the level pivot, the level link, the pivot link, and the reach link. The lift base shall be mounted to the chassis frame rails for superior vertical distribution of loads induced into the chassis frame rails. The Amrep lifting mechanism is attached to the body, not the vehicle frame, putting the weight of the lifting mechanism on the side of the body.
- 10. The grabber is lifted up a rail system with a chain that is operated by a hydraulic motor, instead of an articulating arm mechanism. The chain will wear out more quickly than the pins and bushings required in the specifications. There is a potential of trash getting hung up in the rails that guide the grabber, stopping the lifting mechanism. This will result in the driver having to lower the grabber back down to clear the trash from the rails. The grabber is extended by a slide table that rides on rollers located under the body. This will make it difficult to service the rollers and cylinder that operate it.

The Mack with the Heil DuraPac Python grabber arm system meets all of the specifications listed.

In conclusion, if the Loadmaster Eclipse and the Amrep HX450ASL were the same style of body as detailed in the specifications and met all required specifications, staff believes the cost of their truck would be more comparable to the Mack/Heil body setup. Staff recommends that the two lower bids be declared non-responsive to the specifications, and that the Board award the purchase contract to the lowest responsive bidder, Shipley Motor Equipment Co., in the amount of \$278,800.