

## NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN the Mayor and Board of Aldermen of the City of Tusculum, Tennessee, is advertising for sealed bids which will be received by the Recorder of the City of Tusculum until \_\_\_\_\_ at which time they will be opened and read publicly in the Recorder's Office, City Hall, Tusculum, Tennessee, for the purchase of one (1), 14 cubic yard capacity hydraulic operated garbage packer truck with manual side loading. Alternate bids will be accepted for one (1), 14 cubic yard capacity hydraulic operated garbage packer truck with manual rear loading, with preference given to side loaders.

It will be the sole responsibility of the bidder to deliver personally or mail his proposal to the office of the Recorder, City Hall, Tusculum, Tennessee, on or before the closing hour and date shown above for the receipt of bids. Envelopes must be marked: "SEALED PROPOSAL FOR GARBAGE PACKER TRUCK."

The City of Tusculum is exempt from taxes imposed by State and/or Federal Government. Exemption certificates, if required, are to be furnished by successful bidder and will be filled out by the City.

Bidders must submit proposals strictly in accordance with the following specifications. The bidder in his bidding proposal must specifically state each variance to these specifications.

Proposals are furnished to you in duplicate. One copy is to be submitted to the City and one copy to be retained for your files. **BIDS MUST BE SUBMITTED ON FORMS PROVIDED BY CITY.**

Bidder warrants by virtue of bidding that the prices quoted in this bid will remain firm from the date of bid opening until completion of delivery, including the interim from bid opening to receipt of purchase order, which interim period may be up to 60 days.

Indicate delivery date. It may be a consideration in determining the successful bidder.

**GENERAL INFORMATION (CONTINUED):**

Show cash discount, if any, in the space provided.

**SUBMIT BROCHURES CONTAINING SPECIFICATIONS AND PARTS PRICE LIST WITH YOUR BID.**

All bids must be on new models. This provision excludes surplus, used or demonstrator products.

All proposals must indicate the firm name and address, and be signed in ink by an officer or employee having the authority to bind the company or firm by his signature.

The bidder, by executing a contract or bid proposal on the terms of the invitation to bid, warrants the product that is supplied to the buyer shall remain fully in accord with the specifications and to be of the highest quality. In the event the product as supplied to the buyer is found to be defective or does not conform to the specifications, the buyer reserves the right to cancel the order upon written notice to the supplier and return such product to the supplier at the supplier's expense.

The intent of these specifications is to insure the delivery of a new, complete unit ready for operation. Omission of any essential detail from these specifications does not relieve the supplier from furnishing such unit.

The Mayor and Board of Aldermen reserves the right to reject any or all proposals, to waive informalities and to accept all or any part of any proposal as they may deem to be to the best interests of the City of Tusculum.

Payment will commence or be made in full after delivery and acceptance of equipment. All documents, including invoice, lease-purchase agreement-or title, exemption certificate, shall be presented to the Office of the Recorder, City Hall, Tusculum, Tennessee 37743.

The successful bidder shall agree to defend, at his expense, all suits alleging infringement on any United States Patent by reason of the use or resale of any piece of material furnished user and will save the purchaser harmless from all expense of defending said suits and from all payments which may be assessed against the purchaser on account of such infringement.

Failure on part of the bidder to comply with all the above instructions may result in bid rejection.

TOM MASON, RECORDER; CITY HALL, TUSCULUM, TENNESSEE. P.O. BOX 5014, TUSCULUM STATION, GREENEVILLE, TN 37743; PHONE (423) 638-6211.

SPECIFICATIONS FOR ONE MANUAL SIDE-LOADING REFUSE COMPACTER TRUCK TUSCULUM, TENNESSEE

- 1) The intent of these specifications is to set forth the basic elements necessary to provide a high quality twenty (14) cubic yard manual side-loading compacter truck, which will include a body with side openings to receive the load, a rear opening to discharge the load, a top-hinged tailgate assembly which will also house a packing mechanism, a movable load ejector assembly, and a curb side access opening.
- 2) The City will evaluate each bid in terms of cost, service and the availability of replacement parts. The City will take the best-evaluated bid. The City reserves the right to reject any and all bids.
- 3) When the responding bid may differ from requirements as presented, each variation must be described and reference made to each paragraph to which the variation will apply. A marked-up copy of a company brochure is not acceptable. A brochure may be included with the bid proposal as supplemental information but limited as nearly as possible to the specific equipment to be furnished.
- 4) Each bidder shall state total cost to furnish and install on the owner's truck (delivered and returned by the owner after installation of the body and ready for service); the location of installation; approximate delivery time after the order is placed; terms of the guaranty and the program of instruction for the operation and maintenance of the equipment furnished.
- 5) Each bidder shall furnish the following information:
  - a. Location of the nearest complete inventory of parts. -
  - b. Expected delivery time (list the several possibilities—truck, bus, air-freight, Field service, men, etc.)
  - c. Location of service department and the Policy related to field service or shop Repair.
  - d. Recommended list of parts, with a current Price list that the City should keep in Inventory.
- 6) TRUCK REQUIREMENTS:

The truck chassis shall be rated at gross vehicle weight suitable to a 14 yard packer truck. The empty weight of the packer truck, the estimated payload (considering owners use—light industry, business and residential) will be included in the bid proposal.
- 7) REFUSE BODY:

The Refuse Body will be all steel construction with vertical sidewalls having an access and load opening on the curbside, a covering section, and a discharge opening at rear, and will house the movable ejector assembly.

  - 7.1) The side walls will be constructed of heavy gauge high tensile steel reinforced by vertical boxed braces shaped from heavy gauge high tensile steel.
  - 7.2) The top will be constructed of heavy gauge high tensile steel with box brace reinforcement. The reinforcing member over the rear opening will be shaped from heavy-duty structural channel to support the heavy-duty tailgate hinges.
  - 7.3) Box braces along the top will be in alignment with the sidewalls' vertical bracing to provide continuous side-to-side reinforcement.
  - 7.4) The floor will be constructed of heavy gauge high tensile steel and supported by structural channel cross members.

7.5) Longitudinal members consisting of structural channels will extend full length of the body, spaced apart the width of standard chassis rails.

7.6) All seams or sheet abutments, including side and top bracing members, will be continuously welded for neatness of appearance and to prevent seepage.

7.7) The refuse body will be free of internal pockets, recesses, or obstructions, which might restrict compaction or discharge of refuse.

8) STANDARD OPENINGS:

The refuse body will be provided with two (2) openings.

8.1) The rear opening will be equal to the cross sectional area of the body to permit unrestricted discharge of the compacted load.

8.2) The rear opening will be covered by a top-hinged tailgate, which will be constructed to provide a housing for the packing mechanism.

8.3) The side walls of the tailgate assembly will be fabricated from heavy gauge high tensile steel, reinforced as required by high tensile steel channels.

8.4) The top and rear facing of the tailgate assembly will be fabricated from heavy gauge high tensile steel, reinforced as required by 5 structural channels and with high tensile, pressed steel channel diagonally located.

8.5) The side access opening will be covered by a hinged door which, when closed, will provide a continuous smooth surface with the body's sidewall.

8.6) A spring-loaded latch will be provided to retain the door in closed position.

9) LOADING HOPPER AND PACKING MECHANISM:

The side loading opening will contain a loading opening, a contoured hopper well and a packing mechanism which will be capable of precompacting refuse within the hopper well before moving the refuse into the body.

9.1) The hopper will have a load opening rated at normal swept volume during either manual or automatic control.

9.2) The Packing Mechanism will consist of a packer blade and a link and shield assembly, with double-acting hydraulic cylinders for actuating each mechanical component.

9.3) The shield will be fabricated from heavy gauge high tensile steel, reinforced with plate gussets, pressed channel, and angle bracing.

9.4) The shield will be designed to serve as a carrier for the packer blade and to assist in retaining the compacted refuse within the body.

9.5) The packer blade will be constructed from high tensile steel and will be reinforced by plate gussets and high tensile pressed steel channels.

9.6) The packer blade will be pivotally attached to the link and shield combination. 9.7) The Packing Mechanism will be capable of precompacting the refuse within the loading hopper before the refuse is moved into the body at which point it will be subjected to a secondary compaction force.

9.8) The Packing Mechanism will be capable of varying from the normal full-cycle path when a short cycle is desired for reducing packing time or when repeated forces against the load will result in further reduction of volume.

9.9) The Packing Mechanism will be capable of completing the full packing cycle without binding, jamming, or stalling due to materials being wedged between the packer blade and the hopper floor.

#### 10) EJECTOR ASSEMBLY:

An Ejection Mechanism will be provided which will travel full length of the refuse body for discharge of the load and will be capable of applying a reactionary force for assistance in attaining a tight secondary compaction within the body.

10.1) The Ejector Assembly will be fabricated with heavy gauge high tensile steel face plate, backed by rigid brace members to withstand all applied compaction or ejection forces.

10.2) The lower part of the ejector face will be inclined approximately 45-degrees to permit rise of refuse during packing for even density of the compacted load.

10.3) The Ejector Assembly will be guided full length of the refuse body by replaceable slides within guide channels.

10.4) The slides will be high density, low-friction plastic that provide wear protection to the guide channels. They will be attached to heavy angle outriggers at the Ejector Mechanism's base, mounted in position to give top and bottom stability.

10.5) The guide channels will be high tensile formed steel, diagonally reinforced, and will be located on the body floor, adjacent each wall, to provide unobstructed floor and wall surface.

10.6) Full-length travel of the Ejector Assembly will assure discharge of the entire load.

10.7) The Ejector Assembly will be actuated by one only double-acting multistage cylinder, pivotally mounted in a diagonal position for protection of the cylinder and to conserve space in the front of the body. It will be anchored to heavy footing members of the ejection mechanism.

10.8) No part of the cylinder mount will protrude through the ejector face plate, therefore requiring no protective housing protrusion which could interfere with packing or discharging the load.

#### 11) HYDRAULIC SYSTEM AND POWER SOURCE:

The prime operating power will be provided by a medium to heavy duty power take-off which will be mounted to the truck's main transmission and coupled to a gear type hydraulic pump which will draw hydraulic fluid from a large capacity reservoir tank. The oil or hydraulic fluid will flow through high pressure hydraulic lines, through a control valve bank to the ejector cylinder, the tailgate lift cylinders, and to a unitized control valve which distributes oil for sequence operation of the packer cylinders and shield cylinders.

11.1) The Power Take-Off will be selected on a basis of operation within 60% to 90% of the chassis engine's RPM.

- 11.2) The pump will be coupled to the power take-off by a heavy duty tubular drive shaft with one slip spline and with universal joints at both pump end and power take-off end of the shaft.
- 11.3) The drive shaft installation will not exceed 15 degrees off longitudinal alignment and will be held to the shortest length possible. If it should be necessary for the effective length to exceed 36 inches, a center supporting bearing will be provided.
- 11.4) The oil reservoir will be gallon capacity and will be filled with gallons of anti-wear type industrial oil having a viscosity of 140 to 225 S. U. S. at 100-degrees F.
- 11.5) The oil reservoir will be provided with internal baffling, appropriate drainage opening with plug, hand cleanout opening with gasketed cover, and with filler port and breather cap.
- 11.6) The hydraulic system will be provided with a sump type oil strainer.
- 11.7) A manually operable control valve bank will be provided for control of the ejector cylinder and the tailgate lift cylinders. The valve bank will contain appropriate reverse flow checks and will be sectional in assembly.
- 11.8) An inlet end plate will be provided which will contain an adjustable built-in pressure relief which will be preset at 1800 psi and wire-sealed.
- 11.9) Individual double-acting and single-acting sections as required will be provided for control of the ejector assembly and the tailgate assembly.
- 11.10) Each section will contain a self-centering spool with springs. Each section will be operable by control levers located at driver's side front of the body.
- 11.11) An end plate will be provided which will permit flow-through to the unitized control valve for operation of the packing mechanism.
- 11.12) Auxiliary relief, check and control valves will be installed in the ejector cylinder's extension and prefill lines to permit automatic use of the ejector assembly as a back-up wall during load compaction.
- 11.13) A single block unitized control valve will be provided to perform all hydraulic valve functions necessary to permit preprogrammed sequence of the precompaction packing mechanism.
- 11.14) Controls for actuating the Packing Mechanism will be located at curb side adjacent the loading opening.
- 11.15) A push-pull control will be provided to activate the hydraulic system or to stop the packing cycle.
- 11.16) Automation will be provided to activate a buzzer in the cab to alert the driver when packing is being performed.
- 11.17) A control level will be provided for the compaction sequence.
- 11.18) Each mechanical function of subassemblies will be activated by hydraulic cylinders.
- 11.19) Two (2) double-acting cylinders, inch effective diameter with inch stroke, will raise, lower, and pivot the packer blade.

11.14) Two (2) double-acting cylinders, inch effective diameter with inch stroke will raise, lower, and pivot the link and shield combination.

11.21) One (1) only multi-stage double-acting cylinder will motivate the ejector assembly:

11.22) Two (2) single-acting cylinders, will elevate the tailgate for discharge of load.

11.23) An adjustable flow-control valve will be installed in the cylinders' flow line to regulate and cushion descent of the tailgate.

12) MUDGUARDS:

Rubber mudguards will be provided and replaceable mounted behind the rearmost wheels.

13) LIGHTS AND REFLECTORS: Lights and Reflectors will be provided in conformance with Federal Motor Vehicle Safety Standard Number 108.

14) PAINTING PROCEDURE:

The Side-loading Compaction Body will be thoroughly cleaned to remove all grease, dirt, or foreign matter. Weld slag and corrosion spots will be removed by wire brushing. A two-coat primer and finish paint system will be white or as owner selects.

14.1) The process will use a blend of proven epoxy resins, alkyd resins, and special pigments to incorporate corrosion resistance and uniformity of color from metal to the gloss surface.

15) PERSONNEL RIDING PLATFORMS:

Riding platforms, handrails, handholds and other related equipment shall be furnished that is acceptable to the owner.

16) SPECIFIC SAFETY REQUIREMENTS:

16.1) Compaction cycle will be manually actuated split-cycle and will automatically stop approximately 6 inches above hopper edge before being manually reactivated to pass through.

16.2) There will be mounted a rotating flashing yellow beacon on the rear; this may also be a flashing arrow sign.

**PROPOSAL FOR CITY OF TUSCULUM: ONE (1) 14 CUBIC YARD  
CAPACITY HYDRAULIC OPERATED GARBAGE PACKER  
TRUCK WITH MANUAL SIDE LOADING.**

**PLACES FOR DEMONSTRATION:**

**DELIVERY DATE:**

**CASH TERMS:**

**THREE (3) YEAR LEASE-PURCHASE TERMS:**

**NAME OF BIDDER:**

**BUSINESS ADDRESS:**

**BUSINESS TELEPHONE NUMBER:**

**SIGNED BY:**

**TITLE:**

**DATE:**



**ALTERNATE: PROPOSAL FOR CITY OF TUSCULUM: ONE (1) 14 CUBIC YARD CAPACITY HYDRAULIC OPERATED GARBAGE PACKER TRUCK WITH MANUAL **REAR** LOADING. (Other specifications identical to primary proposal)**

**PLACES FOR DEMONSTRATION:**

**DELIVERY DATE:**

**CASH TERMS:**

**THREE (3) YEAR LEASE-PURCHASE TERMS:**

**NAME OF BIDDER:**

**BUSINESS ADDRESS:**

**BUSINESS TELEPHONE NUMBER:**

**SIGNED BY:**

**TITLE:**

**DATE:**