

## TOWN OF STRATFORD PURCHASING DEPARTMENT STRATFORD, CONNECTICUT

BID No. 2016-003

Issued : January 26, 2016

Subject : <u>Refuse Body</u>

The Town of Stratford through the Office of the Purchasing Agent, will receive SEALED BIDS for furnishing the equipment described in the accompanying specifications, in accordance with the instructions, conditions and reservations that follow:

### A. CLOSING DATE:

Bids will be received until <u>3:00 pm February 5, 2016</u>, at which time they will be publicly opened and read. All bidders are invited to attend this public opening, which will be held immediately following the closing time specified above, in the Office of the Purchasing Agent, Room 202, Town Hall, 2725 Main Street, Stratford, CT 06615.

Any bid may be withdrawn prior to the above-scheduled time for receiving bids or authorized postponement thereof. Any bids received after the date and time specified shall NOT be considered. No bidder may withdraw a bid within 45 days after the actual opening thereof.

## **B. INSTRUCTIONS:**

Bid proposals are to be submitted **(TWO COPIES)** in a sealed envelope and clearly marked with the bid number and description on the outside of the envelope, including all outer packaging (DHL, FedEx, UPS, etc).

Bids must be delivered to:

Purchasing Department Stratford Town Hall – Rm 202 2725 Main Street Stratford, CT 06615

## C. CONDITIONS:

#### **Bid Surety**:

No bid surety is required.

**Payment:** Final payment will be made upon the acceptance of the completed work by an authorized representative of the Town of Stratford. NO partial payments will be made. Invoices covering the work specified herein should be forwarded to the Purchasing Department upon completion of the project.

**Taxes:** The Town of Stratford is exempt from all State and Federal taxes. Do not include these amounts in your quotation.

**Addendums:** All addendums will be posted on the town website, <u>www.townofstratford.com</u>. It is the responsibility of the bidder to check the website for any addendums before submitting their bid.

F.O.B. Destination: All prices quoted must be net delivered to destination.

**Conflict of Interest:** No public official or employee shall, while serving as such, have any financial interest or engage in any business, employment, transaction or professional activity or incur any obligation of any nature which is in substantial conflict with the proper discharge of his/her duties or employment in the public interest.

### D. RESERVATIONS:

The Town of Stratford may consider informal any proposal not prepared and submitted to the Town in accordance with the provisions herein stated. The Town of Stratford reserves the right to reject any or all proposals or parts of proposals; to waive defects in same proposals; or to accept any proposal or part thereof deemed to be in the best interests of the Town of Stratford.

Michael Bonnar, Purchasing Agent

SPECIFICATIONS: See next page.

### 25 YARD LOADMASTER REAR LOAD REFUSE BODY BID SPECIFICATIONS

It is the intention of these specifications to describe the minimum requirements for a 25 yard rear loading design refuse collection truck body. The body shall be capable of compacting and transporting refuse to a landfill or transfer station, and dispensing the load by means of hydraulically ejecting the load from the body. The manufacturer shall have produced rearloading refuse equipment for a period of at least ten years.

The bidder shall represent by his bid that all equipment bid is new and unused.

It is required that the unit bid shall be completely assembled, painted and ready for immediate operation.

Features which are regularly furnished as standard with this unit shall be supplied by the successful bidder. The body shall conform in strength, quality of material, and workmanship to that provided by the best manufacturing and engineering practices of the industry. Assemblies, sub assemblies, and component parts shall be standard and interchangeable throughout the entire quantity of units as specified in this invitation to bid.

The equipment furnished shall conform to the latest version of A.N.S.I. Safety Standard Z245.1 for refuse collection equipment. The unit shall also conform to Federal Motor Vehicle Standard FMVSS-108 lighting standards for truck mounted bodies.

Bidder shall complete every space in the specification with a "Yes" to indicate if the item bid is exactly as specified. If not, the "No" column must be checked and a detailed description of the deviation from the specification must be supplied, using a separate page if necessary.

Omission of a detailed description or specification of any point shall be regarded as meaning that only the best commercial practice shall prevail and that only material of first quality and correct type, size, and design are to be used.

Yes/No	Offered	CAPACITY	CAPACITY		
		<ul> <li>1. The minimum capacity of the b</li> <li>be 25 cubic yards exclusive of t</li> <li>hopper.</li> </ul>	ody shall he		
 		<ul> <li>2. The minimum capacity of the h shall be 3.7 cubic yards without use of a hopper loading sill external</li> </ul>	opper t the ension.		
		<ul> <li>3. The body shall be designed to a high density compaction of up to lbs. per cubic yard of dry house refuse.</li> </ul>	llow to 1050 hold		

Yes/No	Offered	BODY DIMENSIONS
		1. The maximum overall width shall be 96 inches.
		2. The maximum overall length shall be: 288 inches.
		3. The maximum height above the chassis frame shall be 94" inches.
· ·		4. The inside width of the body shall be 90 inches at the widest point.
		5. The inside height of the body shall be 82.5 inches at the highest point.
		6. The minimum weight of the body and the tailgate (less special options) shall be: 16,000lbs.
Yes/No	Offered	BODY CONSTRUCTION
		<ol> <li>The body shall have a smooth floor without a trough. No cylinders, valves or other hydraulic components shall be exposed to refuse packed into the body. Floors with trough or depression are not acceptable.</li> </ol>
·		2. The body floor, sides and roof shall be designed and constructed to withstand maximum imposed of residential refuse without structural damage or excessive wear.
·		3. The body sides shall be fabricated from 8 gauge hi-tensile steel and be of a curved one piece design.
·		4. The body roof shall be fabricated from 8 gauge hi-tensile steel and shall be of a curved design.
		5. A 25" x 32" body side door shall be located on the drivers side. The door shall be equipped with a spring loaded latch, access ladder and grab handles.

		6. The body floor shall be fabricated from 1/4" thick hi-tensile steel full width of the body with no depression or trough to accommodate the ejector cylinder.
		<ul> <li>7. The body longitudinal shall be 8" tall fabricated from 1/4" hi-tensile steel.</li> </ul>
		<ul> <li>8. The floor cross members shall be tapered from the long sill outboard to the body side sheet.</li> </ul>
		<ul> <li>9. The floor cross members shall be fabricated from 7 gauge hi-tensile steel.</li> </ul>
		20. There shall be steel fabricated mudflaps.
Yes/No	Offered	TAILGATE DIMENSIONS
		<ul> <li>1. The hopper opening shall be 75" wide and 62" high to permit unobstructed loading of the tailgate hopper.</li> </ul>
		<ul> <li>2. The top of the loading sill shall be</li> <li>4 inches below the top of chassis</li> <li>frame to facilitate easy loading.</li> </ul>
		<ul> <li>3. The overall height above the chassis frame with tailgate raised shall be 184 inches.</li> </ul>
Yes/No	Offered	TAILGATE CONSTRUCTION
		<ul> <li>1. The tailgate sides shall be fabricated from abrasion resistant</li> <li>1/4" T-1 alloy 100,000 P.S.I. minimum yield strength steel.</li> </ul>
		<ul> <li>2. The hopper floor and chute shall</li> <li>be a one piece design fabricated</li> <li>from ¼" Hardox 550 no exceptions</li> </ul>
		<ul> <li>3. The tailgate sides shall be reinforced</li> <li>with hi-tensile steel channels interlaced</li> <li>and fully welded to the side sheets.</li> </ul>

		4. The hopper and chute floor shall be reinforced with hi-tensile steel channels.
		5. The tailgate shall be secured to the body with heavy duty 1" DIA turnbuckles equipped with fast spin handles.
		6. The tailgate seal shall extend a minimum 50 inches up the body side.
		7. Two grab handles shall be located on each side of the tailgate.
 - - - -		8. The rear steps shall be fabricated from open grip strut material with a minimum standing surface of 330 square inches per step. The steps shall comply with A.N.S.I. standards. Steps shall be of a bolt on design.
·		9. The hopper loading sill shall be constructed of 3" x 4" x 3/8" wall structural tubing.
Yes/No	Offered	PACKING MECHANISM
		1. The packing cycle shall be controlled by a two lever control system that allows the operator to start, stop and reverse the direction of any function at any point during the packing cycle.
		2. The tailgate control valve shall be located under the top covers.
		3. The packing blade assembly shall consist of two primary components: the slide blade and the sweep blade.
·		A. The packing blade assemblies shall be mounted on four wear shoe assemblies that travel on Hardox steel wear tracks. The shoe assemblies shall be replaceable without removing the

packing blade assembly from the tailgate. The sweep blade and the slide blade shall be attached by two 3" DIA. Alloy steel pins. These 3" DIA pins shall be Induction-Hardened and rotating in 4 serviceable hard bushings. These pins shall also support the (2) lower wear block assemblies. B. The slide blade shall be constructed from 3/16" hi-tensile steel plate. C. The sweep blade shall be mounted to and pivot on the slide blade. The sweep blade shall be fabricated from 1/4" \_\_\_\_\_ 550 Hardox steel plate 4. Packing Blade assembly shall ride on four Nylatron NSM shoe \_\_\_\_\_ assemblies. Metallic type shoes or rollers are unacceptable. 5. The blades shall operate without the use of linkage or linkarms. 6. The packing blades shall be powered by two 5" Bore x 3" Rod x 23 <sup>1</sup>/<sub>2</sub> stroke sweep cylinders and two (2) \_\_\_\_\_ 5" Bore x 2 <sup>1</sup>/<sub>2</sub>" Rod x 43 stroke slide cylinders. 7. The slide and sweep cylinders shall have hardened chrome plated rods and be of cushioned design, to reduce hydraulic shocks, noise, and impact related stresses. \_\_\_\_\_ Sweep cylinder shall have hardened bushings at rod side pivots. \_\_\_\_\_ 8. The packing blades shall operate in a 22-23 second cycle time. 9. The sweep blade shall stop above the hopper sill to prevent a pinch point.

10. Material in the hopper shall be

		compacted between the packing panel assembly and the ejector panel. The ejector panel shall hold pressure against the compacted material and be automatically advanced by a hydraulic load control valve without operator assistance.
		11. The sweep blade shall have a 3/16"Hardox 450 face liner
		12. The slide blade shall have a 3/16" Hardox 450 face liner.
Yes/No	Offered	EJECTION SYSTEM
		<ol> <li>The load shall be ejected by a double acting, telescopic hydraulic cylinder that shall extend and retract the ejector panel the full length of the body without the use of clamp bars or related hardware.</li> </ol>
		2. The ejector cylinder shall have the following dimensions:
		Body SizeBoreStages25 cu. yd.6.54
		3. The ejector panel shall have an 3/16" hi-tensile steel face sheet that is reinforced by structural steel tubing and formed channels of high tensile steel.
		4. The ejector panel shall be mounted on 6 high-density Nylatron GSM wear shoes that shall be replaceable without removing the ejector panel from the body. Metallic type shoes are unacceptable.
		5. The ejector panel shall be guided in the body by two guide tracks located on the body side 6" above the body floor. The tracks shall be 6" deep, fabricated from ¼" hi-tensile steel and full welded to the body sides.

		<ul> <li>6. The ejector cylinder shall be mounted diagonally to the body floor and not require a trough or depression in the floor. Troughed floors are unacceptable.</li> </ul>
Yes/No	Offered	CONTROLS
		1. The ejector and tailgate liftcontrols shall be mounted at theleft front of the body.
		2. Ejector and tailgate knobbed lever         controls shall be mounted directly to the         valve spool.
		3. A throttle advance switch shall be be located convenient to the ejector and tailgate lift controls.
		4. The tailgate controls shall be located at the right rear of the tailgate. The two lever design shall have positive control of movement of the packing mechanism at all times. The tailgate controls shall comply with the applicable A.N.S.I. regulations.
		5. An automatic throttle advance device shall be incorporated with the tailgate controls.
Yes/No	Offered	HYDRAULIC SYSTEM
		1. A heavy duty cast iron gear pump with a rated capacity of 40 G.P.M.at 1200 R.P.M. shall be driven by the engine crankshaft front mounted pump
		2. For extended life of all hydraulic components the maximum operating pressure shall not exceed 3200 psi.
		3. The hydraulic system shall         incorporate an adjustable relief         in the body valve.
		4. Hydraulic hoses and tubes shall

be secured by clamps as required to prevent damage from abrasion and vibration. Hydraulic hoses and tubes shall use S.A.E. O-ring boss and JIC 37 degree flare ends for zero leaks.

5. Hydraulic hoses shall comply with the applicable S.A.E. standards for the designed specifications.

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- 6. Hydraulic hoses are to have a 4:1 burst to working pressure safety factor.
- 7. The hydraulic oil reservoir shall have a minimum capacity of 45 gallons. The reservoir shall be equipped with filler, breather cap, sight glass, clean out cover, 100 mesh suction filter, magnetic tank drain plug and gate valve at the suction outlet. The hydraulic reservoir shall not be a structural member of the body or the mount for the ejector cylinder.
- 8. A 6 micron synthetic MicroGlas tank top return line filter shall be located on the hydraulic tank and be equipped with a condition indicator. Pleated paper filters are not acceptable.
- 9. A suction screen filter of 100 mesh (141 micron) shall strain all the oil leaving the tank. Suction filter shall be equipped with a 5 P.S.I. bypass valve.
- 10. All hydraulic valves shall be sectional that would allow replacement of defective sections without replacement of the entire valve.
- 11. All cylinders and valves shall have SAE O-ring boss ports.

Yes/No	Offered	Н	YDRAULIC CYLII
		1.	All rod cylinders s working pressure r 3500 psi.
		2.	The sweep and slid shall have hard char rods and be cushio hydraulic shock at stroke.
		3.	The sweep and slic shall carry a minin warranty.
		4. 	Tailgate cylinders hardened chrome p rods, and be equip restrictors to limit raising and lowerin
		5. 	All rod cylinders s iron glands and pis with double wear b seals. <b>Aluminum</b> not acceptable.
		6.	Telescopic cylinde chrome plated cyli plungers.
		7.	All cylinders are to direct contact with
Yes/No	Offered	EI	LECTRICAL
		1.	All electrical wirin coded and be in a l loom.
		2.	Electrical harnesse connected with a s type electrical con
		3.	Electrical wires sh copper type with a remain flexible and deterioration

#### NDERS

- shall have a rating of
- de cylinders rome plated oned to reduce the end of the
- de cylinders num full three year
- shall have plated cylinder ped with the speed of ng of the tailgate.
- shall have cast stons and be equipped bearings and premium glands and pistons are
- ers shall have inder sleeves and
- o operate without the compacted load.
- ng shall be color braided harness or
- es shall be sealed aircraft nector.
- all be stranded SXL covering to d resist deterioration.

- 4. Electrical wires shall have function printed on the wire for easy identification.
- 5. Body electrical system shall be protected with its own fuse block.
- 6. All fuses shall be ATO type.

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- 7. All limit switches shall be water proof to prevent damage from the elements and pressure washing.
- 8. All lighting shall comply with F.M.V.S.S. #108, with an additional set of two stop, tail and turn lights mounted above the hopper on a light bar.
- 9. Clearance, backup, stop and directional lights shall be rubber grommet mounted with sealed light housings, lexan lenses, vibration resistant filaments, and unitized sealed quick change prong connections.
- 10. A 112 Db backup alarm conforming to current standards must be provided. The alarm must also sound when the tailgate is not closed.
- 11. Camera & 7" color monitor installed.
- 12. Two LED work lights mounted outside the hopper with brush guard activated in reverse. Two LED work lights mounted inside the hopper.
- 13. Two 4" strobe lights to be mounted on the top corners of the tailgate. Two 4" strobes at the top corners of the body face.
- 14. One strobe light mounted on top of the tailgate with a cage.

Yes/No	Offered		PAINTING		
		1.	All burrs and rough areas are to be ground smooth and all welds peened to remove slag.		
		2.	Prior to application of any coating, all surfaces shall be thoroughly cleaned and conditioned to paint manufacturer's specifications.		
		3.	The body shall then be coated with two (2) coats of a self etching epoxy primer.		
		4.	Two finish coats of polyurethane enamel shall be applied to produce a high gloss finish. Color white		
Yes/No	Offered		OPTIONS		
	Cost	-	1. Optional kickbar for lifting Containers.		
	Cost	_	2. Option 12000 lb drum winch		
	Cost	-	3. Container latch system to hold a large container while dumping		

(2) Cart Flipper – To be Perkins D6220-27k Dumpers capable of dumping two wheel carts to the rear of the tailgate. All associated hydraulic components shall also be supplied.

\_\_\_\_\_ Cost Per Tipper \_\_\_\_\_

# WARRANTY.

\_\_\_\_\_\_ 1. Manufacturer's limited warranty shall apply for a period of one year for body and two years for cylinders after date of acceptance of the unit.

\_\_\_\_\_ 2. Equipment Dealer must have factory certified mechanics and a full stocking parts and service facility within 15 miles from the Town of Stratford.

State delivery date which will be taken into consideration in bid award as time is of the essence .

TOWN OF STRATFORD **BID SHEET** BID # 2016-003 DESCRIPTION: Refuse Body Price for Refuse Body : \_\_\_\_\_ You must provide a detailed description including specifications of everything that is included in the bid. All exceptions and alternate options must be noted and described in detail. Delivery: \_\_\_\_\_ days after receipt of order References in at least three other municipalities (include contact name and phone): Bidder's Name : \_\_\_\_\_\_ Address : \_\_\_\_\_ \_\_\_\_\_ Phone : \_\_\_\_\_ Date : \_\_\_\_\_ Authorized Signature : Printed Name : \_\_\_\_\_ Title : \_\_\_\_\_