Request for Proposal
(2) High Compaction Front Load Refuse Truck
May 22nd, 2020

RFP Bidding Specifications

1.0 INTENT

It is the intent of this specification to provide for the purchase of two (2) new and unused Front Loading Refuse Truck to be used by the Fargo Solid Waste Department.

Sealed proposals will be received by the City of Fargo Auditor's Office at 225 4th Street until 2:00 PM on Friday, May 22nd, 2020.

Due to the 2020 Emergency Declaration Related to COVID-19, we encourage the public to deliver Requests for Proposals in the manner of one of the options listed below, by the due date stated in the proposal:
1. Mail to City of Fargo, Auditor's Office, 225 4th St N, Fargo ND 58102 (Write your project name on the outside of your envelope)
2. Deposit your envelope in the Drop Box located at the entrance of the City Hall employee parking ramp, on 3rd Ave N. (Write your project name on the outside of your envelope)

The City of Fargo Solid Waste Department has evaluated different styles of Front Loading Refuse Trucks, and has determined that this published specification is best suited for the Solid Waste Dept needs in terms of quality and features. This specification shall not be interpreted as restrictive but rather as a measure of quality and performance against which all other Front Loading Refuse Trucks will be compared.

In comparing proposals, comparison will not be confined to price only. The successful proposer will be one whose product is judged as best serving the interests of the Solid Waste Dept when price, product, quality and delivery are considered. The Solid Waste Dept also reserves the right to reject any or all proposals or any part thereof, and to waive any minor technicalities. A contract will be awarded to the proposer submitting the lowest responsible proposal meeting the requirements.

2.0 EQUIVALENT PRODUCT

Proposals will be accepted for consideration on any make or model that is equal or superior to the Front Loading Refuse Truck specified. Decisions of equivalency will be at the sole interpretation of the SWD. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. *An original manufacturer's brochure of the proposed product is to be submitted with proposal.*

3.0 INTERPRETATIONS

In order to be fair to all proposers, no oral interpretations will be given to any proposer, as to the meaning of the specification documents or any part thereof. Every request for such a consideration shall be made in writing. Based on such inquiry, the SWD may choose to issue an addendum in accordance with local state laws.

4.0 GENERAL

The specification herein states the minimum requirements of the SWD. All proposals must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The SWD will consider as irregular or non-responsive any and all proposals that are not prepared and submitted in accordance with the proposal document and specification, or any proposal lacking sufficient technical literature to enable the SWD to make a reasonable determination of compliance to the specification. It shall be the proposer's responsibility to carefully examine each item of the specification. Failure to offer a completed proposal or failure to respond to each section of the technical specification (COMPLY: YES NO) will cause the proposal to be rejected without review as non-responsive. All variances, exceptions and/or deviations shall be fully described in the appropriate section. Deceit in responding to the specification will be cause for rejection.

CITY OF FARGO RIGHTS

The City reserves the right to cancel this RFP in writing or postpone the date and time for submitting proposals at any time prior to the proposal due date. The City by this RFP does not promise to accept the lowest cost or any other proposal and specifically reserves the right to reject any or all proposals, to waive any formal proposal requirements, to investigate the qualifications and experience of any Proposer, to reject any provisions in any proposal, to modify RFP contents, to obtain new proposals, to negotiate the requested services and contract terms with any Proposer, or to proceed to do the work otherwise.

The City hereby notifies all proposers that it will affirmatively ensure that in regard to any contract entered into, pursuant to this request, minority business enterprises will be afforded full opportunity and are encouraged to submit proposals in response to this invitation and will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award. The City reserves the right to accept or reject any and all bids that is in the best interest of the City. All questions and inquiries will be addressed to:

Solid Waste Dept Operational Questions:

Dave Rheault
Solid Waste Route Supervisor
Solid Waste Department
4501 7th Avenue N
Fargo, ND 58102

drheault@FargoND.gov

Phone: (701) 241-1455
Fax: (701) 282-6077

Tanner Smedshammer
Fleet Management Specialist
Central Garage
402 23rd St N
Fargo, ND 58102

Tanner.Smedshammer@FargoND.gov

Phone: (701) 241-1460
Fax: (701) 298-6971

General Specification

Complete units shall be a new 2020 model and shall include all standard equipment unless otherwise specified. On an attached sheet, bidder shall provide an explanation for all specification items without a "yes" response.

WARRANTY: Dealer will submit warranty on complete unit with bid

MANUALS:
One (1) complete service manual, paperback or electronic
One (1) complete parts manual, paperback or electronic
Three (3) operations manuals, paperback or electronic
One (1) complete wiring schematics for all electrical

DELIVERY: Bidder must perform a complete pre-delivery service prior to delivery of equipment. All units are F.O.B., Fargo Public Works, 402 23rd St North, Fargo, North Dakota

Proposer must state the number of days for delivery from time of order and a $150.00 per day will be accessed against the purchase price with the total not to exceed 2.5% of purchase price.

BIDDER QUALIFICATION: Bidders must have a local dealer with a reasonable amount of parts inventory for the unit that has been bid and a complete service facility.

There shall be a $500,000.00 minimum of product liability coverage by the manufacture and a minimum of $500,000.00 liability coverage by the product installers to protect the City of Fargo. Certification shall be provided with bid.

Bidder must supply a list of equipment users who have purchased their units in the past two years.

Information shall include name of contact person and telephone number of that individual.

5.1 GENERAL

	Meets Spec YES	NO
1. Successful bidder shall supply a current year complete unit (truck and refuse body) equipped with at least a 28 yd^3 capacity, Front Loading. Peterbilt 520 Cab over chassis or approved equal.		

5.2 SAFETY AND COMPLIANCE

	Meets Spec YES	NO
1. Refuse body shall meet OSHA regulations with proper shielding and visible warning labels.		
2. Complete unit shall meet all applicable standards and regulations in effect at the time of manufacture.		
3. Vehicle must comply with the City of Fargo weight restrictions. The specifications are listed on www.fargotruckroutes.com.		

5.3 CAB AND CHASSIS

	Meets Spec YES	NO
1. Premium air-ride seat for the operator		
2. Cab will have air conditioning and high output heater.		
3. Cab shall have tilt steering column with a 15" maximum steering wheel diameter.		
4. Cab shall have remote adjustable, heated mirrors with extra convex mirrors for additional visibility.		
5. Frame shall have front and rear tow hooks.		
6. Front frame shall have the capability of mounting an engine driven hydraulic pump.		
7. Instrument panel shall have full instrumentation including hour meter, transmission temperature and air filter restriction gauge.		
8. Power windows, Power locks, Cruise, AM/FM radio.		
9. Power supply and ground shall be provided for the installation of a two-way radio.		
10. Bidder shall work with chassis manufacture(s) to ensure proper chassis specifications are complete.		
11. Rear axle shall be 46,000 lbs., Hendrickson HMX or equivalent		

5.4 ENGINE

	Meets Spec YES	NO
1. Diesel engine shall be a wet sleeve design.		
2. Engine shall be a minimum of 350 HP.		
3. Engine shall have a 120v block heater.		
4. Engine shall have a front PTO provision.		
5. All coolant hoses must be silicone.		
6. Clutched radiator fan.		

5.5 TRANSMISSION

	Meets Spec YES	NO
1. Allison 6 speed RDS transmission, auto neutral function.		
2. Heavy duty oil cooler.		
3. Synthetic fluid.		

5.6 CAPACITY

	Meets Spec YES	NO
1. The body shall have a capacity, excluding the receiving hopper, of not less than 28 Cubic Yards.		
2. The hopper shall have a capacity of twelve (12) cubic yards.		

5.7 BODY DIMENSIONS

	Meets Spec YES	NO
1. Body length including 52" cab shield is 352".		
2. Overall length with arms down and forks in full tuck position min. 415".		
3. Overall length with arms down and forks in horizontal position min. 453".		
4. Body width outside shall be no more than 102".		
5. Hopper width (bottom), above guide tracks, must be no less than 75".		
6. Hopper width (top) must be a minimum of 80".		
7. Hopper length at roof must be a minimum of 90".		
8. Hopper depth must be a minimum of 85".		

5.8 BODY CONSTRUCTION

	Meets Spec YES	NO
1. Packer body will have flat hopper and body floor with curved roof and body sides and of overhead loading design. Hopper will be designed to properly handle containers from 1-10 cubic yard capacity.		
2. Roof - Minimum 8-gauge high tensile steel sheet 80,000 PSI typical yield.		
3. Side Walls.		
a. Hopper sides-minimum 3/16" AR450 abrasion resistant plate steel.		
b. Body sides – minimum 8 gauge high tensile steel sheet, 80,000 PSI typical yield.		
4. Floor.		
a. Hopper floor – minimum 1/4" AR450 abrasion resistant plate steel		
b. Body floor – minimum 1/4" AR450 abrasion resistant plate steel		
5. Roof, Hopper and Side Reinforcements.		
a. All external welds of hopper side bracing shall be continuous full seam.		
6. Floor Reinforcements.		
a. Cross members shall interlace with body longitudinal to fully support the floor.		
7. Body Longitudinal (Long Members) - Shall be minimum of 7 gauge 80,000 PSI typical yield formed box section.		
8. Side Access Door - The side access door shall be located at the front street side of the body with minimum opening of 27" x 29". Steps and grab handles shall be provided for ease of entry. An electrical interlock shall be provided to disable the pump whenever the side door is open.		
9. Roof Access Ladder - A ladder shall be provided for access to the body roof. Steps must be of "non-slip" material.		
10. Sliding Top Door.		
a. A hydraulically-actuated sliding top door will be provided to cover the hopper for traveling to the discharge site.		

b. The top door cylinder shall be double acting and have a minimum 2-1/2" bore x 90" stroke with a 1-1/2" diameter chrome plated rod.
c. An in-cab mounted light will be provided to indicate when the top door is not fully open.

11. Hopper Sump - A 32-gallon hopper liquid sump with a 14" x 5.5" door each side or rear of the hopper will be provided for ease of clean out.
12. Hopper Sump Drain – A 3" sump drain valve located on the street-side and curbside shall be provided for the removal of liquid waste from the hopper sump.
13. Front Head Closure - A front head closure screen made of expanded metal shall be provided to prevent loose debris from entering the area in front of the packer and to prevent unauthorized entry by non-service personnel.
14. The body shall be equipped with a rear hinge style to allow for the manual raising of the body for serviceability. Two (2) interconnected tubular aluminum body props will be provided to hold the empty body in a partially raised position for servicing the unit. When the props are released and the body is raised, the props automatically position themselves in the support pockets.
15. A plastic shovel and bracket shall be mounted to the rear of the packing blade for the sump area cleanout.
16. A single 20 lb. fire extinguisher shall be provided and be readily accessible.

5.9 PACKING **Meets Spec YES NO**

1. A hydraulically-actuated packer shall clear the hopper of material with a maximum cycle time of thirty seconds.
2. The packing panel face will be a minimum 3/16" AR450 abrasion resistant plat steel. The packer will be reinforced with any combination of structural members.
3. Packing mechanism guide rails:
   a. The hopper zone packer guide rails (2) in the side of the body shall be comprised of 3/8" 50,000 PSI typical yield structural angle welded to 3-1/2" x 1/4" ASTM A500 Grade B structural tubing on each side of body. The structural tubing shall be of a continuous piece the full interior length of the hopper, 128" long.
   b. Abrasion resistant wear bars, AR500 abrasion resistant with typical 184,000 PSI tensile strength and 145,000 PSI yield strength x 500 BHN, shall be clad to the hopper zone guide rails, each side, in the following manner:
   c. The ejection zone guide rails shall be high grade 3/8" structural tube.
   d. The packer panel shall be guided on each side of the body with High Grade structural tubing clad with AR500 abrasion resistant wear bars.
4. Bolt-on lugs:
   a. The packer panel shall be provided with bolt-on lugs for each of the two (2) packing cylinders. Cylinder removal may be accomplished by either pulling the pins or by removing the entire bolt-on lugs.

b. The body front head shall also be provided with bolt-on lugs for packing cylinders.

5. Packer cylinders:
   a. The packer will be hydraulically actuated by two telescopic cylinders with 5" minimum bore.
   b. Packer cylinders shall have spherical bearings on both ends.
   c. The Packer cylinder grease zerks that are located on the rod and base end shall be equipped with a remote lube system that is accessible from the ground
6. Packing force – minimum cylinder compaction force shall be 105,000 pounds.

5.10 TAILGATE

Meets Spec
YES NO

1. Tailgate must be one piece; top hinged and shall open approximately 4º above horizontal.
2. Tailgate back sheets shall be constructed of a minimum 10 gauge, 80,000 PSI typical yield steel.
3. Tailgate side sheets shall be constructed of a minimum 10 gauge, 80,000 PSI typical yield steel.
4. The tailgate shall be reinforced by a minimum 1/4" 80,000 PSI typical yield, horizontal boxed braces.
5. The tailgate will be secured to the body by two (2) sets of hinges with 2" hinge pins at the roof line.
6. The Tailgate hinge grease zerks shall be equipped with a lube system that is accessible from the ground.
7. A heavy duty rear door positive seal of rubberized gasket material will be installed the full length of the bottom and a minimum of 65" up the sides of the tailgate to prevent leakage.
8. The tailgate shall be secured in the closed position by means of a fully automatic latching mechanism actuated by a separate control in the cab.
9. Hydraulic tailgate:
   a. The tailgate shall be raised and lowered hydraulically actuated by two (2) double acting cylinders with a minimum bore of 3", hardened chrome plated rod. Cylinder design shall also include an orifice fitting in the base port which will prevent the rapid descent of the tailgate in the event of a hydraulic failure.
   b. The tailgate shall be locked by two (2) lock cylinders with a minimum bore of 3", hardened chrome plated rod. Lock and tailgate raise cylinders shall be actuated by separate controls in the cab.
10. All lights will be recessed into the tailgate. Clearance, backup and directional lights shall be, anti- shock mounted in a protective housing. The whole unit will be "pop-out" and replaceable.
11. An in-cab light and audible alarm will be provided to indicate that the tailgate is not fully closed.

5.11 LIFT ARMS

	Meets Spec YES	NO
1. The lift arms will be 3" x 8" box reinforced type construction rated and capable of lifting 8,000 pound gross container and payload.		
2. Lift arms shall be capable of lifting loaded containers from a truck dock with 10' maximum pocket height.		
3. Lift arm cycle time will be approximately 15-25 seconds.		
4. Pick-up, dump, and disengagement will be done without the need for assistance and without the driver leaving the cab.		
5. The lift arms, during the dump cycle must not obstruct or interfere with the opening of the truck cab doors on either side.		
6. The two (2) rigidly-constructed lift arms will be held tight to the torque tube.		
7. The arm torque tube will be mounted in four (4) split bearing blocks with four (4) replaceable split bronze bushings with grease provisions.		
8. Lift arm hydraulics:		
a. The lift arms will be hydraulically actuated by two (2) double acting cylinders 4-1/2" bore, induction hardened and chrome plated rod.		
b. The cylinders will be located outside the body at the body floor level and directly attached to the lift arms.		
9. Container Forks:		
a. Two (2) 1-1/2" x 51" grip high tensile, 50,000 PSI typical yield forks shall be welded to a 4-1/2' O.D. x 3/8" wall C-1018 Seamless tubing fork cross shaft assembly. This assembly shall include rubber bumpers to reduce impact and prevent damage to containers.		
b. Fork cross shaft assembly shall be attached to the arms with two (2) split bearing blocks with replaceable split bronze bushings fitted with grease provisions.		
10. Fork Hydraulics - The forks will be hydraulically actuated by two (2) double acting cylinders, induction hardened and chrome plated rod.		
11. Forks shall be designed to provide the necessary dump angle to assure complete discharge of materials from the refuse containers.		
12. Lift arms shall be brought to a smooth stop in the raised and lowered position by use of cushioned hydraulic arm cylinders.		
13. Heavy duty bolt-on hard rubber arms stops located at the side of the body will cushion and prevent over travel of the lift arms.		
14. Maximum height with the lift arms raised in the full up and forks fully tucked position will be 13'6" (based on a chassis rail height of 42").		
15. An in-cab mounted warning light will be provided to indicate when any part of the arms is raised above the body.		

5.12 HYDRAULICS

	Meets Spec YES	NO
1. The maximum operating pressure of the system will be 2500 PSI.		
2. The hydraulic pump shall be a front engine, crank driven, Denison single vane pump with electronic over-speed control. The packer panel operation shall be limited to a flow 52 GPM @ 1500 RPM in neutral or foot on brake. Pump shall comply with specification 219-2303 or equal.		

3. Pump-to-body hard plumbing shall be provided and shall be securely supported and clamped to prevent vibration, abrasion, and excessive noise. Flex hoses shall be provided at each end of the hard plumbing to provide adequate flexure to prevent hydraulic leaks.
4. Hydraulic Hoses-All hydraulic hoses shall conform to S.A.E standards for designed pressure. Bends shall not be more than recommended by S.A.E. standards. Flat Spots in hoses will not be acceptable.
5. Hydraulic Oil Reservoir
    a. The tank shall be complete with a screened fill pipe and cap, filter breather, clean out cover, shut off valve, oil level sight, and temperature gauge.
    b. The hydraulic system shall be protected by a three (3) micron, in tank, return line filter along with a 100 mesh (140 micron) reusable oil strainer in the suction line.
    c. The return line filter shall also include an in-cab filter by-pass monitor which shall alert the operator or service personnel when the filter is need of replacement.
    d. A hydraulic pump shut down system shall also be included which shall prohibit prolonged operation of the hydraulics when the filter is in the bypass mode.
    e. The hydraulic circuit shall consist of (2) controlling valves. The packing, arms raise/lower, and the fork valve sections will be located under the mid body on the street-side of the unit. This valve will be protected with a steel cover to prevent contamination and damage. This valve assembly shall consist of a relief to prevent overload damage to the body. The tailgate cylinders, top door cylinders, and the tailgate lock cylinders shall be controlled by a valve located on the street-side rear body side skirt. This valve shall be an electric over hydraulic valve with in cab controls to prevent the operator from exiting the cab to operate. This valve shall also be protected by with a steel cover. These vales shall have a minimum capacity of 50 GPM @ 2500 PSI and designed to properly operate all the hydraulic components. Hydraulic valves located behind the cab near high-temperature engine exhausts are not acceptable due to the difficulty of servicing and the potential risk to hydraulic components due to excessive engine temperatures.

5.13 CONTROLS **Meets Spec YES NO**

1. Arm, fork, packer, top door, tailgate raise, and tailgate lock controls shall be provided. Arm and fork movement shall be accomplished by an air over hydraulic, self-centering joystick that returns to the neutral position when released. An arm rest shall be provided for operator comfort. Packer, top door, tailgate raise, and tailgate lock controls shall be air toggle type. All controls shall be located inside the cab within easy access to the driver. A separate in-cab control shall be provided for tailgate lock function.
2. Manual joystick operation available to the operator.
3. All controls shall be properly labeled and indicate the direction of travel (i.e., arms up, arms down, etc.) with warning lights to indicate use.
4. Light on during hydraulic pump activation visible from operator seat.

5.14 ELECTRICAL

	Meets Spec YES	NO
1. A mobile controller with control center and display shall be provided in the cab to monitor system functions and operation of the truck. This controller shall be able to withstand the vibration, moisture, dirt ingress, and climate variations that are present in the cab of the vehicle. The mobile controller shall be installed inside the truck cab and shall display self-diagnosing error codes in readable text format which identify the potential trouble source.		
2. All electrical wiring connectors to be automotive double-seal, with wiring in split convoluted loom. All wiring connections to be soldered with rubber molded covering or crimp type connectors with shrink wrap. Unprotected wiring in any application is unacceptable.		
3. All switches not manually operated shall be proximity in type. Mechanical switches are not acceptable.		
4. All lights shall be LED plus mid body turn signals on each side of the body and a center brake light on the rear.		
5. A LED 360° strobe light along with front and rear strobes shall be provided.		
6. A hopper light illuminating the hopper area shall be provided and controlled by an on/off switch in the cab.		
7. Backup lights fender lighting to come on in reverse.		
8. Camera in the hopper to view hopper area.		

5.15 REAR UNDERRIDE GUARD

	Meets Spec YES	NO
1. The body shall be equipped with a rear underride guard as standard equipment, to meet Federal Motor Carrier Safety Regulation		

5.16 MAINTANCE

	Meets Spec YES	NO
1. All system components are easily accessible and suitable for maintenance and repair with common hand tools. Grease fittings shall be incorporated into banks that are accessible from the standing position on the ground.		
2. One operator and parts manual from the truck and refuse body manufacture.		
3. One complete repair manual including electrical schematics for the refuse body and all subcomponents.		

5.17 WARRANTY

	Meets Spec YES	NO
1. One year all-inclusive warranty on chassis.		
2. One year all-inclusive warranty on refuse body.		
3. Please provide warranty details on the form provided.		

5.18 ACCESSORIES

Meets Spec
YES NO

1. Fire extinguisher and triangles.
2. Rear fenders that cover both axles, front and rear mud flaps with anti-sale brackets.
3. Side mounted ladder for hopper access. _____

Exceptions & Deviations

Bidder shall fully describe every variance exception and/or deviation. List the item number here and fully explain any items in non-compliance with specification. Additional sheets may be used if required.

TRADE IN:

2005 Sterling L8500 Rear Load
16470 Estimated Hours
Located at Solid Waste Department; 2301 8th Ave N, Fargo, ND 58102

Front Loading Refuse Truck Warranty:

Base Manufacture: _____

_____

Engine: _____

Hydraulics: _____

OTHER: _____

_____

_____

2020 Front Load Refuse Truck

City of Fargo – Division of Solid Waste

Company Name: _____

Packer Make: _____ Model: _____

Chassis Make: _____ Model: _____

Front Load Refuse Truck Price: $_____

x2

$ _____

TRADE-IN VALUE:

2005 Sterling L8500 Rear Load $_____

(City reserves right to accept/reject trade value)

Two (2) Front Load Refuse Truck with Trade in Price: $_____

_____

Signature

_____

Title

_____

Date Phone

Delivery Date

Number of days for delivery from date of order: _____

(Subject to delivery penalty if time limit is exceeded)