INVITATION TO BID



CITY OF RINGGOLD PURCHASING P.O. BOX 579 150 TENNESSEE STREET RINGGOLD, GA 30736

ITB# 19-012

FOR: Automated Side Loading Garbage Truck with Chassis

OPENING DATE: June 5th, 2019

TIME: 2:00 P.M. EST

PLACE: Ringgold City Hall 150 Tennessee Street Ringgold, GA 30736

BID SPECIFICATIONS

Bidders shall be prepared to give a complete demonstration of the merits of the machines offered as directed by the purchaser. The machines so demonstrated shall be complete as offered by the bidder for this bid.

Awards will be made to the best responsible bidder as determined by the City of Ringgold. The quality of the articles to be supplied, their conformity with the specifications, their suitability to requirements and delivery terms shall be taken into consideration.

If there are any of these standards in which proposed machine does not meet, please provide the description of lacking standard with the machines design standard.

Any and all questions should be addressed to Mike Cagle, Public Works Director at <u>mike.cagle@yahoo.com</u>, phone number (423) 619-8831.

The proposal for this machine should include:

New and unused: Automated Side Loading Garbage Truck with Chassis

CHASSIS

Bidders must check all line items under the columns marked – "Comply or Alternate." Alternates to the following specifications must be explained in detail. Alternates must be detailed on a separate page and referenced to the		
appropriate section number. Failure to furnish this information may be cause for rejection of the bid. Manufacturers' brochures will not suffice.	Comply	Alternate
1.0 VEHICLE CONFIGURATION	Comply	
1.1 Low Cab Forward Truck		
1.2 RH drive only		
1.3 Unit must be manufactured in the USA		
2.0 TRUCK SERVICE		
2.1 Refuse		
2.2 Side Loader		
2.3 Chassis bidder responsible for working with winning body bidder to		
ensure compatibility		
3.0 ENGINE		
3.1 ISX 350HP 1450lbs		
3.2 Ultra Low sulfur Diesel fuel		
3.3 Must be a 2013 compliant engine		
4.0 ENGINE EQUIPMENT		

4.1	50 State certified diesel engine	
4.2	ENGINE IDLE SHUTDOWNEngine idle shutdown enabled—5	
minu	tes	
4.3	ENGINE PROTECT SYSTEM/WARNINGSAudible/visual alarm:	
LOP	.HT, LWL	
4.4	FILTER-FUEL, - fuel/water separator with heat	
4.5	ENGINE OIL SAMPLING PORT	
4.6	FAN & DRIVE – ENGINEFan clutch, 2 speed	
4.7	RADIATOR – w/Extended life coolant	
4.8	AIR CLEANER15" air cleaner	
4.9	MUFFLER SYSTEM LH Vertical stack	
4.10	EXHAUST SHIELDSDPF & SCR shields	
4.11	EXHAUST STACKSon LH side w/vertical diffuser	
4.12	ENGINE/EXHAUST COVERaluminum turbo/exhaust pipe debris	
	shield	
4.13	AIR COMPRESSOR 18.7 cfm compressor	
4.14	ALTERNATOR 12V 130 amp 22SI	
4.15	BATTERY(3) 12V 2850CCA	
4.16	STARTING MOTOR 12V 39MT W/OCP	
4.17	RH mounted Urea tank 10 gallon	
4.18	Front mount Pump	
5.0	TRANSMISSION	
5.1	VOCATIONRDS Refuse—VOC 400-XXX	
5.2	TRANSMISSIONAllison 4500 Series, 6-speed	
5.3	COOLER-TRANSMISSION OILoil to water type	
5.4	TRANSMISSION LUBRICANTTransynd synthetic auto trans fluid	
5.5	DRIVESHAFT-MAINSpicer 1760HD half round	
5.6	Transmission oil sample port	
6.0	FRONT AXLE AND EQUIPMENT	
6.1	FRONT AXLESteer Axle, 20,000 # capacity	
6.2	FRONT SUSPENSION20,800 springs.	
6.3	SHOCK ABSORBERS FRONTDouble acting single—heavy duty	
6.4	POWER STERRING RESERVOIRFour quart remote mounted	
7.0	REAR AXLE AND EQUIPMENT	
7.1	REAR DRIVE AXLE—Tandem 46,000#, 5.63 ratio	
7.2	REAR SUSPENSION 46,000 lbs. rating	
8.0	BRAKE SYSTEM	
8.1	BRAKE CONTROL SYSTEMBendix ABS	
8.2	BRAKES-FOUNDATION, FRONT AXLE 16x6 QP	
8.3	BRAKE, SLACK ADJUSTER—Automatic	
8.4	DUST SHIELDSFront and Rear brakes	
8.5	BRAKES-FOUNDATION, RR AXLE 16.5x7 Q Plus	
8.6	BRAKE CHAMBERS-PARKINGCam type	
	¥ 1	

9.0	CHASSIS		
9.1	WHEELBASE—210 or as needed for tank and body installation		
9.2	FRAME REINFORCEMENT1/4" liner need for tip to dump		
9.3	FUEL TANK-Min 75 gallon Diesel		
9.4	TOWING DEVICE-FRONTTwo removable tow pins		
9.5	AIR DRYERBendix ADIP w/heat		
9.6	WET TANK DRAIN Automatic with heater		
9.7	AIR RESERVOIR DRAIN SYSTEMCentral air drain manifold		
9.8	BATTERY SHUT OFF SWITCHBattery shutoff w/lockout		
10.0	CAB EXTERIOR		
10.1	CAB VISIBILITYREARMust have rear window and Rear corner		
wind	OWS		
10.2	STEP-CAB ACCESS self cleaning entrance steps		
10.3	MIRRORSDual MOTO, west coast, heated, LH & RH power control,		
brigh	t finish		
10.4	MIRRORS—AUXILIARYone 8" convex, one below - each side		
10.5	GRAB HANDLESDual S/S grab handles		
10.6	HORN—AIR		
10.7	CAB TILT MECHANISMHydraulic tilt		
11.0	CAB INTERIOR	Comply	Alternate
11.1	STEERING- RH steer only		
11.2	SEATS—Heavy duty Air ride		
11.3	AC/Heater		
11.3	AC/Heater		
11.3 12.0	AC/Heater GAUGES & INSTRUMENTATION		
11.3 12.0 12.1	AC/Heater GAUGES & INSTRUMENTATION ELECTRONIC TACHOMETER W/HOUR METER		
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11.3 12.0 12.1 12.2 12.3 12.4	AC/Heater GAUGES & INSTRUMENTATION ELECTRONIC TACHOMETER W/HOUR METER ELECTRONIC VOLTMETER ELECTRONIC ENGINE OIL PRESSURE GAUGE ELECTRONIC FUEL LEVEL GAUGE		
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11.3 12.0 12.1 12.2 12.3 12.4 12.5 13.1 13.2	AC/Heater GAUGES & INSTRUMENTATION ELECTRONIC TACHOMETER W/HOUR METER ELECTRONIC VOLTMETER ELECTRONIC ENGINE OIL PRESSURE GAUGE ELECTRONIC FUEL LEVEL GAUGE ELECTRONIC FUEL LEVEL GAUGE ELECTRONIC ENGINE COOLANT TEMP GAUGE LIGHTING LAMPS-TURN SIGNAL, FRONTLED front turn signals LAMPS-MARKERAmber LED roof markers		
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11.3 12.0 12.1 12.2 12.3 12.4 12.5 13.0 13.1 13.2 13.3 13.4 14.0 14.1 14.2 15.0	AC/Heater GAUGES & INSTRUMENTATION ELECTRONIC TACHOMETER W/HOUR METER ELECTRONIC VOLTMETER ELECTRONIC ENGINE OIL PRESSURE GAUGE ELECTRONIC FUEL LEVEL GAUGE ELECTRONIC FUEL LEVEL GAUGE LIGHTING LAMPS-TURN SIGNAL, FRONTLED front turn signals LAMPS-MARKERAmber LED roof markers LAMPS-RUNNINGDaytime without park brake de-activation CIRCUIT PROTECTION DEVICEAuto circuit breakers RADIO/MISC KEY AND LOCK SETS2 additional keys per truck—4 total RADIOAM/FM radio, roof mtd. FIRE EXTINGUISHER 5lb. cap. Mtd in cab under drivers seat FRONT TIRES/ WHEELENDS HUBS FRONTSteel hub piloted, 285MM bolt circle		

16.0	REAR TIRES/ WHEELENDS	
16.1	HUBS-REARIron hub, HP 10 stud	
16.2	WHEELS, DISC-REAR22.5 x 8.25 Steel	
16.3	TIRE SIZE & LOAD RANGE11R22.5H	
16.4	TIRE MANUFACTURER AND TREAD-REAR rated to 10K	
17.0	PAINT	
17.1	SINGLE COLOR PAINT to City's color specification	
18.0	ADDITIONAL OPTIONS	
18.1	CHASSIS WARRANTYMin 1 year complete cab & chassis	
18.2	TRANSMISSION WARRANTYAllison 5 year Edge warranty	
18.3	Engine warranty—2yr base engine warranty	
18.4	ENGINE EXTENDED WARRANTY5 yrs/150,000 miles to include	
turbo	and injectors and aftertreatment	
20.0	MANEUVERABILITYBidder must include turning radius of truck	
as spe	cifiedREQUIRED	

BODY AND ARM

GENERAL BID REQUIREMENTS FOR CHASSIS	COMPLY	State
AND BODY	Yes/No	Exception
If the product you are bidding does not match the specification EXACTLY please state No in the comply column for each line and provide a detailed explanation of what is being offered. Use separate sheets of paper to explain how your offering deviates from the spec. Please supply brochures/specifications/literature for product offering.		

Delivery Schedule Cab/Chassis	Days	
STATE YOUR DELIVERY SCHEDULE, FROM TIME OF AWARD, OF THE CHASSIS TO THE BODY		
MANUFACTURER		

GENERAL BODY REQUIREMENTS	COMPLY Yes/No	State Exception
Body and Arm design being bid must have been in production for at least 10 consecutive years to ensure a field proven product. Documentation proving this may be required by the city.		

Body supplier is required to be ISO 9001 certified. Please provide certification certificate with bid documents.	
Body provided by bidder is to be the body manufacturer's current model year, non-demo, new and unused, 28 cubic yard minimum, excluding hopper, fully automated side loading refuse collection vehicle.	
Body manufacturer to have a manufacturing facility located in the United States and the body being bid will be produced in the U.S.	
State model of body being offered.	

BODY SPECIFICATIONS	COMPLY	State
	Yes/No	Exception
Body sidewall construction will be elliptical in design for strength. The packer sidewalls will be clean in appearance to		
allow for identification and graphics, with no horizontal body posts or outside stringers visible. Body Sidewalls will be constructed with AR450 steel minimum.		
Body side wall, first section street side will be 1/8" AR450 and 175,000 lbs psi yield minimum.		
Body side wall, all other sections will be 10 Gauge AR200 and 75,000 lbs psi yield.		
Body Floor will be 10 Gauge.		
Body floor will be AR200, 75,000 lbs psi yield.		
The body floor will be of elliptical design to ensure its strength and durability. Flat floors will not be accepted.		
Body floor will not incorporate cross-members to save on weight as the elliptical design adds strength without the need for cross-members.		
Body Longitudinals will be grade 50, 50,000 lbs psi yield.		
Body Longitudinals will be of tube design for added strength. The tube will be 3" minimum.		
Nylatron wear strips will be incorporated onto the bottom of the tube longitudinal between the longitudinal and chassis frame rail.		
The body will be dump to unload style. Full eject is not acceptable.		
The body will be raised by two single acting cylinders that are chrome plated and case hardened. Single cylinder designs used to raise the body to dump will not be accepted for potential stability issues.		

The dump cylinders will be 3 stages.		
The dump cylinders will have orifices incorporated into the cylinder, for safety, to prevent the body from lowering at a rate that is faster than the rate of decent during normal operation.		
The body Dump cylinders will be 3 ½" bore x 2" rod x 66 ½" stroke		
The body will be of tapered style. The taper will be 6" from the front of body to the rear of body to ease ejection of the load.		
The width at the front of the body will be 90".		
BODY SPECIFICATIONS	COMPLY	State
	Yes/No	Exception
The width at the rear of the body will be 96".		
The outside width of the body will be no more than 96".		
Overall body height will be 100" above chassis frame rails.		
Overall length of the body will be 309".		
The hopper to body transition must include one ¼" transitional plate liner.		
Body roof will be of elliptical design to ensure strength and durability.		
Body roof will be constructed 10 Gauge steel.		
Body roof steel will be GRD 50.		
Body Bolsters: 10 Gauge GRD 50 high strength Steel.		
Front Body Bolster: 3/8" A500 GRD B Tubing.		

HOPPER SPECIFICATIONS	COMPLY Yes/No	State Exception
Hopper capacity will be 4.3 cubic yards with Hopper cover		
Hopper side walls will be 3/16" AR400.		
Hopper Floor wear area will be ¼" AR400 with a yield strength of 155,000 lbs psi minimum.		
Hopper Floor will be flat.		
Hopper Assist Panel to be 14 GA A607 Steel.		
Floor Support: 3'x 3"x 11 GA A500 Tubing.		
Hopper will incorporate a transverse sump the full width of the hopper.		
Transverse sump will be 20"w x 3" H and tapered the last 14 ½" closest to the cleanout door to direct drainage to the cleanout door.		
Hopper will have cleanout doors located on both sides of the hopper and incorporate a gasket to ensure proper sealing to prevent leakage. Two streetside one curbside.		

Hopper will incorporate a street side operator entry door.	
Street side operator entry door will be 29" wide x 34" height minimum.	
Street side operator entry door will be hinged and handle shall be of 1/4 turn type.	
Street side operator entry door will incorporate a proximity switch for safety to shutdown the hydraulics when operator needs to access the hopper for cleaning and/or inspection. Limit switches will not be accepted. A light in the cab will indicate when door is open.	
Street side operator entry door proximity switch will be located inside the door frame to protect it from damage.	
Hopper will have a bolt on ladder, for ease of replacement, mounted to the street side of the hopper.	
The ladder will be foldaway type with 5 rungs and a locking mechanism to hold the ladder stowed while in transit.	
The rungs will be spaced to allow operator to safely step from ground and rung to rung, approximately 12" apart.	

PACKER SPECIFICATIONS	COMPLY Yes/No	State Exception
Packing panel face and top will be constructed of 1/4" steel.		
Packing panel face and top steel to be AR200 steel 75,000 lbs psi yield strength.		
Packing panel face will be 26" high.		
Packing panel face will be 81" wide.		
Packing panel force will be no less than 98,100 lbs to ensure payload expectations are met.		
Packing panel will be of ram type. Pendulum style packer panels will not be accepted.		
The packer panel will have an auto-pack function that is actuated with a completed cycle of the arm. Packer will cycle 3 times per dump.		
Packing panel sides will be ¼" steel.		
Packing panel sides will be A572 GRD 50 Steel, 50,000 lbs psi yield strength.		
Packing panel will incorporate a one-piece follower panel and will be 10 GA steel to reduce the maintenance involved versus multi-piece follower panels.		
Follower panel will be A607 GRD 50 Steel, 50,000 lbs psi yield strength.		

Follower Support Frame: 10 GA A607 GRD 50 Steel, 50,000		
Ibs psi yield strength.		
Packing panel will be driven by 2 double-acting cylinders.		
Packing cylinders rods will be nitride type.		
Packing cylinders will incorporate an M2 tool steel scraper to keep the cylinder seal pack protected from debris.		
Packing cylinders will be 5" bore x 3" rod x 34.5" stroke.		
Packer panel will ride in tracks, one on each side of the hopper floor.		
These tracks will be 5 $\frac{1}{2}$ " height x 4" wide x $\frac{1}{4}$ " thick.		
The tracks will incorporate XWEAR chromium carbide wear strips on the lower, outer and upper portions of the tracks. XWEAR is designed to have a 12 times longer life than AR400 wear strips.		
PACKER SPECIFICATIONS	COMPLY	State
	Yes/No	Exception
The packing panel will incorporate slide shoes. There will be one slide shoe located on each side of the panel.		
These slide shoes will 4" height x 3 $\frac{1}{2}$ " width and be the full length of the packer.		
The slide shoes will incorporate XWEAR chromium carbide wear strips on the lower, outer and upper portions of the shoes.		

ARM SPECIFICATIONS	COMPLY Yes/No	State Exception
Inner Arm: 5" x 7" x ¼" A500 GRD B Tubing.		
Outer Arm: ¹ ⁄ ₄ " A572 GRD 50 Steel Web, ¹ ⁄ ₂ " A572 GRD 50 Steel Outer Plate.		
Lifter Link Arm: ³ / ₄ " A572 GRD 50 Steel.		
Arm Mounting Bracket: ½" A572 GRD 50 Steel.		
Arm mounting bracket to be bolted to the chassis frame rails under the hopper.		
Grabber Fingers: 2 piece-bolt on welded structure—Inner Section 3/8" x 2" T1 Steel, Outer Section 3/8" T1 Steel.		
Arm must be located on the curbside and centered in relation to the hopper. Arm shall not be located in the hopper or in front of the hopper between the cab and body to minimize stress that occurs with that design and to allow for placement of the CNG system.		
Arm will be able to extend below grade to pickup containers.		

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Arm must not rise with the body during the load ejection process. It will be mounted to the frame rails of the chassis.	
Arm must be capable of 8 foot "side to side" articulation (front of body to rear of body).	
Arm reach to be a useable 9 feet (inside of grabber at home position to container) minimum.	
Arm must have a zero grab capability i.e. the ability to pick up containers at the side of the unit without extending the arm.	
Arm dump time to be 3.5 seconds from the home position.	
Arm return to home position time to be 3.0 seconds from the dump position.	
Arm reach time from home position to maximum reach, reach must be minimum 9 feet, to be 3 seconds.	
Arm return to home position from maximum reach position to be 3 seconds.	
Gripper open to be 1.5 seconds.	
Gripper close to be 1.5 seconds.	
Arm is to be controlled by 4 double acting chrome plated cylinders.	
Arm reach and dump cylinders will be internally cushioned to slow the arm movement at the end of the return of the reach cylinder and the return of the dump cylinder.	
Arm reach Cylinder: 3-1/2" bore x 2" rod x 14-3/4" stroke.	
Arm dump cylinder: 3-1/2" bore x 2" rod x 17.88" stroke.	
Arm articulation cylinder: 2" bore x 1-1/8" rod x 9-1/8" stroke.	
Grabber Cylinder: 2" bore x 1" rod x 6-1/4" stroke.	
Arm must have a minimum lifting capacity rating of 2,000 lbs.	
Arm grippers must be able to lift two containers at once. The unit must be able to handle this without changing to a different gripper assembly while still being able to pickup single containers.	
Arm must be capable of using full flow of its pump at any point during the packing cycle without decreasing the speed of the arm during the pack cycle.	

TAILGATE SPECIFICATIONS	COMPLY Yes/No	State Exception
Side and Rear Walls will be constructed of 10 gauge and be AR450 steel.		
Tailgate steel will be AR450, 175,000 lb psi yield strength.		
Tailgate will be of elliptical design for strength.		

Tailgate will be hydraulically actuated by 2 double acting chrome plated cylinders.		
Tailgate cylinders will be 2-1/2" bore x 1-1/2" rod x 38" stroke.		
TAILGATE SPECIFICATIONS	COMPLY Yes/No	State Exception
The tailgate cylinders will have orifices incorporated into the cylinder to prevent the tailgate from lowering at a rate that is faster than the normal operating rate of decent for safety.		
Tailgate locking mechanism will be actuated with controls located inside the cab. Any tailgate design that incorporates manually operated pins located at the tailgate will not be accepted.		
Tailgate locking mechanism will be of the automatic type and will not require an additional set of cylinders to lock the tailgate.		
Unit will incorporate a tailgate open audible alarm able to be heard in cab and outside of body.		
Unit will incorporate a tailgate open visual indicator in cab.		
Tailgates controls will consist of 2 manually operated rocker type switches and will be momentary for safety. On/off type switches will not be accepted.		
Tailgate will include a safety stand attached to the tailgate and holder located at the bottom back of the body for safe cleanout and maintenance of the unit.		
When the safety bar is engaged there will be a minimum clearance of 36" between the tailgate and body for safe and easy access to cleaning and maintenance of the unit.		
Tailgate open complete cycle time will be no more than 19 seconds.		
Tailgate close complete cycle time will be no more than 19 seconds.		
Tailgate will incorporate a one-piece bolt on rubber seal to prevent against leakage.		
Tailgate seal will travel up the side of the body 42 inches as measured from the lowest point of the seal to the highest point of the seal.		
Tailgate control valve will be located on the body for ease of maintenance.		
Post and Bolsters (Header and Footer): 10 GA A715 GRD 50 Steel.		
Tailgate will incorporate a bolt on removable light bar at the top of the unit that is not part of the tailgate welded structure to allow for easy access for maintenance.		

Tailgate will incorporate two bolt on removable light bars at the bottom of the tailgate that are not part of the tailgate welded	
structure to allow for easy access for maintenance.	

CONTROLS	COMPLY	State Exception
Single Joystick Control for Arm and Grabber for ease of operation by driver will be located in the cab. Multiple lever arm controls will not be accepted.	Yes/No	
Joystick will incorporate air lines into the joystick and air canisters located at the valve sections to control the movement of the valves for feathering.		
Joystick operations of the arm will activate only when the brake pedal or the parking brake is applied by the operator.		
Tailgate controls will be located in cab and be able to fully lock and unlock from inside the cab. Tailgates with locking mechanisms, manual or otherwise, requiring operator to exit the cab to lock the tailgate will not be accepted.		
Control box will be one unit to minimize the space taken up in the cab and to minimize the amount of wiring and connectors required.		
Control panel will incorporate a master on/off switch.		
The control panel box will have a C.A.N. based P.L.C. that will be contained in a weatherproof housing inside the control box. Control boxes with exposed control boards will not be accepted due to the possibility of corrosion and contamination. Socket type components will not be accepted due to the possibility of vibrating loose and causing failures.		
Control panel will feature an emergency stop switch that will be lighted and red in color.		
Control panel will incorporate the use of Cannon style plugs.		
Control panel will incorporate the use of a fuse panel and will be located on the back of the control box for ease of troubleshooting and maintenance.		
Control panel will incorporate an indicator light to show when the hydraulic system has gone into hydraulic over speed.		
CONTROLS	COMPLY Yes/No	State Exception
Control panel will incorporate Eaton rocker switches. Those utilizing membrane style control panels will not be accepted.		

Control panel rocker switches will be supplied for the following controls: Packer extend and retract, pump on/off, Arm on/off, Tailgate activate, body active, body raise/lower, tailgate raise/lower, rear lights (camera assist), pack assist.	
Control panel will incorporate short circuit protection, in case of failure, to ensure other functions will continue to operate normally.	
All operations of the arm and packer panel must operate in gear at idle engine speed. Arms utilizing engine speed/throttle advance to operate at full speed will not be accepted.	
Grabber controls will be integrated onto the joystick.	
There will also be a manual packer panel cycle activate button and must be located on control box.	
The manual activate will be of the push-button type.	
Unit will have an auto-pack function for the packer panel that commences after the dump cycle and return of cart.	
This auto-pack cycle will be programmable for multiple cycles during the route by the operator to customize the pack cycle for light to dense neighborhoods on the route. (i.e. 1 packer panel cycle, 3 cycles, etc.).	

HYDRAULICS	COMPLY Yes/No	State Exception
The system will incorporate a tandem gear pump configuration.		
The arm and main pump sections will be designed to work in gear at idle.		
Pump Size and flow to be adequate to operate all functions of the unit.		
The pump shall be front mounted		
Main Valve Assembly: Commercial Intertech VA35, MRV Setting—2500 psi.		
Arm Valve Assembly: Parker VA20, MRV Setting – 2000 psi.		
Reservoir: 50 Gallons.		
Return line filter will be Parker 40 CN or Schroeder K-9 rated at 3 micron and 100 G.P.M. and located external to the tank for ease of maintenance.		
Suction Strainer: 100 mesh stainless steel with magnets.		
Hydraulic system will incorporate a Hydraulic Over-speed Control (H.O.C.) to prevent damage to the hydraulic system.		
All cylinders will be induction hardened.		

HARDWARE	COMPLY Yes/No	State Exception
Weather Pak® and Deutsch® Connectors.		
Aeroquip® Hoses and Fittings.		
Hoses will have at least a 4 to 1 burst pressure rating.		
HydraZorb® and Stauff® Clamps.		
All electrical wiring will be color coded, numbered and the function of the individual wire is stamped every four inches along the wire for ease of maintenance and troubleshooting.		
All hydraulic tubing will be zinc coated for better resistance to corrosion.		
Hydraulic system will not require an external hydraulic cooling device.		

PERFORMANCE AND OPERATION	COMPLY Yes/No	State Exception
The packer must be able to pack a minimum of 900 lbs/yd ³ based on standard residential municipal waste.		

BODY WARRANTIES	COMPLY Yes/No	State Exception
Cylinders: 5 year limited warranty from date of delivery.		
Hydraulic Pump and Valves: 2 years from date of delivery.		
Packer Unit: 1 year from date of delivery.		

PAINTING	COMPLY Yes/No	State Exception
Packer and components steel to be steel shot blasted prior to priming.		
Primer to be high solids epoxy primer.		
Finish Coat Akzo Coating's Sikkens high solids acrylic urethane.		
Cab and body cover color to be white.		

Other items required	COMPLY Yes/No	State Exception
Triangle safety kit located in cab.		
Fire extinguisher, 5 lb, located in cab.		

Auto load system for arm. Operational parameters: Once operator grips cart a single button shall retract the arm, dump the container, lower the arm and extend the arm to return the container to its original position.	
Pack assist panel, located in hopper, to be raised and lowered via hydraulic cylinder operated with a switch in the control box.	
Toolbox, frame mounted. Minimum 30"x18"x18".	
Safety camera system to include the following: One 9" color LED display backup camera. Display shall have a 15G shock rating, display housing to be of heavy duty aluminum alloy, adjustable volume controls, built in SD memory card slot with ability to record camera video to removable media for safety and training purposes. Camera lenses to be minimum 140 degree field of vision, IP69K rated, incorporate infrared LED technology for operating at dim lit times of the day, heated. Camera system will have a 4 year warranty.	
Cameras shall have guards to protect them from debris.	
Hopper floor will incorporate a ¼" AR400 hopper liner.	
Lights to be supplied in addition to standard body lighting: Peterson smart light system (quantity 4, 4" located on tailgate corners), Peterson center stop light on tailgate, dual camera assist lights on tailgate. Note: all body lighting to be Truck-lite brand except for the options noted here.	
Peterson smart lights (4 on tailgate) to be powered by engine ignition (not by on/off switch on control panel).	
Mud flaps installed in front of and to the rear of the tandem axle will be provided.	
20 lb. fire extinguisher, located on frame.	
Decals for body sides and tailgate will be installed on units before delivery and incorporate the current Voorhees Township logo. Current design of warning decals on tailgate to be supplied as well. Please see attachment in bid for design that shall be supplied by the successful bidder. Full side "wrap" for both sides of the body as depicted in the attachment. A picture	
providing the design for the tailgate is attached as well.	

TRAINING	COMPLY Yes/No	State Exception
Training for mechanics and operators, minimum 2 hours each, will be provided at the time of delivery or at an appropriate time		

to as determined by the Township and is to be conducted at	
the Township facility.	

Delivery Schedule Body/Completed unit	Days	
State your delivery schedule, from time of award, of the completed unit to the Township after receipt of the chassis at the body manufacturer.		

PROPOSAL

We have examined the specifications and agree to furnish the City of Ringgold with the equipment/services accordingly. Any deviations from the specifications will be marked exception on the bid sheet.

We propose to furnish City of Ringgold with said equipment/service for:

Equipment manufacture and model proposed:

TOTAL BID COST FORMAT

Purchase Price: \$_____

Delivery Date :

COMPLY TO ALL SPECS:	YES	NO
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ANY EXCEPTIONS ARE TO BE NOTED: _____

<u>Bids shall be submitted in a sealed opaque envelope and shall be marked on the outside with</u> <u>the name of the submitting company, the words "SEALED BID – Automated Side</u> <u>Loading Garbage Truck with Chassis"</u>. Any deviation from the requirements set forth for the labeling of the bid envelopes shall result in said bid being returned to the bidder unopened and any such bid shall not be considered.

Sealed bids shall be addressed to the attention of Mike Cagle and mailed to the City of Ringgold, P.O. Box 579, Ringgold, GA 30736 or hand delivered to Ringgold City Hall at 150 Tennessee Street, Ringgold, Georgia. All bids shall be received on or before the above designated date and time. Any bid received after this date and time shall not be accepted. Bids shall be typed or submitted in ink. Bids will be opened and read publicly. Bids are legal and binding upon the bidder when submitted.

It is understood that this contract, if accepted by the City of Ringgold, is entered into solely for the convenience of the City and in no way precludes the City from obtaining like goods from other suppliers upon prior approval of the City Manager. Such approval shall be made at the sole discretion of the City of Ringgold and shall be conclusive.

The City of Ringgold reserves the right to accept or reject any or all bids for any reason, to waive technicalities, and to make an award deemed in its best interest. The City of Ringgold shall have the right to delete a unit item from the bid if necessary or proper in the sole determination of the City of Ringgold.

We certify that our bid meets the minimum requirements as specified in bid documents, this _____

day of ______.

AUTHORIZED SIGNATURE

PRINTED NAME OF SIGNATURE

ADDRESS

TELEPHONE NUMBER

CITY/STATE/ZIP CODE

FAX NUMBER

F:\BIDS\INVITATION TO BID\INVITATION TO BID Garbage Truck 2019.docx

EMAIL ADDRESS: _____

TITLE

COMPANY

Contractor Affidavit under O.C.G.A. §13-10-91(b)(1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. §13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the City of Ringgold, Georgia has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. §13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.C.A. §13-10-91(b). Contractor hereby attests that its federal work authorization number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct. Executed on _____, ___, 201___ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent SUBSCRIBED AND SWORN BEFORE ME ON THIS THE ____ DAY OF_____, 201___.

NOTARY PUBLIC