City of Forest

BIDDER SHALL COMPLETE BY CHECKING THE FOLLOWING.

IF NOT COMPLIANT, STATE SPECIFICALLY ITEM BEING OFFERED.

SPECIFICATIONS FOR Street Sweeper

The following are the suggested minimum specifications for

one (1) Street Sweeper.

All bids must be equal in performance and quality pursuant to the bid specifications below, which are not intended to exclude any manufacturer's standard deviation. Any reference to manufacture's make or series of equipment stated in the following specifications is intended only to establish an acceptable standard and is not intended to limit the bidding. The City of Forest is acting under the authority of Section 31-7-13, Miss. Code of 1972 Amended, and reserves the right to reject any and all bids.

2025 Model or Newer Diesel Powered 4.0 Cubic Yard Volumetric Capacity – Mid-Sized Street Sweeper

It is the intent of these specifications to describe a sweeper in sufficient detail to assure that product reliability, design integrity, technical soundness and sweeping performance is provided. The unit provided shall be new and of current manufacture, and the model and series must have been in production a minimum of ten (10) years. Bidder shall provide a list of 5 customers currently using the model as bid. All parts not specifically mentioned, which are necessary to provide a complete sweeper, shall be included in the bid and shall conform in strength and quality of material and workmanship to what is normally provided to the trade in general.

The unit shall be delivered completely assembled, serviced and ready to operate. The bidder shall have a qualified service representative in attendance with the sweeper during startup operation to make any adjustments and give instructions to assure proper operation of the sweeper.

The sweeper shall be warranted to be free from defective materials and workmanship for a period of 12 months or 1,000 hours from date of delivery.

The unit bid shall be a regenerative air sweeper mounted on a truck chassis capable of highway speeds.

The bidder shall indicate their compliance with a "**YES**" or non-compliance with a "**NO**" for each line item specification. Any space left blank shall be considered non-compliance. Any **EXCEPTIONS** to these specifications must be clearly cited in writing and attached on a separate sheet of paper by the bidder. No deviations below "minimum" or above "maximum" specifications will be accepted.

The City of Forest is interested in **lease/purchase** of the equipment described in this bid document. Bidder may submit a lease/purchase proposal in addition to his outright purchase price bid. The lease/purchase proposal should be for three (3) years and must include a buy-back provision. Include terms and conditions of buyback with proposal.

Scheduled maintenance shall be performed on sweeper unit by bidder "on site" quarterly for three years. Bidder shall provide a complete and detailed description of all services to be performed at each service (eg fluid and filter replacements, inspections, adjustments, etc.)

COMPLIANCE

MANUALS

_____ The bidder shall supply one sweeper operator's manual and one sweeper parts and service manuals on paper and one set on an electronic format with each unit.

_____ The bidder shall supply one operator's for the auxiliary engine on paper.

_____ Manufacturer shall have available certifiable training course for complete maintenance and operation of sweeper at the manufacturer's facility. The training course is provided at no additional charge.

_____ Manufacturer must have scheduled a minimum of 6 training courses per year for convenience of customers scheduling. The course shall be specific to the model bid.

_____ Bidder shall provide video operator instruction/safety/maintenance procedures on an electronic format with the unit.

PAINT - COLOR

_____ The entire unit shall be painted with manufacturers standard white paint applied over a suitable primer. Pick-up head, gutter brooms and truck frame shall be painted black.

REGENERATIVE AIR SWEEPER

POWER UNIT

_____ The sweeper power unit shall be a turbocharged diesel fueled, Final Tier 4 liquid cooled industrial engine. Piston displacement shall not be less than 148.5 cubic inch developing not less than 56 HP @ 2100 RPM and 140 ft. /lbs. torque @ 2100 RPM. Engine shall be 4 cycle, 3.43 inch bore and 4.03 inch stroke.

_____ Cylinder construction shall be dry sleeve type.

_____ Spin-on replacement type oil filter.

_____ 12 volt ignition, electric starter and minimum 40 amp alternator with charge indicator gauge shown on the touchscreen display mounted on control console in cab.

_____ An engine ECU shall have a multi-point engine protection system that will derate/shutdown when an engine problem is detected such as high coolant temperature, low coolant level, or low oil pressure.

_____ Unit shall share batteries with chassis engine.

_____ Unit shall share fuel with chassis engine.

_____ Unit shall have a heavy-duty dry type air cleaner with replaceable Donaldson PowerCore® element, safety element, and integral pre-cleaner.

_____ To keep overall height to a minimum when dumping, access panels shall not be attached to the hopper weldment

_____ Power unit must be easily accessible without starting the engine or the use of auxiliary hydraulics.

_____ A frame mounted fuel/water separator with water in fuel notification on in-cab display shall be furnished.

DUST SEPARATOR

_____ Separation of the dirt from the air stream shall be accomplished by means of an external cylindrical multi-pass centrifugal dust separator with a minimum size of 20" diameter and 22.5" width. The separator shall be designed so that it will not plug with normally encountered debris

_____ The separator shall be lined with a bolt-in, replaceable, wear resistant rubber liner for long life

_____ The dust separator shall have a minimum 4 inch diameter port allowing inspection and cleaning of the interior, with an expandable rubber plug and a 25 inch long extension handle for access.

_____ The separator shall incorporate a self-cleaning compartment to trap fine particulates and prevent re-entry into the air stream

HOPPER

_____ Hopper shall be constructed of full seam welded steel plate.

_____ Hopper size to be a minimum four (4.0) cubic yard volumetric measurement with an operating load capacity of not less than three (3) cubic yards.

_____ Dumping shall be accomplished by means of hydraulically actuated piggyback cylinders causing hopper to tilt up expelling the load behind the rear wheels. Dump cylinders shall not protrude below sweeper frame.

_____ Dump angle shall be a minimum of 90 degrees.

_____ The hopper shall have a minimum dumping height of 72 inches. (Select with cabover chassis.)

_____ Hopper door shall have an opening dimension of 77-1/4" x 70" and be opened/closed by means of two hydraulic cylinders.

_____ The required overhead dump height clearance shall be no greater than 14 feet.

_____ For easy access and to insure airtight hopper seals the hopper dump door shall be hydraulically actuated.

_____ Hopper door shall be held in the closed position by means of a lock valve located in the hydraulic dump circuit.

_____ Hopper shall be maintained airtight through use of rubber seals on all doors and openings.

_____ Hopper shall contain a chute area with a replaceable deflector.

_____ All hopper doors shall be fabricated from steel plate to prevent loss of airtight seals due to warping, cracking, or premature wear.

_____ Hydraulic cylinder movement shall be controlled with the use of an electric toggle switch located on the exterior of sweeper behind truck cab and in front of the blower housing.

_____ Hopper shall have a safety prop with manually installed latching pin

_____ Roof access clean-out doors prohibited due to potential safety hazards.

_____ One work light shall be mounted at the rear of the hopper.

_____ A rubber hopper drip edge extension shall be provided to extend horizontal reach by 7 inches for dumping.

_____ A dual mild steel screen with total area of not less than 3,200 square inches shall be provided.

_____ Screens shall lift with the dump door to allow easy access for cleaning.

_____ Abrasion Protection Package shall include a suction inlet liner; deflector plate liner; separator liner; transition liner; pressure wear pads; suction nozzle liner; heavy duty pressure and suction hoses.

_____ Two rear rubber bumper pads shall be provided to prevent damage to the rear of the sweeper during dumping.
_____ Hopper deluge system with high volume nozzle which attaches to a fire hydrant to flush the hopper shall be furnished and shall include quick disconnect fittings on nozzle and filler hose.
_____ Hopper Drain System shall be mounted on lower right quarter of hopper wall panel to allow sweeper to operate in wet conditions by draining water picked up during sweeper operations.
_____ Hopper load indicator shall be provided with audible and visual indicators on the in-cab display that signals full load.

HYDRAULIC SYSTEM

_____ The hydraulic system shall be adequate for use within the design requirements of the sweeper. The system shall include a minimum 13.5 gallon reservoir, sight gauge, temperature gauge, 80 mesh suction strainer, spin-on replaceable full flow oil filter, restriction indicator, hydraulic cylinders, gutter broom drive motors, control valves, relief valves, oil cooler, hydraulic hoses and standard fittings.
_____ Mobil DTE 25 ULTRA hydraulic oil shall be provided for extended service life.
_____ The hydraulic pump shall be gear driven by the auxiliary engine.
_____ System pressures shall consist of 1500 PSI maximum for pick-up head and dump door; 2500 PSI maximum for gutter broom(s).
_____ Hydraulic control valves must be easily accessible for service without raising the hopper or enclosures.
_____ An auxiliary hydraulic system shall be furnished which electrically operates the hydraulic system without running the auxiliary engine to raise/lower the gutter broom(s), pick-up head and open/close the dump door.

BLOWER

_____ Heavy duty, wear resistant, high strength cast aluminum alloy turbine type open face blower computer balanced within 4 grams shall be provided to create air pressure and suction.
_____ Blower wheel shall be covered with wear-resistant rubber for long life.
_____ Blower shall be mounted on self-aligning anti-friction bearings.
_____ Blower shall be driven from PTO off auxiliary engine by heavy duty power belt which shall be adjustable for tension.
_____ Blower housing shall be lined with a bolt-in wear resistant, replaceable rubber liner for long life.
_____ Blower not to exceed 2700 RPM to insure smooth efficient performance.
_____ Access to blower housing must be accomplished without raising hopper

PICK-UP HEAD

_____ A spring balanced all steel fabricated pick-up head with maximum length and width of 78" x 30" I.D. shall be provided.
_____ The pick-up head shall have a separate upper and lower chamber where pressurized air is blasted from upper chamber through an elongated blast orifice to street surface.
_____ Blast orifice flange shall be of bolt-on design so that flange is easily replaced and shall have slots so that blast orifice gap is easily adjusted without removing pick-up head from sweeper.
_____ Pick-up head shall have a 12 inch diameter (minimum) bolt on pressure inlet ring with turning vanes located on left side of pick-up head.
_____ A 12 inch diameter (minimum) heavy duty pressure hose attached to the blower housing shall be provided.
_____ A 12 inch diameter (minimum) heavy duty suction hose, attached to a quick disconnect transition at the hopper shall extend down to the right side of the pick-up head and shall be attached to the pick-up head suction nozzle ring which shall be constructed of 10 gauge steel.
_____ Pick-up head shall be equipped with reversible, 2" wide, adjustable, side mounted, integral alloy steel and carbide runners for maximum pick-up ability and long life. Skid runners to be warranted for 2 years/2,000 hours prorated.
_____ Side Skid plates shall have a minimum slotted height adjustments of 4 inches at the blast orifice.
_____ Pick-up head shall be raised and lowered hydraulically by a single switch on the control panel.
_____ Pressure inlet ring shall be equipped with an adjustable pressure relief for optimum leaf and light debris sweeping; pressure relief shall be controlled from inside cab.
_____ Reverse pick-up head system shall be furnished to allow unit to back up without damage to the pick-up head.
_____ Hydraulic pick-up head front curtain lifter shall be provided to give the pick-up head the ability to sweep a large volume of light debris such as leaves, grass, paper, etc. without causing excessive debris accumulation at the pick-up head inlet. It shall be hydraulically controlled with a switch within the cab of the truck.

GUTTER BROOM

_____ Twin gutter brooms shall be 36 inch diameter (minimum), steel vertical digger type for removing debris from gutter area. The gutter broom bristles shall be steel and 12 inches in length for maximum wear life.
_____ 12 inch parabolic mirror(s) and floodlight(s) shall be provided.
_____ Gutter broom(s) shall be hydraulic motor driven and shall be positioned laterally and vertically by one hydraulic cylinder.
_____ Gutter broom(s) down pressure shall be automatically adjusted to load by a pressure sensing sequence valve in line with gutter brooms torque motor.
_____ Gutter broom(s) shall have adjustment for bristle contact pattern and wear.
_____ Gutter broom(s) shall have lateral flexibility to swing rearward 15" when encountering the impact of an immovable object thus avoiding damage to the broom assembly.
_____ Gutter broom(s) shall have a spring adjustment to allow downward compensation for bristle wear and shall be free floating to follow street contour.
_____ Gutter broom(s) shall be held in the up and transit position by use of an electric lock valve attachment. Upward motion of gutter broom(s) shall be regulated by an adjustable flow control valve.
_____ Gutter broom(s) shall be controlled from inside the cab by a single switch.
_____ Gutter broom(s) shall additionally incorporate a hydraulically actuated tilt capability of 27 degrees, remotely controlled from the operator's seat to allow instant adjustment for debris removal from deep gutters (such as those resulting from multiple overlays of blacktop).
_____ Gutter broom(s) shall be variable speed and controlled from operator console inside the cab.

DUST CONTROL WATER SYSTEM

_____ Water tank shall be 72.5 gallons total capacity, constructed of recyclable, translucent polyethylene for strength and ability to view water level at all times. Water tank shall be 100% rustproof and shall be of bolt-in design for easy removal. (Requires Isuzu 132.5" wheelbase chassis)
_____ Water from tank to be filtered by 80 mesh cleanable filter located between tank and water pump.
_____ Hi/low pressure wash down system with self-contained water supply; 25' high pressure, low volume wash down hose, a belt driven Cat 290 piston water pump (delivering up to 3.5 GPM with a 1000 PSI working pressure); a wand with trigger control and two interchangeable lance lengths of 36" shall be furnished. (Requires Cat 290 water pump)
_____ Electric solenoid water control valves shall be cab controlled. Spray system shall include spray nozzles to be located as follows: minimum of 2 for gutter broom and 1 inside hopper. Water nozzles to be located near the gutter broom(s) and top of hopper suction inlet throat for easy inspection and superior dust control.
_____ Water tank shall have anti-siphon/anti-pressure filler neck with air gap.
_____ Flexible 20-foot (minimum) long water fill hose with 2-1/2" quick disconnect coupling for filling water reservoir shall be provided. Water fill hose shall include a stainless 100 mesh cleanable filter.
_____ Flexible 5/8" diameter water fill hose with garden hose connection with straining screen for filling water reservoir shall be provided.
_____ Shop Air Purge system to facilitate purging dust control system during freezing conditions.
_____ Hydrant wrench shall be provided.

FRONT STORAGE COMPARTMENT

_____ Sweeper shall be equipped with a storage compartment for storage of tools, supplies, accessories, batteries, and water tank(s).
_____ Compartment shall be independent of the hopper weldment and easily opened without the use of auxiliary hydraulics or starting the auxiliary engine.
_____ The storage compartment shall be divided into multiple compartments with a total capacity of not less than 20 cubic feet, after deducting space for the 72.5 gallon water tank and batteries.
_____ Contents of the compartment to be easily accessible by lockable doors on the left and right side.
_____ Doors are to be fabricated of high density composite materials for strength and durability.

REAR STORAGE COMPARTMENTS

_____ Sweeper shall have two (2) rear storage compartments with one (1) located on each side of the hopper.
_____ Storage compartments shall be fabricated of polyethylene, have a steel frame, and have a total capacity of not less than 26.6 cubic feet.
_____ Compartments shall be independent of rear bumper and rear fenders for ease of maintenance.
_____ Lockable compartment doors shall be mounted on the side of the sweeper and constructed of aluminum.
_____ Storage compartments shall be fully enclosed and independent.

SAFETY WARNING DEVICES

_____ Unit shall have two rear mounted LED amber alternating flashing warning lights.

_____ Unit shall have a backup alarm that sounds when chassis is placed into reverse gear.

HAND HOSE EQUIPMENT

_____ For cleaning remote areas, an auxiliary hand hose with mild steel hardware shall be provided. It shall be six (6) inch diameter, 10 feet long and have a 40" long metal nozzle.

OPERATING CONTROLS

_____ The sweeper electronic control platform shall be CAN controlled utilizing a multiplex control system.

_____ The multiplex control system shall be equipped with a multiplex module with diagnostic LED indicators for all Inputs and Outputs as well as network and power LEDs to assist in troubleshooting.

_____ The multiplex module shall be equipped with overcurrent protection for all outputs.

_____ All module Inputs and Outputs as well as network and power status shall be accessible through the in-cab display.

_____ All operating controls for sweeper shall be mounted inside truck cab and readily accessible to the operator.

_____ All main sweeping functions shall be multiplexed with LED diagnostics and integral solid-state circuit protection to reduce overall wiring and enhance operator feedback.

_____ In-cab controls shall consist of, but are not limited to, gutter broom(s), pick-up head, engine throttle, water system, water system nozzles, dump door, and work lights.

_____ Dump control includes a single weatherproof toggle switch located on the exterior of sweeper just between the truck cab and blower housing.

_____ Auxiliary engine controls shall be mounted on control console.

_____ A 5.7 inch viewable (minimum) multi-function, high resolution, LCD, color touchscreen display shall be pedestal mounted to display gauges consisting of, but not limited to engine RPM, engine oil pressure, engine temperature, battery voltage, and instantaneous fuel rate.

_____ For sweeper on board diagnostics (OBD), the in-cab display shall provide detailed text descriptions of sweeper faults as well as provide input/output status and stored output faults.

_____ For auxiliary engine OBD, the in-cab display shall provide a detailed message about auxiliary engine faults providing SPN, FMI, and a text description of the fault at minimum.

_____ The display shall provide a visual indicator icon for the following: Pick-up head down, dust suppression water pump, low water, water system winterization.

_____ The in-cab sweeper display shall incorporate resettable and non-resettable hour meters for the auxiliary engine; gutter broom(s); pick-up head; water pump; and blower for collecting data about sweeping route performance and maintenance.

_____ The in-cab sweeper display shall incorporate resettable sweeper and auxiliary engine service timers, which will trigger service reminders for engine oil, engine air filter, fuel filters, hydraulic filter, hydraulic oil.

_____ The in-cab display shall include a minimum five (5) User-defined custom reminders

_____ A minimum of three (3) custom reminders shall be timed by hours

_____ A minimum of two (2) custom reminders shall be timed by days.

_____ The in-cab display shall include a sweeper odometer that is active when the pick-up head is down and the auxiliary engine is above idle.

_____ The sweeper odometer shall include a non-resettable odometer and resettable odometer, hour meter, and average sweeping speed.

_____ The in-cab display shall log the following events by date, time, event title, and engine hours: hour meters resets, custom reminders resets, service reminders, service hour meter reset, overspeed events, engine faults, sweeper output faults, sweeper odometer resets, winterization and de-winterization events, and fuel usage statistics resets.

_____ Overspeed warning system shall be equipped to alert the operator when sweeping at an excessive speed and can be adjusted from 5-20 mph with a PIN code.

_____ The in-cab display shall include fuel usage statistics for the auxiliary engine which displays trip fuel usage, fuel trip hours, average fuel economy, and instantaneous fuel rate.

_____ The in-cab display shall include an on-screen guide for winterization procedures specific to the dust control system equipment. The display shall tag the system as winterized once the guide has been completed and will remove the winterized tag once the system senses water.

_____ Audible alarms and visual indicators shall include, but are not limited to indications of the following: low dust control water, exceeding maximum recommended sweeping speed, auxiliary engine fault codes and derates such as low coolant or high engine temperature, and sweeper output faults such as low voltage.

_____ All main electrical systems, i.e. ignition, lights, hydraulic, etc. shall be separately fused to isolate electrical problems to fused area and speed service.

_____ All external wiring, harnesses and terminations shall be of a sealed, weather-tight design utilizing heat-shrinkable components. Additionally, where feasible, all connectors shall utilize solid, cold-formed, nickel-plated copper alloy contacts with gas-tight crimps (Deutsch).

_____ In-cab dump switch shall be located on the control panel to activate dump operation from inside cab.

ADDITIONAL EQUIPMENT

_____ Camera/Monitor System with 7" color monitor mounted in cab with one rear view camera, right gutter broom camera, and one pick-up head camera.

_____ Work lights shall be provided pointing to the left and right gutter brooms, and rear of the sweeper

_____ Auto Sweep Assist (ASA) shall be furnished. It is a system designed with five preset sweep modes including: Light, Normal, Heavy, Leaves, and Brooms In. A 6th mode is available for user configuration. Depending on the options available on the sweeper, each mode defines the condition for: blower speed (or engine speed), broom speed*, leaf pressure bleeder position*, curtain lifter*, warning lights, broom position*, BAH*, screen vibrator*, pressure inlet water injection*, and up to 10* water solenoids. The setting for each item as well as the name of the mode can be changed by the user. Several ASA features shall be configurable and be enabled/disabled through the control system display and be PIN protected including:

_____**ASA Auto/Manual:** Selecting "Auto" enables the ASA System to include sweep modes and automatically interrupt sweeping when shifting into reverse or pressing the reset switch. "Manual" mode disables all functions of the ASA, except low water interrupt. (Included with ASA.)

_____**Overspeed Interrupt,** when enabled, allows for a two-stage process to prevent sweeping at excessive speeds by warning the operator at a set PIN-code protected configurable speed and then by activating ASA at a set configurable speed. From 5-20 mph the operator will receive a warning and at 8-25 mph the Auto Sweep Assist will engage depending on ranges set. (Included with ASA.)

_____ **Interrupt Warning Below Max:** When the operator approaches the maximum recommended sweeping speed, the system will sound an audible alarm and instruct the operator to slow down. This allows the operator the opportunity to adjust the operating speed and prevent activation of the ASA overspeed interrupt.

_____ **ASA Head Operation:** The setting adjusts control of raising the pick-up head when the sweep functions are interrupted.(Included with ASA.)

_____**Low Water Interrupt:** The ASA system can be configured to interrupt sweeping when the dust suppression water tank is depleted. (Included with ASA.)

_____ **Forced Water:** If a water zone is set to "Forced" the designated water solenoid will be turned on any time the sweep mode is active. (Included with ASA.)

CHASSIS

GENERAL

_____Chassis/cab shall be a low cab forward (cabover) design with a tilt forward cab. Frame to be 44,000 PSI, section modulus 7.20 in^3 (316,800 lb. ft./in. RBM). Gross vehicle weight rating to be not less than 17,950 lbs. Curb weight with cab, fuel, water, oil and tires shall be approximately 7,058 lbs. Standard truck cab enclosed and equipped with safety glass all around, adjustable driver and stationary two man passenger seat with safety seat belts. Rear bumper shall be of wrap-around design with recessed lights and rubber bumper guards.

WARRANTY

_____ Sweeper auxiliary engine shall be warranted for 36 months or 3,500 hours, whichever occurs first from date of delivery.

_____ Vehicle coverage is 36 months/unlimited miles.

_____ Engine (including all gear driven accessories) coverage is 36-months/unlimited mileage.

_____ Transmission coverage is 36 months/unlimited miles.

_____ Frame coverage is 100% for 36 months/unlimited miles and 50% for 36-60 months/unlimited miles

_____ Emissions coverage is 60 months/100,000 miles.

_____ Corrosion (rust-through) coverage is 48 months/unlimited miles.
_____ Must provide towing/ roadside service warranty for 36 months/unlimited miles

WHEELBASE

_____ Chassis shall have a maximum wheelbase of 132.5".

AXLES

_____ Front axle to be minimum of 6,830 lbs. with suspension capacity of 8,440 lbs. and stabilizer bar.
_____ Rear axle shall be 14,550 lbs. single speed with a ratio of 5.125 in direct drive, suspension to be minimum of 14,550 lbs.
_____ Front and rear shock absorbers and front stabilizer bar.

STEERING

_____ Left Hand operator controlled integral hydraulic power steering with cruise control, tilt, and gauge package.
_____ Diameter of steering wheel shall be minimum 16 inches.

BRAKES

_____ Service brakes to be dual circuit, power assisted hydraulic with antilock brake system.
_____ Front brakes shall be disc.
_____ Rear brakes shall be self-adjust drum.
_____ Mechanical, cable actuated, internal expanding drum type, transmission mounted parking brake.

CAB

_____ Gauges shall consist of: speedometer, odometer, temperature gauge, indicator warning lights, fuel gauge, engine hour meter, and trip meter.
_____ Warning lights shall be supplied for check engine, low fuel, brake system warning, low coolant and oil level, battery discharge, and engine oil pressure.
_____ Chassis shall be equipped with air conditioner, fresh air heater, defroster, two speed electric windshield wipers with electric operated washers, 12V receptacle, two rearview mirrors, one 10.5" diameter parabolic mirror, dual sun visors, AM/FM stereo radio with CD player and power windows and door locks.
_____ Light bar – LED, amber, SAE Class 1, 55 inches long, cab mounted with 12 lights total – 2 on the sides and 8 on the front.

ELECTRICAL

_____ Shall consist of two multiple beam headlights with dash beam indicator, daytime running lights, instrument panel, taillights, stop lights, front and rear turn signals, and self-canceling signal switch, equipped for four way flashing.
_____ Taillights, stop lights and signal lamps may be in combination.
_____ Shall have two 750 CCA batteries.
_____ Shall have a 140 amp alternator.
_____ LED stop/turn/tail/clearance/side markers

ENGINE/EXHAUST

_____ Engine shall be heavy duty 4-cylinder turbocharged diesel with a minimum 317 cubic inch displacement (5.19L); 215 gross HP @ 2,550 RPM; 452 lbs. ft. gross torque @ 1,850 RPM.
_____ Dry element air cleaner shall be supplied.
_____ A 4.23 gallon, rear mounted DEF tank shall supply diesel exhaust fluid to Selective Catalytic Reduction (SCR) system.
_____ Frame mounted aftertreatment device behind cab. Includes single vertical exhaust pipe.

FUEL

_____ A 30 gallon tank mounted in frame rail behind rear axle shall supply fuel to both engines. Frame mounted heated fuel/water separator.

TIRES AND WHEELS

_____ Heavy duty first line quality tubeless radial tires to be minimum 225/70R-19.5 C/R F rating with duals in rear for adequately carrying full load of sweeper and maximum stability.

_____ Wheels to be 19.5x6.0 6-hole disc.

TRANSMISSION

_____ 6-speed automatic

_____ Spin on transmission oil filter shall be provided.

Additional Requirements:
Delivery will be a consideration factor to establish the lowest and best bid pursuant to Mississippi Code 31-7-13 section d.

Any exceptions to the above specifications must be listed in the bidders bid, with justification. Failure to do so will disqualify the bid. All bidders must be able to deliver their equipment within 45 days (which will be a factor used in determining the lowest and best bid. Failure to do so may result in the termination of the award) and bid price must include delivery to the City of Forest.

Delivery Date:_____ _

The offer of a guaranteed buy back provision at the end of three (3) years or may be a factor used in determining the lowest and best bid. The guarantee buy back must be accompanied by a letter from the vendor. All bidders must list any conditions and or limitations to buy back, if any. Please enter your guaranteed buyback dollar amount

Guaranteed Buy Back Provision at the end three (3) years:_____