INVITATION TO BID NEW REGENERATIVE AIR STREET SWEEPER

The City of Antigo will accept sealed bids for one (1) new Regenerative Air Street Sweeper until 4:00 pm March 25, 2020.

Specifications, including information for bidders will be available on the city website at the following address: www.antigo-city.org

Bids will only be accepted through the City's vendor program, Vendor Registry. You may register for the program at www.antigo-city.org. Bid price shall be complete and include all transportation, preparation and accessories as indicated in the specifications.

Bids will be opened and read at 9:00 am on Thursday, March 26, 2020, in the Public Works Office, City Hall, 700 Edison Street, Antigo, Wisconsin 54409.

The City of Antigo reserves the right to reject any and all bids and to waive irregularities and informalities therein, and further reserves the right to award the contract in its best interest.

www.antigo-city.org

MINIMUM SPECIFICATIONS NEW REGENERATIVE AIR STREET SWEEPER

CITY OF ANTIGO, WISCONSIN

GENERAL SPECIFICATIONS:

The following specifications are intended to serve as general guidelines to obtain bids for comparable equipment. It is the intent of these specifications to describe a unit that we feel best meets our requirements. These specifications are to be considered **<u>minimum</u>** specifications unless stated otherwise. The machinery will include all necessary equipment and shall be furnished and delivered complete and ready for immediate use. The bid information shall itemize, in detail, all standard and accessory equipment. The equipment shall be equal to or exceed the following specifications, and shall conform to all safety and OSHA regulations. All parts not specifically mentioned which are necessary to provide a complete operating piece of equipment shall be included in the bid and shall conform in strength, quality of material, and workmanship to what is usually provided by the manufacturer and generally accepted by industry.

The supplier shall describe, in detail, those areas where their equipment does not comply with these specifications. Any alternate equipment or material deviating from the specifications **must be noted** with the bid proposal. Deviations may or may not be considered informalities in bidding. Deviations that may or may not be accepted by the City shall also be described in detail. Failure to do so may result in disqualification of the bid.

The City reserves the sole discretion in determining the best and most qualified bid. The decision to purchase will be based on price, performance, maintenance history, availability of parts and service, equipment warranty (if any), evaluation of quality, past operating experience and delivery date.

The term "standard" is defined as that equipment listed or shown as standard equipment at no extra cost in the manufacturer's current publications.

Should the bidder fail to make delivery as he has specified on the proposal sheet, there shall be deducted from his contract payment, the sum of fifty dollars (\$50.00) per day for each calendar day that the deliveries are late. This sum shall be considered as fixed, agreed, and liquidated damages due the City of Antigo from the bidder, by reason of inconvenience to the public and City of Antigo. In case of a strike, of which the dealer has no control, the City will waive this liquidation damage for only the actual number of strike days. This shall in no way operate as a waiver on the City of Antigo of any rights under the contract.

Warranty work or recalls must be fully explained to Shop Mechanic at delivery. Warranty work or recall needing to be performed on unit shall be picked up by successful bidder at City of Antigo Street Department, and returned to the City of Antigo Street Department by successful bidder when work is complete, at bidders cost or done in our facility. Any time unit gone over 2 days a loaner similar to the unit must be supplied at Bidders cost.

REGENERATIVE AIR STREET SWEEPER

It is the intent of these specifications to describe a street sweeper in sufficient detail to assure that product reliability, design integrity, technical soundness and sweeping performance is provided. The unit provided shall be new, of current manufacture, and the model and series must have been in production a minimum of five (5) years. Bidder shall provide a list of 3 customers currently using the model. All parts not specifically mentioned, which are necessary to provide a complete street 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 diesel powered regenerative air sweeper mounted on a truck chassis.

COMPLIANCE TO SPECIFICATIONS

The bidder shall indicate their compliance with a "**YES**" or non-compliance with a "**NO**" or "**OFFER**" 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" specifications will be accepted.

A complete description of terms of warranty on unit and repair service availability.

Descriptive literature and complete specifications of unit bid.

A price list of all optional accessories that are regularly used with the unit but not included in the bid.

MANUA	ALS/TRA	AINING	
Yes	No	Offer	
·			The bidder shall supply one printed sweeper operator's and one printed sweeper parts and service manual on paper and one set on CD with each unit. Manufacturer must have scheduled a minimum of 20 training courses per year for convenience of customers scheduling. The course shall be specific to the model bid. Bidder shall provide operator instruction/safety/maintenance procedures on DVD with the unit.

PAINT - COLOR

Yes No Offer

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

POW	ER UNIT	- DIESEL
Yes	No	Offer
		The sweeper power unit if equipped shall be a diesel fueled, liquid cooled, charge air-cooled,
		turbocharged electronic Final Tier 4 emissions industrial engine. Engine displacement shall not be less
		than 275 cubic inch developing not less than 99 HP @ 2200 KPM and 315 It. los. torque @ 1000 KPM.
		Cylinder construction shall be wat sleave type
		Engine shall be equipped with a radiator fan auxiliary drive, and engine mounted exhaust filter
		Spin on replacement type oil filter remote mounted for easy access
		Spin on repracement type on micromote mounted for easy access Unit shall have a fuel/water separator and fuel filter remote mounted for easy access with water-in-fuel monitoring
		that will display a warning in the cab of the sweeper
		12-volt ignition electric starter and minimum 90-amp alternator
		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, high air cleaner restriction or low oil pressure
		Engine controls shall be located inside cab.
		Unit shall share a 50-gallon fuel tank with chassis engine.
		Unit shall share batteries with chassis engine.
		Unit shall have a heavy-duty dry type air cleaner with replaceable Donaldson PowerCore [®] element, safety element,
		and integral pre-cleaner scavenged to the regenerative air system.
		The in-cab display shall include an air cleaner restriction gauge which displays percentage restriction and includes
		an audible alarm and visual message when filter restriction reaches a serviceable level.
		Engine shall be programmed for isochronous governor feature for engine speed control.
		A heat exchanger assembly will provide adequate cooling for three different systems: engine coolant system, engine
		intake charge air and hydraulic system oil. It must be modular in design for ease of maintenance with each cooler
		located side-by-side rather than stacked in series. Air will be circulated through the heat exchanger assembly by
		an engine mounted fan.
		A minimum 5.4 gallon (volumetric), minimum 3.8 gallon (useable), right mid-ship mounted DEF tank shall supply
		diesel exhaust fluid to Selective Catalytic Reduction (SCR) system.
DUST	SEPARA	TOR – HIGH CAPACITY
		Separation of the dirt from the air stream shall be accomplished within the hopper by means of a multi-pass
		cylindrical centrifugal single chamber dust separator with a minimum size of 20" diameter and 61" width.
		The separator shall be designed so that it will not plug with normally encountered debris.
		I he dust separator shall have a minimum 24" x 61" curved, easy to open door allowing inspection and cleaning
		of the interior. The door shall have an abrasion resistant bonded rubber lining material for long life.
		I he dust separator shall incorporate a high capacity chamber to accumulate the separated material. The chamber
		shall be a minimum 10 × 24 × 01.
		I ne entire dust separator iniet area shall be lined with a bolt-in replaceable, wear resistant rubber liner for long life.
		Dust separator shall be constructed of industrial grade, non-magnetic low carbon, high chrome stanness steel.
	DED	
HOFF	LN	Hopper size to be no less than seven (7) cubic yard volumetric measurement with an operating load capacity of
		not less than 6 cubic vards
		A stainless steel screen of not less than 13 gauge shall be provided that swings down for easy cleaning
		Hydraulic cylinder movement shall be controlled with the use of an electric toggle switch located on the side
		of the hopper so discharging of debris may be viewed during dumping
		Hopper door shall be opened and closed hydraulically and be held in the closed position by means of a
		lock valve located in the hydraulic dump circuit
		An inspection door shall be provided on both left and right side of the hopper for easy viewing inside
		honner and insertion of large debris
		Hopper shall be maintained airtight through use of rubber seals on all doors and openings.
		Hopper suction inlet roof area shall have a bolt on replaceable Ultra High Molecular Weight (UHMW)
		wear resistant liner.
		An SAE Class 1/California Title 13 compliant amber LED beacon light shall be mounted on the left rear of the
		sweeper hopper. The beacon light shall have a protective limb guard
		A second SAE Class 1/California Title 13 compliant amber LED beacon lights shall be mounted on the right rear
		of the sweeper hopper. The beacon lights shall have a protective limb guard.
		Two (2) work lights shall be mounted at the rear of the hopper to illuminate the dump area.

Yes No Offer

Two (2) amber LED flashing warning lights shall be mounted at the rear of the hopper. Sides and top of inlet with replaceable wear plates or lined with abrasion resistant material. Abrasion protection package shall be furnished with standard hopper screen with screen baffles; protective hopper wall liners; suction nozzle liner; pressure wear pads; heavy duty pressure hose. Hopper load indicator shall be provided with audible and visual indicators on the in-cab display that signals full load. A stainless steel limb guard shall be mounted on the right hand side of the hopper to protect hopper water nozzle. Additional hopper nozzle, location to be determined...

HYDRAULIC SYSTEM

- The hydraulic system shall be adequate for use within the design requirements of the sweeper. The system shall include a minimum 25-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.
- The multiplex control system shall include a hydraulic oil temperature shutdown which provides the operator an audible and visual indicator through the in-cab display and shuts off the gutter brooms when hydraulic oil reaches a high temperature. The in-cab display shall also include a hydraulic oil temperature gauge. Mobil DTE 25 hydraulic oil shall be provided for extended service life.
- The hydraulic pump shall be driven by the auxiliary engine or chassis engine or power plant.
- Pressure shall be 2500 PSI maximum for gutter brooms and 1500 PSI maximum for pick-up head and dump door. An auxiliary hydraulic system shall be furnished which electrically operates the hydraulic system 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 anti-friction bearings, sealed and lubricated for life. Blower shall be driven by auxiliary power source. Blower housing shall be a bolt on design and shall be lined with a bolt-in wear resistant, replaceable rubber or Stainless liner for long life. Blower not to exceed 3000 RPM to insure smooth efficient performance. Non-magnetic Stainless Steel Blower Housing shall be furnished.

PICK-UP HEAD - BROOM ASSIST (BAH)

 A spring balanced all steel fabricated pick-up head with minimum length and width of 87" x 40" 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 adjustment
mechanism 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) pressure inlet ring located on left side of pick-up head.
 A 12-inch diameter (minimum) pressure hose attached between pick-up head and blower housing shall be provided.
 A bolt-on pressure inlet ring with turning vanes shall be provided for efficient performance and easy service.
 A 14-inch diameter (minimum) 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 1/4-inch steel.
 Suction hose shall have a minimum 3/8 inch wall construction for long life.
 Pick-up head shall be equipped with 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.
Runners shall be symmetrical for optimum life.
 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; control shall be mounted inside cab.
A broom shall be mounted at the rear of the nick-up head and shall be fully enclosed

A broom shall be mounted at the rear of the pick-up head and shall be fully enclosed.

Yes	No	Offer
		Control of broom rotation and positioning shall be accomplished by a toggle switch located on the control
		console in the cab.
		The broom shall be driven hydraulically at 230 RPM. A separate hydraulic pump will be provided for all
		Droom functions. The broom shall be 70" long and 10" minimum in diameter
		Broom nattern shall be easily adjustable by mechanisms on the top of pick-up head
		Droom pattern shan so easily adjustate by meentanisms on the top of pick up neutricDesign of broom suspension shall provide automatic independent positioning of each broom end to conform to the surface being swept.
		Two (2) hydraulic cylinders shall be incorporated to provide positioning and the independent suspension of the broom ends.
		Down pressure and broom pattern shall be controlled to provide maximum broom performance and life. Reverse Pick-Up Head System shall allow unit to back up without damage to 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. Pick-Up Head Deluge System with a high volume nozzle which attaches to a fire hydrant to flush the pick-up head shall be furnished and shall include quick disconnect fittings on nozzle and filler hose. Removable Front Curtain Set shall be provided for quick replacement of worn-out front pick-up head curtains. Curtain Actuator. Electric linear actuator for pick-up head pressure bleeder control shall be furnished with a percent open gauge in multifunction color display.
		3-inch skid bumper extensions shall be provided.
		The pick-up head pressure transition shall have a minimum 6-inch diameter port allowing inspection and
		cleaning of the interior, with an expandable rubber plug.
GUTT	ER BROO	MS
		Twin gutter brooms shall be 42-inch minimum diameter, steel bristle filled vertical digger type for removing debris from gutter area.
		Gutter brooms shall be hydraulic motor driven and shall be positioned laterally and vertically by one
		hydraulic cylinder.
		Gutter broom down pressure shall be automatically adjusted to load by a pressure sensing sequence valve in line with gutter broom torque motor.
		Each gutter broom shall have adjustment for bristle contact pattern and wear.
		Each gutter broom shall have lateral flexibility to swing rearward 15" when encountering the impact of an
		immovable object thus avoiding damage to the broom assembly.

_____Each gutter broom shall have an adjustment to allow downward compensation for bristle wear and shall be free floating to follow street contour.

- ____Each gutter broom shall be held in the up and transit position by use of an electric lock valve attachment.
 - Upward motion of gutter broom shall be regulated by an adjustable flow control valve.
- ____Each gutter broom shall be controlled from inside the cab by a switch.
- _____Twin Gutter Broom Drop Down feature allows gutter brooms to drop down for road surface agitation in front of the pick-up head.
 - _____Twin Gutter Broom Shall have tilt adjustment.

_____ Gutter brooms shall be variable speed and controlled from in-cab control console and include a broom speed gauge on the in-cab display.

_____Gutter broom override for both brooms.

Yes	No	Offer
		Water tanks shall be 200 gallons Minimum, constructed of recyclable polyethylene for strength and puncture
		resistance, be 100% rustproof, be of bolt-in design for easy removal, and have a water level sight gauge.
		Water from tank to be filtered by 80-Minimum mesh cleanable filter located between tank and water pump.
		An Air Operated Diaphragm (AOD) water pump powers Dust Control System and Washdown with an electronic
		solid state liquid level sensor to automatically shut off pump and trigger an audible alarm and warning message
		on the touchscreen display when water is depleted. Dust Control System is regulated to a maximum of 30 PSI.
		Electric solenoid water control valves shall be cab controlled. Spray system shall include spray nozzles to be
		located as follows: minimum of 4 on outside of pick-up head; 2 for each gutter broom; 1 inside hopper. Water
		nozzles to be located on outside of pick-up head and suction tube 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 2½ inch coupling for filling water reservoir and hose storage
		rack shall be provided. Water fill hose shall include a stainless 100 mesh cleanable filter.
		High output water system shall be furnished with additional nozzles and deflectors strategically located to control extreme dust.
		Water system water level gauge shall provide a percent full gauge on the in-cab display, which includes calculated
		water usage statistics to include resettable trip water usage, water trip hours, and average water usage meters.
		Additional hopper water nozzle controlled by a separate switch shall be provided.
		Two additional right gutter broom water nozzles controlled by a separate switch shall be provided.
		I wo additional left gutter broom water nozzles controlled by a separate switch shall be provided.
PER	ATING	CONTROLS
		The sweeper electronic control platform shall be per manufactures spec and design.
		The system shall be equipped with diagnostic LED indicators for all Inputs and Outputs
		as well as network and power LEDs to assist in troubleshooting.
		The 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 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 brooms, pick-up head, engine throttle, water system.
		water system nozzles, dump system, and work lights.
		Dump control includes a single weatherproof toggle located on the exterior of sweeper on the right side on
		the hopper, mid-ship.
		If equipped, 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.
		If equipped, 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, pick-up head broom,
		dust suppression water pump, low water.
		The in-cab sweeper display shall incorporate resettable and non-resettable hour meters for the auxiliary engine-
		(if equipped with); left and right gutter brooms; pick-up head; pick-up head broom; 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

Yes No Offer

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, over speed events, hydraulic oil alerts, engine faults, sweeper output faults, sweeper odometer resets, and fuel usage statistics resets. The in-cab display shall include fuel usage statistics for the auxiliary engine (if equipped with) which displays trip fuel usage, fuel trip hours, average fuel economy, and instantaneous fuel rate. 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. Auto Sweep Interrupt (ASI) shall be furnished. It is a system designed to interrupt sweeping functions when any of several parameters are met. The following sequence of events will occur when the transmission gear selector is placed into reverse, when sweeping at an excessive speed, or when the ASI Reset Switch is engaged: 1) Auxiliary engine is idled and gutter broom(s) are stopped 2) Dust control system is turned off 3) Left gutter broom (if applicable) is raised 4) Right gutter broom (if applicable) is raised 5) Pick-up head is raised. The "ASI RESET" switch will reposition all functions to prior setting(s) and can be used as a one button start/stop switch during sweeping to interrupt/resume all sweeping functions. Dump Switch In-cab is located on the control panel to activate dump operation from inside cab.

ADDITIONAL EQUIPMENT

_____ Traffic directing LED light on rear of sweeper hopper.

- _____ Camera/Monitor System: With 7" Minimum color monitor mounted in cab with one rear view camera and two pick-up head view cameras from right and left side.
 - _____LED work lights shall be provided with (1) pointing to the left gutter broom and (1) pointing to the right gutter broom, and (2) pointing behind the sweeper from the rear.
 - In cab remote control pendant (wireless or hard wired) for sweeper operation from right side of truck door mounted. To include: Pickup Head Up/Down
 - Broom Start/Stop
 - Broom Tilt
 - Broom Speed
 - Broom Location In/Out
 - Water On/Off Broom/Hopper

CHASSIS

GENI	ERAL	
Yes	No	Offer
		Chassis/cab shall be conventional with air ride cab and a tilt hood. Frame to be straight full channel steel rails (Minimum of 50,000 PSI). Gross vehicle weight rating to be not less than 31,000 lbs. Curb weight with cab, fuel, water, oil and tires shall be approximately 9,850 lbs. Standard truck cab enclosed and equipped with safety glass all around and two individual, adjustable, high back air seats with lumbar support and safety seat belts.
WAR	RANTY	
		Base vehicle coverage is 24 months/unlimited mileage.
		Engine (diesel) coverage is 36 months/unlimited miles.
		Drive train coverage is 24 months/unlimited mileage.
		Allison transmission coverage is 36 months/unlimited mileage.
		Frame coverage is 84 months/unlimited mileage.
		Cab corrosion coverage is 60 months/unlimited mileage.
(War	ranty co	verage is 100% parts and labor unless otherwise noted as provided by chassis manufacturer.)
WHE	ELBASE	
		Chassis shall have a maximum wheelbase of 176".
AXLE	S	
		Front axle to be minimum of 10,000 lbs. with suspension of 10,000 lbs.
		Rear axie shall be 21,000 lbs. 2 speed with a ratio of 6.1 //8.42, suspension to be minimum of 31,000 lbs.
STEE		van-rate with 4,500 los. capacity multi-lear auxiliary rubber spring.
SILL	NING	Dual operator controlled integral power steering with cruise control, tilt and dual gauge package
		Diameter of steering wheel will be minimum 18"
		Draileter of seering wheel will be minimum 10.
BRAK	KES	
		Service brakes to be full air with 18.7 cfm air compressor.
		Air tank drain valve, manual with pull cable.
		Front brakes shall be 15" x 4".
		Rear brakes shall be $16\frac{1}{2}$ " x 7".
	. <u> </u>	Shall have automatic slack adjusters front and rear.
		Parking brakes shall be spring actuated, double diaphragm, 30" MGM Chambers air chambers, with warning light.
		Brake chambers, spring relocated to rear of rear axle for maximum ground clearance.
		4-Channel anti-lock brake system shall be provided.
	·	An air dryer with heater shall be lurnished.
CAB		
	·	Cab shall have in-dash chassis manufacturer's factory installed air conditioner for operator comfort with a
		Iresh air filter. Dual sun visara, agat hagle staraga naglet en driver door, 12V recentegia, alastria horn, alastria windshield washer
		Dual sun visors, coat nook, storage pocket on unver door, 12 v receptacie, electric norm, electric windsmeid washer
		Chassis shall be equipped with fresh air heater, defroster, dual 7" x 16" remote controlled electric powered
		mirrors and two separate 12" diameter parabolic mirrors
		AM/FM stereo radio with clock and auxiliary input shall be provided.
		Chassis Hour Meter shall record truck engine hour operation.
		Power windows and door locks shall be provided.
		Fire Extinguisher shall be refillable, dry chemical unit, DOT approved, cab mounted.
		Hazard Reflectors shall consist of three (3) triangular red reflectors.
		Slow Moving Vehicle Emblem is a reflective triangular emblem which is rear mounted.
	·	Amber Beacon Light – LED: SAE Class I/California Title 13 compliant with protective limb guard
		(mounted on cao) Front tow books shall be front frame mounted
		i font tow noord bluit of front fruite information.

ELECTRICAL

Yes	No	ffer
		 Shall consist of two, multiple beam headlights with dash beam indicator, daytime running lights, instrumpanel, 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 12volt (1900 CCA total) maintenance free batteries. Shall have a 160-amp alternator. LED stop/turn/tail and clearance lights and markers Battery disconnect switch shall be provided.
ENGI	NE/EXHA	ST
		 Shall be in-line six cylinder, turbocharged diesel with a minimum 200 HP at 2400 RPM, 6.7L, 520 lb./ft. torque @ 1600 RPM. Dry type single element air cleaner with restriction indicator in cab and safety element.
		Automatic shutdown/engine protection system shall be provided. Horizontal after treatment device, right frame mounted. Includes single horizontal tail pipe. A 7 gallon, DEF tank shall supply diesel exhaust fluid to Selective Catalytic Reduction (SCR) system.
FUEL		A 50 gallon Minimum tank shall be supplied and shall supply fuel to both engines, if equipped.
TIRES 	AND WH 	ELSHeavy duty first line quality tubeless tires to be minimum 11R x 22.5, L/R G rating with duals in rear for adequately carrying full load of sweeper and maximum stabilityWheels to be 10-hole disc 22.5 x 8.25.
TRAN	SMISSIO	
		Shall be heavy duty Allison 2500 RDS electronic, six-speed automatic, with external oil filter. Shall have synthetic transmission fluid.

_____Shall have a transmission temperature gauge in cab.

BID PROPOSAL FOR ONE (1) REGENERATIVE AIR SWEEPER

Supply one (1) New Sweeper completely equipped per these specifications, F.O.B., City o Street Department, 1020 W Pierce Ave, Antigo, Wisconsin, less state and federal taxes.	f Antigo
Name of Supplier:	
Address:	
Phone:	
Make & Model: Price: \$	
Written out price	
Delivery:days	

The undersigned hereby declares that the specifications have been examined and he/she is familiar with the said requirements. Also, that the equipment supplied meets or exceeds general specifications identified by the City of Antigo. Any exceptions must be clearly identified on attached sheet(s).

Signature_____Date_____

The City of Antigo reserves the right to accept the bid deemed most advantageous to the City.