

CITY OF COURTENAY



REQUEST FOR PROPOSAL

R20-01 Regenerative Street Sweeper

Closing Date: 2:00pm, Wednesday, March 18, 2020

City of Courtenay
830 Cliffe Avenue
Courtenay, B.C. V9N 2J7
Attn: Purchasing Division

SECTION I TERMS OF REFERENCE

1. INTRODUCTION

- 1.1 The City of Courtenay invites proposals from qualified vendors for the supply and delivery of one (1) new Regenerative Street Sweeper for the City's Transportation Division.

2. SPECIFICATIONS & ALTERNATIVES

- 2.1 Wherever the specifications state a brand name, make, name of manufacturer, trade name, or vendor catalogue number, it is for the purpose of establishing a grade or standard. It is not intended to rule out competition from equal brands or makes. If a product other than that specified is offered, it is the Proponent's responsibility to provide information in its proposal that enables the City to confirm equivalency and acceptance.
- 2.2 Except where stated otherwise, the specifications describe what is considered necessary to meet the performance requirements of the City and Proponents should consider this in its proposal or, if the Proponent cannot meet specifications, the Proponent may identify and offer an alternative which it believes to be an equal or better alternative.
- 2.3 Proponents shall clearly indicate any variances from the City's specifications or conditions and attach descriptive literature.
- 2.4 A listing of the specifications for this vehicle are attached as Appendix A. Please note, Appendix A must be completed and included with the Proponent's proposal.

3. ENVIRONMENTAL CONSIDERATIONS

- 3.1 The City is committed to preserving the environment. Proponents shall provide environmentally sensitive products or services wherever possible.
- 3.2 Where there is a requirement within the specifications that require the Proponent to supply materials, oils, lubricants, paints or other fluid materials and where such materials may cause adverse effects, the Proponent shall indicate the nature of the hazard in its proposal.
- 3.3. The Proponent agrees to advise the City of any known alternatives or substitutes for such materials that would mitigate the effects of any adverse conditions on the environment.

BID FORM

The Proponent offers to supply the goods and/or services in accordance with the RFP documents and accept payment at the unit prices specified in the Bid Form in accordance with the RFP documents. The Proponent declares that all information, which is provided or will be provided to the City of Courtenay, is true and understands and agrees to be bound by the RFP documents. Bid prices shall not include GST.

A. One (1) New Regenerative Street Sweeper – Per RFP

(Make, Model, Year, etc.)

For the Unit Price of: \$_____ excluding PST, GST and Environmental Levy

Environmental Levy \$_____

Trade-In: City Unit 143 \$_____ (Optional)

B. Delivery Shall Be Made Within _____ Weeks From Receipt of the Purchase Order and To Be The Guaranteed Delivery Date to the City, F.O.B. Public Works Yard, 1000 Piercy Ave., Courtenay, B.C.

C. Nearest Service and Parts Depot _____

The above prices include and cover all duties, handling and transportation charges, environmental levies and all other charges incidental to and forming part of this proposal.

Acknowledgement is hereby made of receipt and inclusion of the following addenda to the documents:

Addendum(s) No. _____ Dated: _____ No. Of Pages: _____

Legal Name: _____

Address: _____

Phone: _____ Fax: _____ Email: _____

I/We the undersigned duly authorized representatives of the Proponent, having received and carefully reviewed the RFP including without limitation the Terms of Reference and Instructions to Proponents submit this bid in response to the RFP.

This bid is offered by the Proponent this _____ day of _____, 20____.

Signature of Authorized Signatory

Print Name and Position of Signatory

SECTION II INSTRUCTIONS TO PROPONENTS

1. An electronic submission of the proposal in .pdf format must be submitted to purchasing@courtenay.ca no later than 2:00pm local time, Wednesday, March 18, 2020 (the RFP Closing Date).

The email subject line shall read “**R20-01 Regenerative Street Sweeper**”.

It is the sole responsibility of the Proponent to ensure that their proposal is received by the City within the proper time allocation. Late responses will be rejected by the City of Courtenay. All proposals must be signed by an authorized representative of the Proponent.

Submission of a proposal indicates acceptance by the Proponent of the conditions contained in this RFP, unless clearly and specifically noted in the proposal submitted.

2. **Questions are to be submitted in writing within 2 business days of the RFP Closing Date quoting the RFP name, number and contact person below, and sent to email purchasing@courtenay.ca.**

Graham Peterson, Procurement Specialist
City of Courtenay
purchasing@courtenay.ca

Any oral communications will be considered unofficial and non-binding to the City. Proponents should rely only on written statements issued by the contact person listed above.

3. Not a Tender Call

This RFP is not a tender call, and the submission of any response to this RFP does not create a tender process. This RFP is not an invitation for an offer to contract, and it is not an offer to contract made by the City. Proposals will not be opened in public.

4. No Obligation to Proceed

- a) Though the City fully intends at this time to proceed through the RFP process in order to select the goods or services, the City is under no obligation to proceed to the purchase, or any other stage. The receipt by the City of any information (including any submissions, ideas, plans, drawings, models or other materials communicated or exhibited by any intended Proponent, or on its behalf) shall not impose any obligations on the City. There is no guarantee by the City, its officers, employees or agents, that the process initiated by the issuance of this RFP will continue, or that this RFP process or any RFP process will result in a contract with the City for the purchase of the product, service or project.
- b) The City reserves the right to accept or reject all or part of the proposal, however the City is not precluded from negotiating with the successful Proponent to modify its proposal to best suit the needs of the City.
- c) The City reserves the right to reject, at the City's sole discretion, any or all proposals if the proposal is either incomplete, obscure, irregular or unrealistic.
- d) A proposal may be rejected on the basis of the Proponents past performance, financial capabilities, completion schedule and non-compliance with Federal, Provincial and Municipal legislation.
- e) The City reserves the right to accept or reject a proposal where only one proposal is received.

5. Cost of Preparation

Any cost incurred by the Proponent in the preparation of the proposal will be solely at the expense of the Proponent.

6. Confidentiality and Freedom of Information and Protection of Privacy Act

The proposal should clearly identify any information that is considered to be confidential or proprietary information (the "Confidential Information"). However, the City is subject to the Freedom of Information and Protection of Privacy Act. As a result, while the Act offers some protection for third party business interests, the City can't guarantee that any Confidential Information provided to the City can be held in confidence if a request for access is made under the Freedom of Information and Protection of Privacy Act.

7. Irrevocability of Proposals

By submission of a written request, the Proponent may amend or withdraw its proposal prior to the closing date and time. Upon closing time, all proposals become irrevocable and are valid for a minimum of 60 days. By submission of a proposal the Proponent agrees should the proposal be successful, the Proponent will enter into a contract with the City. Prices will be firm for the entire contract period, unless otherwise agreed to by both parties.

8. Alternate Proposals

If an alternate solution is offered, the information shall be submitted in the format requested as a separate proposal.

9. Pricing

Prices are to be quoted in Canadian funds with the Goods and Services Tax (GST) shown as a separate line item, if requested. Prices must be quoted inclusive of all shipping, duty and other applicable costs F.O.B. the location indicated in the RFP.

10. Sub-Contracting

Under no circumstances may the provision of goods or services, or any part thereof be sub-contracted, transferred, or assigned to another company, person, or other without the prior written approval of the City.

11. Limitation of Damages

The Proponent, by submitting a proposal, waives any claim for loss of profits if no contract is made with the Proponent. By submitting a proposal the Proponent agrees to all terms and conditions of this RFP. Proponents who have obtained the RFP electronically must not alter any portion of the document, with the exception of adding the information requested. To do so will invalidate the proposal. The Proponent is responsible to ensure that they have obtained and considered all information necessary to understand the requirements of the RFP and to prepare and submit their proposal.

12. Cancellation of RFP

The City reserves the right to cancel this RFP at any time.

13. Accuracy of Information

The City makes no representation or warranty either express or implied, with respect to the accuracy or completeness of any information contained or referred to in this RFP.

14. Default

- a) The City may, by notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to make delivery of the Services within the time specified, or to perform any other provisions of this Contract.
- b) In the event the City terminates this Contract in whole or in part as provided in clause 15(a), the City may procure goods or services similar to those so terminated, and the Contractor shall be liable to the City for any excess costs for such similar goods or services.
- c) The Contractor shall not be liable for any excess costs under clause 15(b) if failure to perform the Contract arises by reason of Force Majeure or acts of the City.

15. Misrepresentation or Solicitation

If any director, officer or employee or agent of a Proponent makes any representation or solicitation to any Councillor, officer, employee or agent of the City of Courtenay with respect to the RFP, whether before or after the submission of the proposal, the City shall be entitled to reject or not accept the proposal.

16. Business License and Permits

For any warranty or non-warranty work to be done on City property, the successful Proponent shall be responsible for acquiring and payment for all required licenses, permits and approvals from authorities having jurisdiction, for the performance of the work.

The successful Proponent shall be responsible to acquire and maintain a valid City of Courtenay Business License for the term of the Contract if the successful Proponent is to conduct work on City property.

17. Health & Safety

For any warranty or non-warranty work to be done on City property, the successful Proponent must submit a copy of their Health & Safety Program Manual and/or Safe Work Procedure that is directly related to the work outlined in this RFP. The submitted Health & Safety Program Manual and/or Safe Work Procedure shall be reviewed for compliance by the City's OH&S/Disability Claims Coordinator.

The successful proponent may be designated the Prime Contractor in the immediate work area and will be required to sign and submit the attached Prime Contractor Designation Form.

18. Payment Terms

The successful Proponent shall invoice the City in an acceptable format and will be paid as per the City's standard payment terms, net 30 days from date of invoice. The City of Courtenay shall not pre-pay for any goods, or services for any period, unless agreed to in writing by the City. All invoices must be emailed to finance@courtenay.ca, please do not also mail invoices.

19. Applicable Laws and Agreements

This RFP is subject to the terms and conditions of the Agreement for Internal Trade, Mash Annex 502.4 and the Trade, Investment and Labour Mobility Agreement, and the New West Partnership Agreement, all inter-provincial trade agreements.

The laws of the Province of B.C. shall govern this request for proposal and any subsequent Contract resulting from the proposal.

19. Insurance for City Property Service

For any warranty or non-warranty work to be done on City property the successful Proponent will supply:

- a) Commercial General Liability Insurance in an inclusive amount of not less than \$2,000,000 for each occurrence or accident. Minimum coverage must include Personal Injury, Contractual Liability, Non-Owned Automobile Liability, Products/Completed Operations, Contingent Employers Liability, Cross Liability and Severability of Interest, and a 30 day written notice of insurance cancellation clause.
- b) Motor Vehicle Insurance including Bodily Injury and Property Damage in an inclusive amount of not less than \$2,000,000 per accident per licensed motor vehicle used to carry out the work.
- c) Proof of WorkSafe BC registration, including proof of up to date assessment payments in the form of a WorkSafe BC Certificate of Compliance letter.

20. Evaluation Process and Criteria

- a) An evaluation committee made up of City staff will be reviewing proposal submissions. The City reserves the right to accept any or none of the proposals submitted and will evaluate proposals based on best value and not necessarily the lowest cost.
- b) Notwithstanding any custom or trade practice to the contrary, the City reserves the right to, at its sole discretion and according to its own judgement of its best interest to waive any technical or formal defect in a proposal and accept that proposal.
- c) The City reserves the right to award the contract to other than the lowest cost Proponent.
- d) Award of any contract resulting from this RFP may be subject to City of Courtenay Council approval, and budget considerations.
- e) The City reserves the right to accept any or none of the proposals submitted and will evaluate proposal submissions based on “best value” using the following criteria:
 - Financial cost to the City and within Budget - 35%
 - Adherence to the Terms of Reference – 40%
 - Warranty & Value Added Services – 5%
 - Delivery Schedule – 10%
 - Environmental Impact Reduction – 10%

APPENDIX A
REGENERATIVE STREET SWEEPER – SPECIFICATIONS & WORKSHEET

Line Item	Specification	Provided As Specified Yes or No	Specify alternative or variance from specification
A. CHASSIS			
1	Chassis shall be cabover design with an approximate 33,000 GVW rating. State chassis make, model and location of manufacture.		
2	Preferred wheelbase should not exceed 156 inches.		
3	Cab to axle distance preference should not be more than 146 inches.		
4	Yield strength of the Rail, High Strength, approximately 120,000 PSI, 10.23" X 3.5" X .25", 1.4 M RBM.		
5	For safety, the rear of the sweeper shall be equipped with a rear panel to provide under ride protection. When dumping debris, material shall not be discharged on top of the rear panel.		
6	Front tow pins shall be provided.		
7	Rear fenders and mud flaps shall be supplied.		
8	One (1) 50-gallon fuel tank, preferred minimum capacity, shall be shared by both engines and shall be easily accessible without raising or shifting any components. A fuel gauge, in cab, shall be supplied. Sight tube is not acceptable.		
9	Diesel emissions shall be EPA 2020 compliant and have a preferred minimum capacity of 8.4 U.S. gallons diesel emissions fluid.		
B. CHASSIS ENGINE			
1	Truck engine shall be 2020 Emission compliant, turbocharged diesel with a preferred maximum of 250 hp for best fuel economy.		
2	Truck engine shall be equipped with a single vertical exhaust system.		
3	The cooling system shall be protected to -30° C.		
4	Engine shall be equipped with 1500 W immersion (coolant) type pre-heater.		
5	Radiator fan shall be viscous drive type.		
C. TRANSMISSION, AXLES, WHEELS & BRAKES			
1	An Allison (or approved equal) automatic transmission shall be provided.		
2	The single-speed rear axle shall have a ratio of 7.17:1 for sweeping speeds.		
3	Front axle shall be approximately 12,000 lb and be equipped with taper leaf front suspension and shock absorbers.		
4	The rear axle shall be approximately 21,000 lb.		
5	Tires shall be tubeless radial tires 14 ply 11R22.5 "G" load rated. The rear axle shall include dual tires for load capacity; singles will not be acceptable.		
6	Rims shall be 10 hole steel hub piloted 22.5 x 8.25.		
7	Parking brake shall be spring applied.		
8	Brakes shall be full air brakes S Cam with a 18.7 CFM capacity		

	compressor, with automatic slack adjusters and ABS.		
9	Air system shall include an air dryer with coalescing filter.		
D. CAB			
1	Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator shall not exceed 8 feet for an SAE 98th percentile size operator.		
2	Steering shall be full power with RH operator controls.		
3	Steering column shall have tilt adjustment.		
4	LH and RH seats shall be high back air suspension, adjustable, cloth covered for air circulation and include 3 point seat belts.		
5	Sweeper shall include two (2) remote heated outside west coast type mirrors with lower 8 inch convex lens for easy viewing of the side broom during sweeping.		
6	To maximize operator visibility of the curb and sweeping gear, outside mirrors shall be mounted forward of the front wheels.		
7	For safety during night sweeping, switches shall be illuminated so that they can be readily identified without the use of the cab dome light.		
8	Switches shall be clearly identified by name and symbol.		
9	Cab interior environment shall be fully air-conditioned including a fresh air heater/ventilator/defroster.		
10	Cab shall have full flow through ventilation for optimal temperature control and operator comfort.		
11	Wipers shall have intermittent feature.		
12	Interior of cab shall have acoustical insulation for low operating noise, automotive type trim, and center sweeper console.		
13	Dash shall be faced with UV Inhibitor, soft molded plastic.		
14	All glass shall be tinted safety glass.		
15	LH and RH sides shall have adjustable sun visor.		
16	Side windows shall have defroster.		
17	Cab shall include an AM/FM/Bluetooth Radio with two (2) speakers, AM/FM antenna shall be included.		
18	A 5lb fire extinguisher shall be mounted in an accessible location.		
E. INSTRUMENTS			
1	Chassis right side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, hour meter, fuel gauge, water temperature gauge, air pressure gauge, DEF gauge.		
2	Chassis engine instruments shall include warning light and chime for low coolant level and high coolant temperature to warn the operator of a potential problem before any damage to the engine occurs.		
3	Hydraulic functions shall be controlled by rocker switches located in the cab mounted control panel.		
4	Truck instruments shall include warning lights for battery and cab latch to make sure the cab is locked in position.		
5	All console switches, including transmission controls and all gauges, shall be illuminated.		
6	Front/remote mounted air restriction indicator with graduations.		
F. ELECTRICAL			
1	Batteries should be located in an enclosed accessible environment, for		

	long life and ease of service.		
2	Chassis shall have two (2) maintenance free batteries rated at not less than 1400 CCA total, 12 volt.		
3	Vehicle to have battery disconnect night switch.		
4	Chassis engine shall have a 160 amp alternator.		
5	Chassis lighting shall include sealed multi-beam halogen head-lights; fog/driving lights, daytime running lights, stop lights, tail lights, backup lights, license plate lights, clearance lights, signal lights, illuminated gauges and instrument panel, and directional lights with hazard switch.		
G. SWEEPER FAN DRIVE			
1	The fan shall be powered by the chassis engine through a Variable Speed Device (VSD) mounted between the chassis engine and the Allison transmission.		
2	Planetary gearbox design shall have a minimum of 240 HP input and 560 lb. ft. torque rating.		
3	A low hydraulic oil/high hydraulic temperature alarm shall be supplied.		
4	In "road mode", VSD shall be 1:1 speed ratio between chassis and transmission.		
5	In "work mode", VSD will allow for accelerator pedal to control input to transmission while maintaining a constant engine speed.		
6	In work mode, fan speed shall be adjustable.		
7	To accommodate both easy access and sound attenuation, there shall be two fiberglass access doors, one on each side of the sweeper body. These doors provide access to serviceable items without tilting the body.		
H. BLOWER			
1	Blower shall be a closed face turbine type, with 9 vanes, 31 3/8 in. diameter constructed of abrasion resistant steel. An open faced fan will not provide adequate combination of air flow and vacuum, and is not acceptable. Impellers constructed of material other than A-R steel will not be accepted. For longevity of the fan and maximum bearing life, the impeller must be balanced to within .5 ounce-inches.		
2	The blower housing shall be constructed of 10 gauge steel and lined with Linatex (or equal) for maximum extended wear in abrasive environments.		
3	Blower housing shall have an inspection door for quick inspections without removing the blower housing or looking into the air exhaust opening.		
4	Blower housing shall not be an integral part of the body. Replacement of the blower housing must be possible without any cutting and/or welding of the housing and or hopper.		
5	The blower shall be mounted and supported on both sides by heavy-duty greaseable bearings. Greasing of the bearings must be possible from ground level, without tilting the hopper. Only greaseable bearings are capable of tolerating the fan speeds required to produce simultaneous high air flow and high vacuum levels.		
6	The blower must not be directly exposed or open to the dust separator to preclude carry-over of material from the separator into the blower and blower housing.		
7	An in-cab activated vacuum enhancer with digital readout in center console shall be provided.		

8	In additional to the above, an in cab operated air flow blocker to allow near instant cessation of air flow shall be provided. Air flow control shall be capable of being turned on/off manually as well as automatically engaged/disengaged. This is paramount to ensure the safety of the general public as well as the operators from being subject unnecessarily to any fugitive dust from the fan system.		
I. PICKUP HEAD			
1	The pickup head is a spring-balanced, all steel fabricated pickup head with separated upper and lower chambers where pressurized air is blasted from the upper chamber through an elongated blast orifice, to the lower vacuum chamber.		
2	The pickup head shall be not less than 90 inches wide and 30 inches long for a total area of approximately 2700 square inches.		
3	The pickup head shall have a minimum of 14 inch diameter pressure hose that connects the blower outlet with the pickup head. Urethane transition pieces between the pressure hose and the pickup head are not acceptable.		
4	The pickup head shall have a minimum 12-3/4 inch diameter suction hose with a quick disconnect coupling at the lower area near the pickup head. The quick disconnect enables the operator to inspect the suction hose as well as the inlet area of the pickup head without tilting the hopper.		
5	The pressure side shall be equipped with an electric actuated pressure relief valve/vacuum enhancer/leaf bleeder, for optimum leaf and light debris sweeping and must provide digital read out to the operator in cab of percent open. The control for this feature must be in-cab positional information for operator. Cable operated valves are not acceptable.		
6	The front and rear debris curtains shall be removable without removing the pickup head from the unit.		
7	To aid with fall leaf cleanup, an in cab controlled leaf curtain must be installed in pick up head.		
8	State sweeping paths:		
9	Pickup head only = approximately 90 inches.		
10	One side broom and pickup head = approximately 117 inches.		
11	Two side brooms and pickup head = approximately 144 inches.		
12	The pickup head shall be equipped with side mounted adjustable steel runners with carbide inserts and with a minimum width of 1-1/8 inches for maximum pickup performance and long life.		
13	The pickup head shall be raised and lowered hydraulically by a rocker switch on the control panel inside the cab.		
J. SIDE BROOMS			
1	For the most aggressive broom performance, the right and left side broom shall be a free floating trailing arm design with inward motion safety to prevent damage when sweeping and encountering a fixed obstacle. For reliability, ruggedness and minimized risk of damage, only		

	trailing arms of a parallelogram design for simple, non-binding action/motion and for constant bristle and wear pattern shall be considered. Forward arm designs are not considered equal or superior to trailing arm.		
2	The side brooms shall be 42-inch diameter minimum, with hydraulically driven rotation.		
3	Brooms shall be pneumatically raised, lowered and suspended.		
4	Adjustable down pressure shall be pneumatically controlled by the operator from the cab in order to maintain proper surface contact consistently during vertical broom travel.		
5	The broom hydraulic motor drive shall provide not less than 6045 in/lbs. of torque for superior digging power.		
6	The side broom assemblies shall have greaseless pivot pins.		
7	The side broom assemblies shall be held in the storage position by a positive means to support broom during travel.		
8	Each side broom shall be controlled from in the cab by simple rocker switches.		
9	Both left and right gutter brooms must be fully capable of being retracted underneath the chassis in front of the pick-up head to provide for inboard sweeping.		
10	Left side broom shall be capable of being tilted by the operator in cab with a digital indication of the broom tilt in degrees.		
11	Right side broom shall be capable of being tilted by the operator in cab with a digital indication of the broom tilt in degrees.		
K. HOPPER			
1	Volumetric capacity shall be 8 cubic yards minimum.		
2	Hopper shall be constructed of 10 gauge steel sides, and quarter inch mild steel floor.		
3	A weight actuated full load indicator shall be mounted in the cab on the control panel.		
4	Dumping shall be accomplished by tilting the hopper via a single two-stage telescopic cylinder. The use of multiple cylinders for tilting the hopper shall not be acceptable. State: hopper tilt angle when dumping.		
5	External weather proof hopper controls (door open/close, hopper up/down) and throttle control shall be mounted on curbside of sweeper in front of rear axle.		
6	In cab hopper controls (door open/close, hopper up/down) shall also be provided.		
7	The hopper floor angle shall be a minimum of 10 degrees. State.		
8	A removable, adjustable, abrasion resistant "scoop" style steel deflector shall be located at the suction inlet. This scoop is to direct material to the center of the hopper, for optimal loading conditions.		
9	The hopper rear door shall be hinged at the top of the door and opened by means of a hydraulic cylinder. The hopper rear door should open at a		

	minimum angle of 90 degrees to be perpendicular to the hopper opening for maximum dumping action.		
10	Hydraulic cylinder movement shall be controlled by either the console mounted switches or the weather resistant switches located on the right- hand side of the hopper to view discharging of debris out of the hopper during dumping for maximum safety.		
11	For maximum operator safety the rear hopper door shall have an external door prop. No exception to this safety requirement shall be accepted.		
12	The hopper rear door shall include an automatic lock mechanism for a tight fit and optimal sealing between the hopper and the rear door.		
13	The rear door seal shall be a water resistant heavy-duty reinforced D style rubber seal for optimal sealing. Foam seals that can absorb moisture and freeze are not acceptable.		
14	Two 34.5" x 43.5" screens, for a total screen area 3000 square inches, of not less than 11 gauge steel shall be installed to allow air to move freely from the hopper into the centrifugal dust separator. The hopper screens shall be hinged and easily lowered for cleaning and inspection.		
15	The entire inside of the hopper shall be coated, including floor, door, sides, roof and transition. State coating finish and provide specifications of coating.		
16	The hopper shall come with a lifetime warranty against rust through or corrosion. State applicable warranty in proposal.		
17	Rear door shall come complete with a 6" drain at the lower curb side of hopper door. Shall include an internal screen and lay flat discharge hose.		
18	A steel inspection door with step and handle shall be mounted at the curbside rear of hopper.		
19	A hopper deluge nozzle assembly in the body door to aid in washing out the body by connecting to a hydrant shall be provided.		
20	An 8 inch diameter 9.5ft long wandering hose located at the rear of the machine to be included. Must be capable of deep cleaning catch basins with controls at the operator's fingertips. Push buttons shall be mounted on the suction nozzle to control the hydraulically assisted up and down movements of the nozzle. Spray water to be injected for dust control and hose lubrication. This system to be approved for the addition of (4) 4 ft aluminum wandering hose extensions.		
21	One 4 ft long steel extension to be used with the hydraulically assisted wandering hose, with crown, shall be provided.		
22	Install a holder for a broom and a shovel.		
L. DUST SEPARATOR			
1	Dirt separation from the air stream shall be accomplished by means of a labyrinth style dust separator that is installed at the air return outlet of the hopper. The separator shall be designed so that it will not plug with regular debris.		

2	The dust separator shall have minimum of two easy to open inspection doors allowing inspection and cleaning of the separator interior. Both doors are self-opening when tilting the hopper.		
3	The dust separator shall have a self-opening door made of abrasion resistant steel allowing automatic discharge of debris when tilting the body. Cable or other manual/mechanical means required for discharging the separator are not allowed.		
M. SPRAY WATER SYSTEM			
1	The water tank shall be a removable, approximately 240 US gal. total capacity, constructed of polyethylene.		
2	The water tank shall be frame mounted with no part sharing any common wall with the hopper and shall not raise during body dumping for better weight distribution.		
3	A 16 ft. 8 inch fill hose with NST coupling with strainer shall be supplied.		
4	A water level gauge shall be provided on the control console within the cab.		
5	All water lines shall be color coded for easy identification.		
6	The water filter must be easy to access and clean without tilting the hopper. A ball valve must be provided at the filter inlet to allow cleaning of the filter without the loss of water from the water tank.		
7	All water piping shall be external to the operator cab. No water lines capable of leaking or bursting shall be within the cab.		
8	Three (3) water spray nozzles are located at each side broom for optimal dust control. A pivoting bracket is provided to allow for optimum positioning of the side broom spray nozzles.		
9	Seven (7) easily removable water spray nozzles are located inside the pickup head. Water spray nozzles that spray only on the outside of the pickup head are not acceptable.		
10	Three (3) removable water spray nozzles are located at the lower portion of the suction hose for lubrication of the suction hose and to further enhance dust control.		
11	Two electric 12 volt, diaphragm type pumps will provide a combined flow of 8 GPM @ 40 PSI to the pickup head, the suction hose and the side brooms.		
12	One water pump is dedicated to supplying water to the pickup head and the suction hose for dust control.		
13	One water pump is dedicated to the side brooms for dust control.		
14	Each water pump must have two flow rates, selectable by the operator from within the cab and capable of running dry without damage.		
15	Individual controls for all water functions shall be supplied. Operator must be capable of individually selecting right broom water, left broom water, pick up head water and front spray bar.		
16	Cab controlled front water spray bar to assist with wetting down debris under extremely dusty conditions shall be provided, including four		

	removable brass nozzles mounted under the front bumper of the truck on copper pipe to keep the system corrosion resistant.		
17	2.5" air gap shall be provided.		
18	An air purge system shall be provided.		
19	Unit shall include a high pressure wash down system. Also included is a 25 ft length of 1/2 inch diameter hose and spray nozzle with couplings on both right and left hand side of the sweeper.		
20	A spring retractable hose reel for the high pressure hose to be installed on the left rear of the unit.		
N. HYDRAULIC SYSTEM			
1	Hydraulic pump shall be a gear driven, gear style pump for maintenance free operation, having a minimum flow capacity of 7.7 GPM @ 2500 RPM. A belt driven or PTO driven hydraulic pump is not acceptable.		
2	Reservoir capacity shall be not less than 23 gallons and have an exterior sight gauge. The reservoir must be located in an enclosed compartment for quick inspections without tilting the hopper. All hydraulic circuits shall have quick disconnect pressure check ports for ease of maintenance.		
3	All hydraulic circuits shall have quick disconnect pressure check ports for ease of maintenance.		
4	Hydraulic oil cooler shall be standard to provide adequate cooling with fresh air intake and accessible without raising the hopper. The hydraulic system shall operate below 93°C.		
5	To minimize the hazards of potential leakage, all high pressure fittings shall be O-Ring Face Seal (ORFS) type. Other systems shall not be acceptable.		
6	An auxiliary powered hydraulic pump to raise/lower hopper and open/close rear door without running the auxiliary engine shall be provided.		
O. PNEUMATIC SYSTEM			
1	There shall be a PR4 protector type pressure protector for the chassis air system.		
2	A separate air tank for all sweeper air components shall be provided.		
3	All pneumatic cylinders shall be interchangeable.		
4	All pneumatic cylinders must be rated to 150 PSI and have a separate rod seal and wiper to prevent contamination entering the cylinder.		
5	Each cylinder shall be controlled by a single, two position, solenoid valve mounted on a manifold with common input and exhaust.		
6	There shall be a filter with a polycarbonate bowl to filter out contaminants down to 5 microns to prevent contamination in the air system.		
7	All pneumatic air tanks shall have automatic moisture drain valves.		
P. ELECTRICAL SYSTEM			
1	A system to provide in-cab feedback for operator awareness of side		

	broom tilt angle, vacuum enhancer percent open/close and one switch sweep resume of sweep functions shall be provided. This system will allow the operator to resume all previous sweep settings, even broom tilt with one touch control. This feature shall enhance productivity and reduce operator fatigue. Must also include a multi-screen display that indicates system diagnostics as well as broom tilt angle, vacuum enhancer position, and broom hours.		
2	Sweeper shall have an in cab colour monitor with a rear facing back-up camera for additional safety and operator awareness of surroundings.		
3	A camera shall be mounted to view the left sweeping broom.		
4	A camera shall be mounted to view the center pick up head.		
5	Sweeper shall have a smart noise sensing electronic back-up alarm for additional warning and safety when chassis is in reverse.		
6	Sweeper lighting shall include rear identification lights, side broom and rear clearance lights.		
7	Sweeper warning lights shall include body up and body full load.		
8	Sweeper wiring harnesses shall be color-coded and function stamped with appropriate circuit name every four inches, i.e. "Ignition", "Side Broom" on each wire.		
9	All electrical circuits must be protected by manually resettable circuit breakers.		
10	A cab mounted LED strobe shall be provided.		
11	Rear LED strobe shall be provided.		
12	LED arrow stick shall be provided.		
13	Two (2) rear bumper and two (2) front bumper mounted strobe / warning lights shall be provided.		
14	LED marker lights shall be provided.		
15	Two (2) LED work lights shall be supplied for both left hand and right hand gutter brooms and two (2) rear bumper work lights. Each work light shall have an independent in-cab control switch.		
16	All work lights shall be independently controlled by operator in cab.		
17	A two way VHF radio and antenna (supplied by the City of Courtenay) shall be installed.		
Q. CONTROLS			
1	All sweeper controls shall be mounted on a stationary central console that allows for use from the right position. This allows the operator to view all important information from either operating position.		
2	The controls for sweeping, spray water, and lighting functions shall be conventional rocker switches.		
3	Controls for throttle, side broom down pressure and manual reset circuit breakers shall be located in the control console.		
R. INSTRUMENTS			
1	Sweeper instruments shall include functional information including		

	water level, sweeping mode and transport mode.		
2	Sweeper instruments shall include a "raised" hopper indicator, an "open" hopper door indicator and a "full" hopper indicator to notify the operator.		
3	Sweeper instruments shall include in-cab display of right and left gutter broom hours (individually) for operator awareness of broom productivity and maximum service life.		
S. PAINT			
1	All visible exterior metallic surfaces shall be powder coated prior to assembly with polyester powder coat. The paint must be a minimum of 2 mils thick. The uses of acrylic enamels and/or polyurethanes are not acceptable.		
2	Color shall be the manufacture's standard color of "White".		
3	Chassis color shall be the manufacture's standard color of "White".		
T. MANUAL/KEYS/SPARE PARTS			
1	A sweeper operation manual shall be provided.		
2	A sweeper parts manual shall be provided.		
3	A sweeper service manual shall be provided.		
4	A chassis operator manual shall be provided.		
5	A chassis parts manual shall be provided.		
6	A chassis service manual shall be provided.		
7	Five (5) complete sets of keys shall be provided.		
8	Supply a complete set of replacement filters, belts, water filters, two (2) spare side brooms, two (2) suction head hoses and two (2) skid feet.		
U. WARRANTY			
1	Manufacturer's warranty shall be not less than one (1) year on entire sweeper, including all parts and labor.		
2	Manufacturer's warranty shall be not less than three (3) years on chassis engine, including all parts and labor.		
3	Bidders submitting literature stating warranties which do not fully comply with warranty requirements of this specification must submit a letter from the manufacturer certifying warranty compliance as an integral part of their proposal. Failure to comply may cause the proposal shall be deemed "non-responsive" and rejected without further review.		
4	Please list cost of 5 year extended warranty on entire sweeper.		
W. SERVICE AND TRAINING			
1	State location of closest full service parts and warranty repair facilities.		
2	Proponent shall allow City staff to conduct periodic audits of OEM inventory, repair and service staff at the closest warranty repair facility for the proposed street sweeper.		
3	A qualified technician shall provide complete training to personnel at the City of Courtenay public works yard. Training shall include safety,		

	operation, maintenance and service for a min of 2 days.		
4	Number of factory trained and qualified service technicians employed by Proponent of the proposed street sweeper.		
5	A minimum of four (4) Municipal references within Canada for quoted make and model of regenerative air street sweeper is required in order to confirm adequate performance requirements and Proponent support. Any other model of street sweeper (pure vacuum or mechanical) references will not be considered and may be cause for rejection. Please include make and model of unit(s) in operation with references.		
6	Provide cost options for City of Courtenay mechanical staff to attend factory training and location of such training.		
7	Provide list all common short-life vehicle components with pricing valid for one year for life cycle costing purposes i.e. brooms, suction tubes, skid feet, etc.		
X. DELIVERY			
1	Street sweeper shall be delivered F.O.B. Courtenay, BC Public Works Yard in new operating condition with current BC Commercial Vehicle Inspection Permit completed.		
2	At the successful Proponent's expense, a pre-delivery inspection of the unit will be conducted by three (3) employees of the City of Courtenay, at the Proponent's final manufacturing location, prior to delivery.		
Y. QUALITY			
1	Street sweeper shall be manufactured by a company with a registered quality standard no less than ISO 9001.		
Z. POTENTIAL TRADE-IN			
1	<p>The City <u>may</u> offer the following vehicle for trade-in:</p> <p>City Unit #143</p> <ul style="list-style-type: none"> • Vin# JNAPC81L59AF75060 • 2009 Elgin Geovac Sweeper • Diesel Engine • 13,380 Hours as of February 20, 2020 • Service/Repair records available on request • This vehicle will be stripped of all emergency equipment, City hardware, and City logos/lettering, prior to trade-in <p>Photos are available in Appendix B</p> <p><u>The City may or may not trade in this vehicle depending upon the best interest of the City. The property offered for sale is considered "as-is – where- is." The City of Courtenay makes no warranty, expressed or implied as to the quality or its condition for any use or purpose.</u></p> <p><i>*Note* The trade-in value will be deducted from the bid price provided on the bid form - in the event that the City intends on pursuing the trade-in of this vehicle.</i></p>		

APPENDIX B
UNIT 143 TRADE-IN VEHICLE PHOTOS



