

SPECIFICATIONS FOR SELF-PROPELLED FRONT MOUNT ROAD SWEEPER

REQUIREMENTS

Each sweeper shall be a new, latest, current model of the manufacturer's current standard production. Even though they are not specifically covered herein, all parts necessary to provide a complete and efficient sweeper shall be furnished and shall include all accessories customarily furnished with a unit of this type. Such parts shall conform to current engineering practices of the industry relative to design, strength, quality of material, and workmanship.

The unit shall be complete when delivered to the Idaho Transportation Department with all accessories and equipment in place and ready to operate.

These specifications are for a total of one (1) unit. Delivery location is stated in item L. of these specifications.

All vendors bidding shall be located within the state of Idaho.

Demonstrators will not be considered.

Unloading and servicing at the yard will be the responsibility of the successful bidder.

Delivery of sweeper is required within 120 days of receipt of purchase order.

Liquidated Damages: The vendor agrees to delivery of items as quoted in this bid. Failure to deliver as quoted constitutes an event of default. The actual damages to the Idaho Transportation Department for the delay will be difficult or impossible to determine. Therefore, in lieu of actual damages, the vendor shall pay to the Idaho Transportation Department liquidated damages for each calendar day of delay an amount of \$50.00 per unit, up to a maximum of 90 calendar days. Should the vendor be unable to complete the delivery at the time of the 90-day period, the Idaho Transportation Department may, at its option, treat the contract as breached, terminate the contract, purchase substitute goods elsewhere, and charge the full increase, if any, in cost and handling for such purchase to the defaulting vendor and seek such additional relief as provided by law. The vendor shall not be charged for liquidated damages when delay arises out of cause beyond the control and without the fault or negligence of the vendor.

An operator's manual, and lubrication guide shall accompany each unit. One (1) shop manual and parts manual shall be provided to each delivery location.

Complete specifications and descriptive literature shall accompany each bid, along with the completed specifications and Questionnaire - Appendix A. Valid signatures of bidder are C:\Documents and Settings\Kitty Scott\Local Settings\Temporary Internet Files\OLK1755\Self-propelled Front Mt D-4 FY10.doc

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required on both the Invitation and Bid sheet. If literature is required and not submitted with bid, vendor will have 48 hours following written notice to submit the required literature. Failure to comply will render bid nonresponsive.

GENERAL

The sweeper furnished under these specifications shall be a four-wheel, self-propelled front mount street sweeper. It will be used for sweeping all types of debris-type materials from state highways. The unit shall meet or exceed the following minimum specifications:

	Meets Specs? Yes/No
A. <u>Description</u>	
1. Type - Self-propelled road sweeper with a hydraulically driven brush capable of sweeping at angles to the left of right.	YES <hr/>
2. Warranty - Manufacturer's standard 1-year for both parts and labor for entire unit bid.	YES <hr/>
3.* Paint - Sprayed to a 2-mil dry thickness of DuPont Chroma-One, Sherwin Williams Ultra Single, or approved equal of DuPont No. 7893 Yellow. Color chip shall be provided and approved prior to painting.	YES <hr/>
*Vendor shall Warranty paint for a period of two years against fading and peeling.	<hr/>
B. <u>Body</u>	
1. Cab - Manufacturer's standard two-door with ROPS.	YES <hr/>
2. Sound Suppressed Cab Package – Cab noise level cannot exceed 80 dBa.	YES <hr/>
3. Heater and Defroster - Manufacturer's standard, factory installed.	YES <hr/>
4. Air Conditioner - Manufacturer's standard, minimum 35,000 BTU factory installed.	YES <hr/>
5. Cab glass - Cab glass will be tinted safety glass. Windshield wiper - Two-speed front with washer.	YES <hr/>
6. Mirrors - West coast type on both sides and rear view mirror in cab.	YES <hr/>

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	Meets Specs? Yes/No
7. Access - Cab must have a door on each side and steps to provide access from either side. All openings in cab must be appropriately sealed to prohibit dust from entering the cab.	YES
8. Operator's Controls - Manufacturer's standard to all operator positions to enable operator to view curb location on either the right or left side when operating. All controls will be within easy reach of the operator from the seated position.	YES
9. Radio - Manufacturer's standard AM/FM stereo.	YES
10. Gauges - Must include oil pressure, transmission temperature, water temperature, engine air filter vacuum pressure, fuel gauge, ammeter, tachometer, hour meter, and shall be lighted and visible from all operator positions.	YES
11. Seat - Manufacturer's standard suspension type high back cloth seat, adjustable for fore and aft with no disassembly.	YES
C. <u>Running Gear</u>	
1. Rear Axle – Oscillating rear steering axle allowing approximately 7' turning radius.	YES
2. Front Axle – Heavy Duty ¾ ton solid mount.	YES
3. Tires and Wheels - 225/75 R 15 steel belted radial load range C, mounted on 5 or 6-bolt wheels. Must be interchangeable front and rear. Shall have a spare tire and wheel mounted on machine.	YES
4. Brakes – 4-wheel hydraulic with dual master cylinder.	YES
5. Mechanical Parking Brake - Manufacturer's standard with indicator light.	YES
D. <u>Engine</u>	
1. Type - Diesel, 4-cycle, liquid cooled, turbo charged, replaceable wet-type cylinder liners, counter balanced crankshaft. Rear-mounted.	YES
2. Size - 80 HP at 2,500 RPM, minimum.	YES
3. Warning Device – Audible for low oil pressure and high engine temperature.	YES
4. Oil Filter - Manufacturer's standard spin-on type.	YES

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	Meets Specs? Yes/No
5. Air Cleaner - Heavy-duty two-element dry type. Turbo II pre-cleaner shall be mounted to the top of cab and braced to eliminate vibration and not obstruct operator's view.	YES
6. Fuel Filter - Fuel filter/water separator, Racor or equal.	YES
7. Cooling System - Heavy-duty type designed for 110-degree-plus temperature and protected to -30 degrees with permanent-type antifreeze. Cleaning access to radiator.	YES
8. Cold Start - Manufacturer's standard Thermostat-controlled Turner quick start with 1-inch fitting or manifold preheater.	YES
9. Exhaust System - Routed to emit fumes behind operator's position and equipped with an elbow to prevent overhead water from entering.	YES
10. Vandalism - Engine compartment must be lockable along with hydraulic oil filler, fuel cap and radiator to prevent vandalism.	YES
11. Fuel Tank – 35 gallons	YES
E. <u>Transmission</u>	
1. Type – 2-speed hydrostatic motor shall drive through a single speed gear box with neutral shift to a semi-floating differential. Shall be able to shift without stopping.	YES
2. Speed - 0-20 miles per hour for sweeping without mechanical speed change mechanism.	YES
3. Controls – Foot control shall be used for forward and reverse, as well as dynamic braking. Hydrostatic control shall be spring loaded to return to positive neutral position when foot is removed.	YES
F. <u>Electrical System</u>	
1. Type - 12-volt.	YES
2. Battery - 950 cold cranking amps at 0 degrees Fahrenheit, enclosed in lockable compartments.	YES
3. Alternator - 120 amp minimum, rated for air conditioning.	NO / 95 AMP
4. Lights - Work, headlights, taillights, turn signals and a slow moving vehicle sign to comply with federal requirements.	YES

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5. Warning Light - Roof mounted, ECCO model 5135A-1, 15" dual rotating, halogen, amber mini-bar, visible from all directions.	YES
6. Backup Alarm - Manufacturer's standard self-adjusting type.	YES
G. <u>Steering</u>	
1. Type – Shall be open center orbital type power steering unit with power beyond and dead steer capabilities. Tilt/Telescopic steering wheel. .	YES
2. Steering Cylinder - Shall be protected from debris propelled by the rotary brush.	YES
3. Sweeper - Shall have an inside turning radius of not more than 8 feet.	YES
H. <u>Hydraulic System</u>	
1. Type – Manufacturer’s standard open or closed center.	YES
2. Brush Drive – Manufacturer’s standard hydraulic. Broom RPM shall be independent of travel speed.	YES
3. Broom Functions - Two-spool valve shall be provided to control brush angle and brush lift and lowering. Controls for brush angle, lift and lower shall be hand operated joystick type and shall be metered or restricted to assure smooth operation. Must be capable of raising, lowering, and adjusting broom angle while brush is operating. Valve shall have a float position and power down.	YES
4. Reservoir – Minimum 25 gallon capacity pressurized reservoir with sight gauge. Live engine drive 28 GPM pump with 5 GPM steering priority. High capacity oil cooler with pressure bypass, 100 mesh suction filter and 20 micron replaceable element return filter.	YES
5. Hydraulic Lines - Shall be routed and sufficiently clamped to minimize chafing.	YES
I. <u>Brush</u>	

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		Meets Specs? Yes/No
1.	Type - Broom shall be mechanically free-floating, with hydraulic raise and lower. Broom shall be vertically adjustable to any desired position within its operating limits.	YES
2.	Angle - The brush shall be capable of being hydraulically angled from at least 35° right to at least 35° left.	YES
3.	Size - Brush core shall be a maximum of eight feet in length and shall be furnished with a minimum 88 inches of filler. The brush shall produce at least 76-inch sweeping width when angled 30°.	YES
4.	Core - The brush core shall be steel and adaptable to accommodate Milwaukee style dustless strip broom.	YES
5.	Type - 32" diameter polypropylene brush filler shall be a Milwaukee Style dustless strip broom.	YES
6.	Shields - Brush shall be covered its entire length with a curved metal shield mounted to raise and lower with the brush. The shield shall cover approximately the top 140 degrees. Shield shall also be installed in such a manner which will eliminate the possibility of the shield striking another part of the sweeper when rotated.	YES
J. <u>Accessories</u>		
1.	Bumpers - Front and rear.	YES
2.	Fenders – Front and rear.	YES
K. <u>Sprinkler System</u>		
1.	Type - Manufacturer's standard with spray nozzles for broom.	YES
2.	Tank - 150 gallon, rear mounted, low profile design, protected from corrosion and capable of being hydrant filled.	YES
3.	Hose - 15' of 2 1/2" tank fill hose, connections, and hydrant wrench.	YES
4.	Controls - Activated from the operator's seat.	YES
L. <u>Delivery</u>		

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	Meets Specs? <u>Yes/No</u>
1. Delivery will be at the following locations:	YES
One (1) unit:	
Idaho Transportation Department	
District 4 Headquarters	
216 Date St. Shoshone, Id. 83352	

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QUESTIONNAIRE - APPENDIX A

1. Make and Model Superior Broom / SM80CT
2. Description: Weight 6500 lbs. Length 200"
3. Engine Make: John Deere Model: 4045DT
4. Replaceable Wet Type Cyl. Liner? YES Counter Balanced Crank? YES
5. Engine: Rating 80 HP Displacement 276 cu in.
6. Transmission: Make EATON Model 72400
7. Axle Ratings: Front 3800 lbs. Rear 8000 lbs.
8. Broom Size: Diameter 32 in.
9. Tires Size and Ply: Front P225/75R15 Rear P225/75R15
10. Fuel Tank Capacity 35 gallons
11. Steering Wheel Type TILT AND TELESCOPING
12. Water Tank Capacity 150 gallons
13. Warranty: Length and Type 12 MONTHS, ENGINE 24 MONTHS PARTS AND LABOR
Components Covered: ALL COMPONENTS ECEPT BELTS, FILTERS, BRAKE LINING
AND BRUSH WEAR.
14. Paint Warranty: Length 24 MONTHS