

Massac County Highway Department

Request for Proposal

Wednesday, February 7, 2024

Pneumatic Tire Roller

The Massac County Highway Department is seeking bids on a new Pneumatic Tire Roller.

- 1) Sealed bids will be received in the office of the Massac County Engineer, 2736 North Avenue, Metropolis, Illinois, 62960, until 10:30 o'clock A.M. March 6, 2024, for furnishing equipment, and at that time be publicly opened and read.
- 2) Proposals shall be submitted on the form furnished by the County (sheets 6-9 of this document). Additional copies may be obtained on the county website at massaccountyil.gov/county-highway. Changes to the Request for Proposal may be posted at any time to our website. It is the Vendors responsibility to check the website. Any addendum issued must be signed and submitted with your Proposal.
- 3) All proposals must be enclosed in a sealed envelope. The outside of the envelope must include the name and address of the proposer and clearly marked as follows:
Attn: Massac County Highway Department
Proposal: Pneumatic Tire Roller
Bid Opening Date: Wednesday, March 6, 2024
- 4) It is the intent of these specifications to describe a Pneumatic Tire Roller in sufficient detail to secure bids on comparable equipment. State and Federal laws supersede any conflicting part of this specification. All parts not specifically mentioned, which are necessary to provide a complete Pneumatic Tire Roller, shall be included in the bid and shall conform in strength and quality of material and workmanship to what is usually provided to the trade in general. The Pneumatic Tire Roller shall be a current model under standard production by the manufacturer. Massac county highway department reserves the right to waive all technicalities and to choose the machine they feel will best serve its needs.
- 5) It will be the responsibility of the manufacturer/bidder to conform with the requirements unless deviations have been specifically cited by the bidder and written acceptance from the Massac County Highway Department made based on the **exception**.
- 6) The right is reserved to reject all proposals and to waive technicalities.

Amy Ferris, P.E.

Massac County Engineer

Specifications

1.0 Purpose:

It is the intent of these specifications to describe a 9-wheel rigid frame pneumatic tire roller in sufficient detail to secure bids on comparable equipment. All rollers bid shall conform in strength, quality of materials and workmanship to what is usually provided the trade in general. The roller shall be a new standard production model of the latest design in current production by the manufacturer.

Any unit not conforming to these specifications will be rejected, and it will be the responsibility of the bidder to conform to these requirements, unless deviations have been cited in the bid and acceptance made on that basis. Massac county highway department reserves the right to waive all technicalities and to choose the machine they feel will best serve its needs.

1.1 Bidder qualifications:

The equipment being proposed must be new and meet the needs of this specification without modification. The model must be currently advertised, have been in production for a min. of two years and have a working volume of not less than called for in this specification. Hybrid, one-off or prototype equipment is unacceptable. Like-new equipment with low hours may also be considered as long as all other requirements have been met.

1.2 Approved Equal:

These specifications are not intended to be restrictive but are meant to describe the kind and size of unit desired to be purchased in detail. If a bidder is basing the proposal on equipment other than what is specified in these bid documents and wishes the equipment to be considered as an "approved equal" they shall submit on a separate sheet, an item-by-item description of that which is proposed. The bidder's specifications must be complete and of sufficient detail to cover all items included in this bid specification and in a manner that allows a direct comparison. Any item not covered will be deemed as not meeting specifications. Such bidder shall also include, but not as a substitute for the above, any manufacturer's literature. In addition, if the bidder takes exception to any item, they shall note this and describe in detail the exception and how the proposal is an "approved equal". Failure to carry out the provisions noted herein may be deemed sufficient reason to reject the bidder's proposal. Check yes if demonstration has been performed prior to bid letting.

2.0 General requirements: Latest model self-propelled nine-wheel rigid frame, pneumatic-tire roller, weighing at least 12,500 pounds metal weight in its standard configuration with a fully ballasted weight using wet sand of at least 30,500 pounds. This unit is to include a rolling width (minimum) 69 inches (maximum) 82 inches. Tire overlap should be at least 0.5 inch.

- 2.1 Latest model self-propelled nine-wheel rigid frame, pneumatic-tire roller, 12,500 lb min.
- 2.2 Fully ballasted weight 30,500 lb min.
- 2.3 Rolling width, 69 to 82 inches with min. 0.5-inch tire overlap.

3.0 Engine: Unit to be equipped with a four-cylinder water-cooled diesel engine capable of producing 80 HP at 2200 RPM meeting all applicable EPA specifications for off-highway emissions. Engine to have 12-volt electrical system, 95-amp alternator, dry air cleaner with safety element, filter condition indicator and vacuator valve. Oil filter and fuel filter shall be provided. Engine shall shutdown with loss of oil pressure. Engine neutral safety interlock shall prohibit engine from starting unless in neutral and parking brake applied. Side by side cooling package shall eliminate hot air being ingested into either the engine cooler or the hydraulic cooler. A low-mounted fuel tank shall allow for street level filling. A low mounted muffler shall be included for reduced noise to the operator. Dual side panels shall be included to allow full access to engine, hydraulic and electrical components.

- 3.1 Four-cylinder water-cooled diesel engine (80 HP/2200 RPM) meeting EPA specifications for off-highway emissions.
- 3.2 12-volt electrical system, 95-amp alternator, dry air cleaner with safety element, filter condition indicator and vacuator valve.
- 3.3 Shutdown with loss of oil pressure, oil and fuel filters provided.
- 3.4 Engine neutral safety interlock included
- 3.5 Side by side cooling package included
- 3.6 Low-mounted fuel tank and low-mounted muffler provided.
- 3.7 Dual side panels included to access engine, hydraulic and electrical components.

4.0 Transmission: Hydrostatic drive, with wheel motors mounted directly to the drive wheels. A single electric displacement control lever shall control direction, speed, and braking. No chain drives. All O-ring flat face hydraulic components are used throughout the hydraulic system.

- 4.1 Hydrostatic drive, with wheel motors mounted directly to the drive wheels.
- 4.2 A single electric displacement control lever to control direction, speed, and braking.
- 4.3 No chain drives.
- 4.4 All O-ring flat face hydraulic components throughout the hydraulic system.

5.0 Brakes: Service braking is dynamic through hydrostatic transmission. Parking brake shall be spring applied, hydraulically released. Parking brake interlock shall be wired into the hydrostatic control to insure no propel torque is applied when brake switch is ON. Park brake interlock when starting engine.

5.1 Service braking dynamic through hydrostatic transmission.

5.2 Parking brake is spring applied, hydraulically released with interlock wired into the hydrostatic control.

6.0 Wheels / Tires: Rollers shall have 9 wheels, with 5 on the front, and 4 on the rear. The four wheels in the rear shall be driven. All wheels shall oscillate, either individually or in pairs. Roller to be equipped with 7:50 x 15, 14-ply smooth compactor-type tires.

6.1 9 wheels, 5 on the front, 4 driven on the rear.

6.2 All wheels oscillate, either individually or in pairs.

6.3 7:50 x 15, 14-ply smooth compactor-type tires.

7.0 Operator's Platform / Controls: Full hydraulic powered yoke steering through orbital control. The operator's compartment shall include one fully adjustable shock-mounted seat with slide. The slide shall allow side-to-side movement to enable the operator to have good visibility from either side of the machine. Side to side seat slide with 180-degree rotation to eliminate neck strain when traveling back and forth. All controls should be mounted within easy reach of the operator while seated.

7.1 Full hydraulic powered yoke steering through orbital control.

7.2 Fully adjustable shock-mounted seat with slide with side-to-side movement and 180-degree rotation.

7.3 All controls mounted within easy reach of the operator while seated.

8.0 Instrumentation: Machine shall be equipped with gauges for the following functions: fuel level, hours of operation, engine speed, engine oil pressure, water temperature and voltage. A dual hydraulic sight level and temperature gauge will be standard. Vandal cover for instrument panel shall be provided.

8.1 Gauges for: fuel level, hours of operation, engine speed, engine oil pressure, water temperature and voltage.

8.2 Dual hydraulic sight level and temperature gauge standard.

8.3 Vandal cover for instrument panel provided.

9.0 Ballast Compartments: Roller shall have a front body ballast compartment, center body ballast and a rear body ballast compartment. Ballast capacity of not less than 150 cubic feet.

9.1 Front, center, and rear body ballast compartments with capacity of not less than 150 cubic feet.

10.0 Sprinkler System: Roller shall be equipped with water tank of at least 110-gallon capacity. Spray nozzles and cocoa mats shall be provided for each individual tire. The tank is to be equipped with a 70-mesh filler screen and an inline 100-mesh filter. The spray system shall be pressurized and shall have an

automatic feature that turns the water spray on when the roller is placed in motion and off when the machine is brought to a stop. All controls to be convenient to the operator.

- 10.1 110-gallon capacity water tank
- 10.2 Spray nozzles and cocoa mats for each individual tire.
- 10.3 Tank equipped with 70-mesh filter screen and inline 100-mesh filter.
- 10.4 Pressurized spray system with automatic spray on/off.
- 10.5 Convenient controls.

11.0 Miscellaneous: Roller to be equipped with five tie-down points, three front and two rear.

12.0 Safety: Roller to be equipped with roll over protective structure (ROPS), seat-belt and back-up alarm. Unit shall meet OSHA safety specifications and have a National Recognized Testing Laboratory Label affixed to the machine.

12.1 Roll over protective structure (ROPS), seat-belt and back-up alarm.

12.2 Meets OSHA safety specifications with National Recognized Testing Laboratory Label affixed to the machine.

13.0 Warranty:

The manufacturer shall warranty the equipment for a period of one year. Engine must be covered for Major Components for a period of 2 years or 2000 hours. Bidder warranty policy must be included with bid submittal.

14.0 Pre-delivery service:

The unit shall be delivered complete and fully operational. It shall be properly serviced, free of leaks, and all mechanical adjustments made prior to delivery.

15.0 Technical service:

The services of a competent technician, thoroughly trained in the use, operation and servicing of the unit shall be available for consultation and guidance. Training on the operation, daily maintenance and servicing of the machine can be done in person or by videotapes.

16.0 Manuals:

One operator's manual, one service manual and one parts manual shall be supplied with this unit.

	REQUIREMENT	YES	NO	NOTES/EXCEPTION
2.0	General requirements:			
2.1	Latest model self-propelled nine-wheel rigid frame, pneumatic-tire roller, 12,500 lb min.			
2.2	Fully ballasted weight 30,500 lb min.			
2.3	Rolling width, 69 to 82 inches with min. 0.5-inch tire overlap.			
3.0	Engine:			
3.1	Four-cylinder water-cooled diesel engine (80 HP/2200 RPM) meeting EPA specifications for off-highway emissions.			
3.2	12-volt electrical system, 95-amp alternator, dry air cleaner with safety element, filter condition indicator and vacuator valve.			
3.3	Shutdown with loss of oil pressure, oil and fuel filters provided.			
3.4	Engine neutral safety interlock included			
3.5	Side by side cooling package included			
4.0	Transmission:			
4.1	Hydrostatic drive, with wheel motors mounted directly to the drive wheels.			
4.2	A single electric displacement control lever to control direction, speed, and braking.			
4.3	No chain drives.			
4.4	All O-ring flat face hydraulic components throughout the hydraulic system.			
5.0	Brakes:			
5.1	Service braking dynamic through hydrostatic transmission.			
5.2	Parking brake is spring applied, hydraulically released with interlock wired into the hydrostatic control.			
6.0	Wheels / Tires:			
6.1	9 wheels, 5 on the front, 4 driven on the rear.			
6.2	All wheels oscillate, either individually or in pairs.			

	REQUIREMENT	YES	NO	NOTES/EXCEPTION
7.0	Operator's Platform / Controls:			
7.1	Full hydraulic powered yoke steering through orbital control.			
7.2	Fully adjustable shock-mounted seat with slide with side-to-side movement and 180-degree rotation.			
7.3	All controls mounted within easy reach of the operator while seated.			
8.0	Instrumentation:			
8.1	Gauges for: fuel level, hours of operation, engine speed, engine oil pressure, water temperature and voltage.			
8.2	Dual hydraulic sight level and temperature gauge standard.			
8.3	Vandal cover for instrument panel provided.			
9.0	Ballast Compartments:			
9.1	Front, center, and rear body ballast compartments with capacity of not less than 150 cubic feet.			
10.0	Sprinkler System:			
10.1	110-gallon capacity water tank			
10.2	Spray nozzles and cocoa mats for each individual tire.			
10.3	Tank equipped with 70-mesh filter screen and inline 100-mesh filter.			
10.4	Pressurized spray system with automatic spray on/off.			
10.5	Convenient controls.			
11.0	Miscellaneous: Roller to be equipped with five tie-down points, three front and two rear.			
12.0	Safety:			
12.1	Roll over protective structure (ROPS), seat-belt and back-up alarm.			
12.2	Meets OSHA safety specifications with National Recognized Testing Laboratory Label affixed to the machine.			

	REQUIREMENT	YES	NO	NOTES/EXCEPTION
13.0	Warranty: The manufacturer shall warranty the equipment for a period of one year. Engine must be covered for Major Components for a period of 2 years or 2000 hours. Bidder warranty policy must be included with bid submittal.			
14.0	Pre-delivery service: The unit shall be delivered complete and fully operational. It shall be properly serviced, free of leaks, and all mechanical adjustments made prior to delivery.			
15.0	Technical service: The services of a competent technician, thoroughly trained in the use, operation and servicing of the unit shall be available for consultation and guidance. Training on the operation, daily maintenance and servicing of the machine can be done in person or by videotapes.			
16.0	Manuals: One operator's manual, one service manual and one parts manual shall be supplied with this unit.			