

**NOTICE FOR SEALED BIDS**  
**ONE USED DIESEL POWERED, ARTICULATED, SIX WHEEL DRIVE MOTORGRADER**

The Board of County Commissioners of McKenzie County, North Dakota, will receive bids at the County Auditor/Treasurer's Office at 201 5<sup>th</sup> ST NW Suite 543, Watford City, North Dakota, until the hour of 10:00 AM CT, January 21, 2025, for one (1) used diesel powered, articulated, six wheel drive motorgrader for the McKenzie County Ag Expo.

Bids will be submitted on the specification form furnished by the Auditor/Treasurer's Office, and will be available on the County's website: <https://mckenziecountynd.gov/bid-and-rfp-rfq-notice/> A Bid Bond in the amount of 5% (five) percent of the amount bid must accompany each bid in a separate envelope. Please specify "Motorgrader" on the envelope.

The Board reserves the right to reject any or all bids as allowed by law, or to accept such bids as may be determined to be in the best interests of the county.

McKenzie County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in its solicitation of bids.

Dated at Watford City, North Dakota, this 19th day of December, 2024.



A handwritten signature in black ink, appearing to read "Erica Johnsrud".

Erica Johnsrud  
McKenzie County Auditor/Treasurer

Publish December 25, 2024 and January 1 and 8, 2025

**MCKENZIE COUNTY  
AG EXPO  
WATFORD CITY, ND**

**SPECIFICATIONS FOR ONE USED  
DIESEL POWERED, ARTICULATED, SIX WHEEL DRIVE MOTORGRADERS**

This attachment shall be considered a continuation of the call for bids, and by reference made a part thereof.

The Board reserves the right to reject any or all bids as allowed by law, or to accept such bids as may be determined to be in the best interests of the county.

Bids are due January 21, 2025, by 10:00 AM CT to the McKenzie County Auditor/Treasurer's Office, 201 5<sup>th</sup> St NW Suite 543, Watford City, ND 58854. Bids that are late or incomplete will be considered unresponsive and they will not be considered for the next steps. The bid will be awarded at the Board of County Commissioners meeting time to be determined. All applicants shall prepare all required materials and information associated with this submittal at their own expense. All firms submitting proposals do so with the understanding that the County will not reimburse any expenses associated with the RFP process.

BASIS OF THE AWARD shall be dependent on the most responsible bid submitted. Consideration will be given to purchase price, delivery date, equipment service guarantees, parts and service availability, parts and service facilities location, analyses and comparison of equipment specification details, and past experience of McKenzie County with similar or related equipment.

**Machine(s) bid must have less than 2,500 original machine hours.**

Pursuant to the call for bids, the following minimum requirement shall be met:

- A. Motor Grader shall meet OSHA requirements and specifications on the date of the bid opening.
- B. Delivery shall be F.O.B. Mckenzie County Ag Expo, Watford City, ND..
- C. Bidders must specify delivery date.
- D. Motor Grader shall be a 2010 model or newer.
- E. Bids will not be considered that do not include a copy of the manufacturer's literature/specification material and an incomplete specification portion of the bid sheets.
- F. Motor Grader shall come with all hydraulics, electronics, controls, etc. to fully operate all functions stated or asked for in bid.

Please indicate in the following if the machine offered can meet the desired configuration. Any "no" should be clarified on a separate sheet if the bidder desires support for an alternate specification. Failure not to do so may result in non-acceptance of the bid.

**YES NO**

- Typical operating weight no less than 46,000 lbs.
- Automatic dual path hydrostatic six wheel drive. Separate left and right systems
- Engine and Transmission must be designed and built by machines manufacturer.
- Blade pull at maximum operating weight must be a minimum of 48,000 lbs.

**ENGINE**

- a. Minimum displacement of 9.0 L (548 cu.inch)  
Manufacturer \_\_\_\_\_.
- b. Four stroke, six cylinder, direct injection, water cooled, turbo charged diesel engine.
- c. Low temperature starting system.
- d. Ether starting aid.
- e. Block heater, 120 volt.
- f. 110 gallon fuel capacity, minimum
- g. Pre-screener.
- h. Dry-type air cleaner with pre-cleaner, automatic dust ejector and air cleaner, cyclone pre-cleaner
- i. Cooling on demand, hydraulic-driven, variable speed fan with auto reversing, and swing out rear fan door and fold out coolers.
- j. Anti-freeze -35 degrees (Fahrenheit), extended life.
- k. Oil filter, cartridge.
- l. EPA tier 3 compliant (No Def fluid)

- \_\_\_ \_\_\_ m. Engine shall have variable horsepower starting in 1<sup>st</sup> with a net HP of 205, and ending in 7<sup>th</sup> gear with a HP of 290 or greater.
- \_\_\_ \_\_\_ n. Engine will automatically increase idle speed to compensate for any voltage drop resulting from an extended idle time.
- \_\_\_ \_\_\_ o. Fuel filter, cartridge.
- \_\_\_ \_\_\_ p. Full engine side cover panels with lockable compartment doors.
- \_\_\_ \_\_\_ q. Fueling shall be easily accessed from ground level.
- \_\_\_ \_\_\_ r. All cartridge filters shall be easily accessed from engine compartment.
- \_\_\_ \_\_\_ s. Net peak engine torque must be 950 lb.-ft or greater.
- \_\_\_ \_\_\_ t. Net peak engine torque rise must be 55% or greater.

## **TRANSMISSION**

- \_\_\_ \_\_\_ a. Power shift with electronic automatic shift, direct drive.
- \_\_\_ \_\_\_ b. Transmission to provide eight speeds forward and eight speeds reverse.
- \_\_\_ \_\_\_ c. Single lever for both direction and speed changes.
- \_\_\_ \_\_\_ d. Differential lock/unlock shall be electro-hydraulically controlled
- \_\_\_ \_\_\_ e. Transmission will be such that machine won't move even if engine is started with transmission engaged.
- \_\_\_ \_\_\_ f. Electronically controlled over speed protection.
- \_\_\_ \_\_\_ g. Minimum top speed 28 mph or greater.
- \_\_\_ \_\_\_ h. Transmission filter, cartridge

## **FINAL DRIVE**

- \_\_\_ \_\_\_ a. Inboard-mounted planetary sealing in cooled, filtered oil.
- \_\_\_ \_\_\_ b. Minimum distance between center of tandem wheels shall be 60 inches.

## **BRAKES, WHEELS & TIRES**

- \_\_\_ \_\_\_ a. Service – brakes shall be multi-disc, oil cooled and completely sealed, tandem mounted.
- \_\_\_ \_\_\_ b. Parking brake - multiple oil disc, spring applied, hydraulically released, adjustment free, sealed, and integrated into the transmission
- \_\_\_ \_\_\_ c. Tires – must be radial tires, 17.5 x R25 50% tread remaining or greater.
- \_\_\_ \_\_\_ d. Rims –three piece steel, interchangeable between all six wheels  
If rims are not interchangeable, include price of spare rim and tire.

\_\_\_ \_\_\_ e. Engagement of parking brake control lever shall neutralize transmission

### **STEERING, FRONT AXLE & WHEELS**

\_\_\_ \_\_\_ a. Front wheels shall have 47.5 degrees left or right minimum steering range.

\_\_\_ \_\_\_ b. Steering shall be hydraulic.

\_\_\_ \_\_\_ c. 24 ft. maximum turning radius outside front tires.

\_\_\_ \_\_\_ d. Front axle, height to center not less than 22.5 inches ground clearance.

\_\_\_ \_\_\_ e. Hydraulic leaning front axle minimum 20 degrees right or left

\_\_\_ \_\_\_ f. Front axle shall have not less than 32 degrees total oscillation, 16 degrees up, 16 degrees down.

\_\_\_ \_\_\_ g. Main frame shall be articulated.

\_\_\_ \_\_\_ h. Due to safety reasons in snow plowing applications, unit must have a steering wheel.

### **ARTICULATION JOINT**

\_\_\_ \_\_\_ a. Articulation joint with mechanical lock.

\_\_\_ \_\_\_ b. Frame angle to be minimum of 22 degrees.

\_\_\_ \_\_\_ c. Articulation indicator in operator's compartment.

\_\_\_ \_\_\_ d. Bottom joint must have double taper roller bearings.

### **HYDRUALICS**

\_\_\_ \_\_\_ a. Full hydraulic controls.

\_\_\_ \_\_\_ b. Hydraulic system shall be closed center, load sensing design, with variable displacement, axial piston type pump.

\_\_\_ \_\_\_ c. Separate hydraulic lock valves shall be provided in each hydraulic circuit in in all control valves

- \_\_\_ \_\_\_ d. Hydraulic tank shall be non-vented, separate of power train oil.
- \_\_\_ \_\_\_ e. Industry standard electric over hydraulic controls. Must have additional valves  
And levers to operate ripper, front hitch, and snow wing.
- \_\_\_ \_\_\_ f. Implement valves shall be proportional priority pressure compensating for  
consistent response when multi-functioning any combination of  
implement controls.
- \_\_\_ \_\_\_ g. All blade controls obtainable from operator's seat.
- \_\_\_ \_\_\_ h. Hydraulic plumbing, etc. which is compatible with front lift groups, rear  
rippers, snow wing, etc.
- \_\_\_ \_\_\_ i. Hydraulic filter, cartridge.
- \_\_\_ \_\_\_ k. Float position on blade lift, rear ripper, front lift group, and snow wing  
hydraulics.

#### **CIRCLE AND DRAWBAR**

- \_\_\_ \_\_\_ a. Circle shall be supported by the drawbar with at least six support shoes.
- \_\_\_ \_\_\_ b. Circle construction shall be heat treated, welded and machined steel.
- \_\_\_ \_\_\_ c. Circle must be capable of 360 degrees rotation and be adjustable for wear.
- \_\_\_ \_\_\_ d. Circle and drawbar shall have quick change replaceable wear inserts.  
**Circle wear components must be new.**
- \_\_\_ \_\_\_ e. Circle drive shall be adjustable slip clutch.
- \_\_\_ \_\_\_ f. Circle and drawbar vertical adjustment points shall be accessible from the top

#### **BLADE**

- \_\_\_ \_\_\_ a. High carbon moldboard with hydraulic sideshift.
- \_\_\_ \_\_\_ b. Size 14' x 27" x 1" with standard highway bolting, and hydraulic tilt,  
¾ inch cutting edge bolting.
- \_\_\_ \_\_\_ c. Depth of cut maximum 29 inches.

- \_\_\_ \_\_\_ d. Lift above grade minimum 17.8 inches.
- \_\_\_ \_\_\_ e. Moldboard shall have a high bank angle of at least 90 degrees to both sides
- \_\_\_ \_\_\_ f. Moldboard side-shift cylinder shall be left-hand side.
- \_\_\_ \_\_\_ g. Blade lift and center shift cylinders shall have replaceable wear inserts in the ball sockets with removable shims.
- \_\_\_ \_\_\_ h. Moldboard end bits reversible overlay.
- \_\_\_ \_\_\_ i. Moldboard slide shall have quick change replaceable wear inserts and quick-adjust jack screw adjustment.

### **OPERATOR COMPARTMENT**

- \_\_\_ \_\_\_ a. ROPS cab with heater, defroster, and air conditioning. Heater 40,000 BTU.
- \_\_\_ \_\_\_ b. Glass safety tinted –front, rear and doors
- \_\_\_ \_\_\_ c. Inside mounted rear view mirror.
- \_\_\_ \_\_\_ d. Exterior glare proof convex mirrors. heated (approx. 66 sq.inches).
- \_\_\_ \_\_\_ e. Doors lock shut and latch open.
- \_\_\_ \_\_\_ f. Air-ride adjustable contour series suspension (cloth) seat fore and aft with seat belt and arm rest.
- \_\_\_ \_\_\_ g. Electric wiper/washer front, rear, bottom and side with intermittent control.
- \_\_\_ \_\_\_ h. AM-FM-weather band radio with, speakers, and antenna.
- \_\_\_ \_\_\_ i. Cab shall be sound suppressed and pressurized with a filter. 75 DB (A)
- \_\_\_ \_\_\_ j. Low profile cab
- \_\_\_ \_\_\_ k. Lunch box storage, mug holder, and coat hook.
- \_\_\_ \_\_\_ l. Toolbox
- \_\_\_ \_\_\_ m. LED beacon mounted on flip down brackets, each side.



## ELECTRIC SYSTEM

YES NO

- a. Heavy Duty 200 amp hour, 1400 CCA batteries.
- b. High and low bar headlights with front turn signals
- c. Halogen mid-frame toe lights shall be installed to illuminate moldboard and surrounding area.
- d. Halogen heel work lamps mounted underneath the cab.
- e. Halogen ripper work lamps.
- f. Halogen front mounted cab lights.
- g. Halogen roof mounted on the right-hand side of car roof bar to illuminate a snow wing. Dealer must supply machines with all the lights that are factory available.
- h. An instrument cluster shall be provided that includes a speedometer, tachometer, coolant temperature, fuel and articulation angle gauge.
- i. Incandescent white reversing lamps and LED stop lamps
- j. Back-up light and sounding alarm standard when reverse gears are selected.
- k. Interior cab lights.
- l. 200 amp alternator.
- m. 24 volt direct electric start.
- n. A 24V to 12V convertor with 30 amp capacity with circuit to turn on and off with ignition switch.
- o. A yellow strobe light installed.
- p. Electronic throttle control –cruise control
- q. Electronic inching control

**OTHER FEATURES**

**YES NO**

- a. Rear ripper shall have five ripper shank holders and 3 included shanks, 9 scarifier shank holders.
- b. Front weight and push block.

**ALL WHEEL DRIVE**

- a. All-wheel drive system – Each front wheel shall be powered utilizing a dedicated variable axial piston pump and variable axial piston motor. Both pumps and motors shall be infinitely variable to provide maximum torque in every gear.
- b. All-wheel drive system shall automatically vary individual front wheel speeds by up to 50% during a turn, improving front wheel traction and reducing turning radius.
- c. All-wheel drive system shall provide a hydrostatic mode neutralizing the transmission for precise low-speed performance. The ground speed shall be infinitely variable between 0 and 5 mph.

**Please list explanations to any “no” answers to specifications below.**

**BIDDERS CERTIFICATION**

It is hereby understood that Mckenzie County (owner) has the right to evaluate this bid upon many bases of criteria, and the trade-in machines are available for appraisal at their present work site.

The County Commissioners reserve the right to hold the bids for a period of not to exceed 30 days.

Machine will be available for delivery on the \_\_\_\_\_ day of \_\_\_\_\_, 202\_\_.

We hereby certify that the foregoing is a responsible bid. Any variations from the specifications are noted or attached. Copies of machine warranty guarantees are attached.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 202\_\_.

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Fax

\_\_\_\_\_  
Dealer Name

\_\_\_\_\_  
Representative Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, Zip Code

**BID PROPOSAL**

**Manufacturer** \_\_\_\_\_

**Model** \_\_\_\_\_

**Model Year** \_\_\_\_\_

**Machine original hours** \_\_\_\_\_

**PURCHASE ONLY**

**Net purchase Price for Unit, No Trade**                    \$ \_\_\_\_\_