

**GOGEBIC COUNTY ROAD COMMISSION  
BID SPECIFICATIONS FOR FOUR (4) - ARTICULATED FRAME MOTOR GRADERS**

NOTICE TO BIDDERS

Sealed bids will be received in the office of the Gogebic County Road Commission, 200 N. Moore Street, Courthouse Annex, Bessemer, Michigan - 49911, until **1:00 p.m. (CST), Wednesday, December 15, 2021**, and opened & read aloud publicly at that time for the following:

**Four (4) - Articulated Frame Motor Graders (Leases)**

- Bid Specifications and forms, which must be used, may be obtained from the office of the Gogebic County Road Commission.
- Bids are to be in sealed envelopes plainly marked "Motor Grader Bid" with the bidder's name appearing on the outside of the envelope.
- The Board reserves the right to reject any and all bids, to waive irregularities therein and to accept any bid, which in the opinion of the Board, may be most advantageous and in the best interest of the County of Gogebic.

BOARD OF COUNTY ROAD COMMISSIONERS  
Bessemer, Michigan

**BIDDER MUST INDICATE IF  
ACTUAL MODEL MEETS  
SPECIFICATIONS**

<u>ITEM</u>	<u>MINIMUM SPECIFICATIONS</u>	
<b><u>MACHINE TYPE:</u></b>	Three (3) Articulated Frame with Safety Lock, Tandem Drive Graders And One (1) AWD Motor Grader, completely equipped with specified Equipment (Unit must be work ready and meet or exceed all OSHA requirements) <b>Lease shall be 5 years – 5,000 hours</b>	<hr/> <hr/>
<b><u>DELIVERY DATE:</u></b>	Units must be delivered by <b>July 15, 2022</b> , at the latest.	<hr/> <hr/>
<b><u>MODEL YEAR:</u></b>	Latest Year Manufactured (New) (Specify)	<hr/> <hr/>
<b><u>OPERATING WEIGHT:</u></b>	38,500 lbs. Minimum SAE Operating Weight w/o add-on weights, snow wing or wheel ballast	<hr/> <hr/>
<b><u>ENGINE:</u></b>	Diesel Variable Horsepower (179/231 HP Min.) SAE Net	<hr/> <hr/>
	Engine Make and Model (Specify)	<hr/> <hr/>
	Displacement (Specify in cu. in.)	<hr/> <hr/>
	Engine Coolant Heater, 110 Volt	<hr/> <hr/>
	Factory Installed Cold Weather (Ether) Starting Aid	<hr/> <hr/>
	Air system pre-cleaner (Turbine-type)	<hr/> <hr/>
	Separate engine oil cooler	<hr/> <hr/>
	Emission approved engine and Tier IV compliant	<hr/> <hr/>
	Sampling ports for engine, hydraulic, coolant & fuel ports to be accessible from the tandem level	<hr/> <hr/>
	Engine fan shall adjust automatically to meet engine cooling needs	<hr/> <hr/>
	Engine fan shall automatically reverse as needed	<hr/> <hr/>

**TRANSMISSION:**

Speeds in Forward (8) & Reverse (3) (Specify)

(3) Tandem Drive and (1) AWD

AWD Option shall include inching capacity down to 0mph and precision mode

Direct Drive programmable electronic auto-shift  
Final drives to be planetary design

Electronic shift with inching pedal

Transmission bottom guard

Separate oil cooler

Event based shifting or load sensing electronic shift modulation with over speed protection

**ELECTRICAL:**

Back-up Alarm

Alternator, 150 ampere, minimum

24 Volt System

Batteries, 1400 CCA, minimum

Top mounted strobe light installed

Electrical master disconnect switch

**INSTRUMENTATION:**

Air cleaner service indicator

Unit has all standard dash mounted gauges and monitoring systems as identified in bidder's literature

Monitoring systems shall be able to display performance data, diagnostic information and trouble codes

Engine coolant and engine oil pressure shall include audible and visual warning

Hour meter

**LIGHTING:**

Front/Rear directional lights w/ four-way hazard flashers

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Cab mounted wing floodlight

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Two (2) front on main frame driving lights, hi-lo beam

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Two (2) mid-frame front facing work lights

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Two (2) lower cab mounted work lights for moldboard

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Two (2) rear work lights on rear of machine

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Six (6) top of cab mounted road lights (4 forward and 2 reverse)

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Top mounted Ecco 5590 CAG Green/Amber LED, installed

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All lighting fixtures shall be LED with heaters

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**OPERATOR STATION:**

AM/FM Stereo Radio (Factory installed in dash)

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Preferred sealed switch module for machine functions  
(Wipers, Lights, Green/Amber Beacon, etc.)

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Defroster Fans (Front and Rear)

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Lower front wipers and washers

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Front and rear window wipers and washers

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All weather, pressurized, low profile, ROPS approved

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Factory installed air conditioning

\_\_\_\_\_

Interior and exterior (2) mounted rearview mirrors, exterior mirrors  
are to be heated

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Seat, cloth covered, contour with air suspension

\_\_\_\_\_

Seat belt, retractable

\_\_\_\_\_

Adjustable control console

\_\_\_\_\_

Steering wheel, tilt, adjustable w/ fingertip controls preferred

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**OPERATOR STATION - Continued):**

Air or electric horn

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Mounting steps and safety hand holds

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Heaviest duty cab heater and fans (State BTU rating)

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Key locked engine compartment and cab

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Sliding windows, LH & RH for ventilation

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Sunshade

\_\_\_\_\_

Optional rear-view camera with color monitor

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**COLOR:**

Wheatland Yellow (Dupont N0683) or approved equal

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Letter both sides of grader with Gogebic County Road Commission

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**TIRES/WHEELS:**

Michelin X SNOPLUS, 17.5 R25 with one (1) piece rims

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One (1) total spare rim and tire if front and rear tires are interchangeable.

Both - one front & one rear rim if tires are not interchangeable.

(each unit)

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Provide front and rear factory installed fenders

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**BRAKES:**

Service brakes must be sealed and fully enclosed to allow operations in water, mud, snow & other adverse conditions without encountering brake fade. Continuously pressurized filter, and oil cooled

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Parking/secondary brake shall be independent of service brakes and shall be equipped with warning light or buzzer and be of sufficient design to hold the weight of machine on a slope.

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**STEERING:**

Full hydraulic power steering

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**AXLE:**

Hydraulically actuated rear axle differential lock-unlock engage able on-the-go under full engine rpm in any gear

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**MOLDBOARD, BLADE, CIRCLE & DRAWBAR**

14' long x 27" high x 1" thick blade with hydraulic side shift, tilt and float

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8" X 3/4" cutting edges with 5/8" punched

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Provide circle drive slip clutch

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Circle and drawbar shall have replaceable wear strips

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Moldboard wear strips shall be shim-less and adjust with jack screws both vertical and horizontal

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Overlay Endbits

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**HYDRAULICS:**

System is closed center, load sensing with variable displacement pump

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Hydraulics furnished shall include all heavy duty valves necessary to operate all regular functions of the motor grader. In addition, it shall include in cab valves for each of the operations of a three function hydraulic snow wing and a one function front mounted dozer blade with float.

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Hydraulic controls including: articulation; blade lift; right and left float position; blade sideshift; blade tip; centershift; circle drive; front wheel lean; dozer blade operation and hydraulic wing operation with float.

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Lock-valves built into all circuits

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Provide quick couplers for wing and dozer blade with pressure bleed off

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**GENERAL:**

Fuel Tank Capacity (Specify in gallons)

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Graders are capable of accepting Gogebic County Road Commission owned dozer blade, otherwise appropriate adapters must be furnished and installed at no additional cost to the Gogebic County Road Commission.

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Factory Installed Air Compressor with port

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Locking engine compartment doors

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**GENERAL - Continued):**

Overlay end bits

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Daily fluid check points should be accessible from the ground and not in conflict with plow wing (left side of machines recommended)

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All standard equipment (as per bidder's literature) unless otherwise specified

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Tow hooks or pins, rear

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Auto-Articulation option

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Grade control ready package (Topcon, Trimble, etc.)

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Automated Cross Slope Grade Control

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Tool box

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Snow plow protection group including but not limited to brake line covers, battery box protection, engine compartment air intake, and covers for engine enclosures louvers

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Five (5) copies of Bidder's literature are enclosed

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**HYDRAULIC SNOW WINGS:**

**Snow Wing Specs (For four graders):**

Falls Series 2000 Short Post Direct Hydraulic Right hand side 12' snow wing or equal

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Verify no articulation interference

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Power wing slides, push bars and all necessary controls

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Both heel and float positions

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Post/cylinders below top of the cab

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Ease of removal and installation

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**FRONT DOZER BLADES**

**Front Dozer Specs (For four graders)**

Falls FDZ-8 Dozer Blade Motor Grader Mounted 8' blade or equal

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**MANUALS:**

One set of operator, parts and maintenance manual (total)

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**WARRANTY: [Per Unit]**

Full parts and labor total machine warranty up to 5000 hours  
All travel time and transportation related costs are to be included the warranty

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Bidder shall have 24 hrs which to address a warranty call and shall provide a replacement grader if necessary

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Bidder shall provide full service at every service interval including standard oil and filter change intervals as recommended by manufacturer. Bidder shall provide 1000 hr, 2000 hr, 3000 hr, and 4000 hr service of the machine in conjunction w/ the warranty

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1000 hr service shall include the following:

Back up alarm	- test operation
Brakes, indicators and gauges	- test operation
Circle drive pinion teeth	- lubricate
Circle top	- lubricate with dry film lubricant
Cooling system	- check coolant level
Fuel system water separator	- drain water
Seat belt	- inspect for wear or damage
Transmission and differential	- check oil level
Articulation bearing	- lubricate
Axle oscillation bearings	- lubricate
Serpentine belt	- inspect for cracking, wear or damage
Blade lift cylinder socket	- lubricate
Cab air filter	- clean/inspect
Centerline cylinder socket	- lubricate
Centershift lock bar	- clean/lubricate
Drawbar ball and socket	- lubricate
Fuel tank	- drain water and sediment
Hydraulic system	- check oil level
Kingpin Bearings	- lubricate
Ripper cylinder (if equipped) bearings	- lubricate
Scarifer lift link socket	- lubricate
Steering cylinder ends and tie rods	- lubricate
Tandem drives	- lubricate

**WARRANTY:**

1000 hr service shall include the following (continued):

Tires	- check tire inflation
Front wheel bearings	- check oil level
Wheel lean bar bearings	- lubricate
Wheel lean bearings	- lubricate
Wheel lean cylinder bearing	- lubricate
Work tool lift	- lubricate
Battery	- clean/inspect
Engine air cleaner	- replace outer filter/inspect inner filter
Engine oil and filter	- change (machine on 250 hr pm schedule)
Fuel system secondary filter	- replace
Perform SOS on engine only	
Braking system	- test holding ability
Engine oil and filter	- change (machine on 500 pm schedule)
Fuel system water separator element	- replace
Fuel system	- prime
Fuel tank cap and strainer	- replace cap filter/clean strainer
Hydraulic tank return filter	- replace
Implement control filter	- replace
Tandem drive breathers	- clean/replace
Transmission and differential filter	- replace
Perform SOS on engine, transmission, hydraulics, tandem drives and cooling system	
Rollover protective structure (rops)	- inspect for loose bolts
Transmission and differential oil	- change
Transmission magnetic screen	- clean
Transmission scavenge screen	- clean



2000 hr service shall include the following in addition to all of the items in the 1000 hr service:

Circle drive oil	- change
Cooling system pressure cap	- clean/replace if damaged
Crankshaft vibration damper	- inspect for wear or deterioration
Electronic unit injector	- inspect/adjust if needed
Engine valve lash	- check/adjust
Engine valve rotators	- inspect for rotation
Evaporator coil and heater coil	- clean
Tandem drive oil change	- change
Hydraulic tank oil	- change
Front wheel bearing oil	- change
Cooling system	- perform sampling

Copy of warranty enclosed \_\_\_\_\_

**TRAINING:**

Successful bidder shall provide up to 16 hours, at no additional cost, on-site operator and/or mechanic training on the proper use, maintenance, and service. Training to be at Bessemer, MI. \_\_\_\_\_

1. Manufacturer: \_\_\_\_\_

2. Model & Year: \_\_\_\_\_

3. Dealer: \_\_\_\_\_

4. Net Price F.O.B. Bessemer, MI (For 4 graders) \_\_\_\_\_

5. Guaranteed Buy-Back Price (For 4 graders) or residual if lease:

After 60 months \_\_\_\_\_

6. Net Price for 4 Graders (F.O.B. Bessemer, MI) Less Guaranteed Buy-Back Price

Note: If there is any additional interest cost associated with the Net Price Less Guaranteed Buy-Back Price, please indicate this cost on the appropriate line)

After 60 months - (4 graders) \_\_\_\_\_

+ Interest cost for 60 months - (4 graders) \_\_\_\_\_

TOTAL COST FOR 60 MONTHS (For 4 Graders) \_\_\_\_\_

7. Rate of Simple Interest \_\_\_\_\_

**Additional Notes:**

1. The Gogebic County Road Commission will sign a 60-month municipal lease for the purchase of the units, with annual lease payments in advance for each year.

2. **The successful bidder will execute a buy-back agreement with the Gogebic County Road Commission which specifies that the bidder will pay off the remainder of the municipal lease (principal plus interest) at the end of 60 months and take back the units should the Road Commission elect to do so.**

The Gogebic County Road Commission will have no further cost or obligation other than the amount shown in Item No. 8) TOTAL COST for the period of time selected along with returning the machines.

3. Grader bid meets all minimum specifications:  
Yes \_\_\_\_\_ No: \_\_\_\_\_

If no, list differences below according to Specification Heading and item: (Attach additional sheets if necessary)

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Bidder's Name (Company) \_\_\_\_\_

Signed: \_\_\_\_\_ Phone: \_\_\_\_\_

Fax: \_\_\_\_\_ Email: \_\_\_\_\_