

TOWN OF GRAFTON, VERMONT

ADVERTISEMENT FOR BIDS

ARTICULATED MOTOR GRADER

Specifications dated November 5, 2024

DRAFT

The Town of Grafton, Vermont is seeking sealed bids for furnishing the town with the following piece of equipment for the Highway Department.

**One (1) Articulated Motor Grader**

Sealed competitive bids shall be received at the Grafton Selectboard's office, P.O. Box 180, Grafton, Vermont 05146 on or before January 16, 2025, by 3:00 pm. Bids will be opened at our regular scheduled Selectboard meeting on January 21, 2025, at 6:00 pm. Bids will be awarded at our regular Selectboard meeting on February 3, 2025, at 6:00 pm. Faxed bids will NOT be accepted. Bid received after that time will not be opened and will be returned to the bidder

**Note: All envelopes shall be clearly marked "Articulated Motor Grader Bid"**

Further information and complete specifications may be obtained from Colby Record, Road Foreman, at 802-843-2456 or [highway@graftonvt.org](mailto:highway@graftonvt.org).

The Town of Grafton, Vermont reserves the right to reject all bids or to accept the bid deemed to be in the best interest of the Town of Grafton, as well as to waive any informalities.

The Town of Grafton is requesting that all bidders bid on the articulated motor grader based on the attached specifications dated November 5, 2024.

TOWN OF GRAFTON, VERMONT  
ARTICULATED MOTOR GRADER BID

All motor grader bids must be of the latest model being manufactured and which has been regularly advertised. Model must carry a model year of 2025 or newer, houred units will not be accepted.

In no case will a bid be acceptable if any of the assemblies furnished are inferior to those described in their regularly published literature. Any and all parts or attachments shall conform in strength, workmanship and quality of material to what is usually provided by good engineering practice.

Any company or manufacturer who submits a bid that does not meet the minimum specifications will not be considered. All bidders must include an exemption sheet that clearly lists any item or items not meeting the enclosed minimum specifications. Not including this exemption sheet may disqualify the bid.

All motor graders must meet all State, Federal, and OSHA requirements

Award of bids will be based on the following criteria: cost, resale value, performance, warranty, service, parts availability and any other criteria deemed in the best interest of the Town of Grafton.

## BIDDING REQUIREMENTS AND INFORMATION

1. It is in the intent of the Town of Grafton to purchase one (1) articulated motor grader with a **minimum** of 33,000-pound operating weight, 170 net horsepower, inclusive of these specifications dated November 5, 2024.
2. It is the intent of the Town of Grafton to trade its 2011 Caterpillar 120M. Therefore, the town is requesting bidders to bid on the new motor grader with a trade-in.
3. All Motor Graders bid on must be of the latest standard model being manufactured and which has been regularly advertised.
4. It is not the intent of these specifications to specify the particular make of unit or assemblies, although names may be used for reference.
5. Town of Grafton reserves the right to try out grader before purchase.
6. Completed bids are to be submitted by a person authorized to represent the bidder. Sealed competitive bids will be received at the Grafton Selectboard's Office, P.O. Box 180, Grafton, Vermont 05146 on or before January 16, 2025 by 3:00 pm at which time they will be publicly opened and read aloud at our regularly scheduled Selectboard meeting. Faxed bids will not be accepted. Bids received after that time will not be opened and will be returned to bidder.
7. The Town of Grafton cannot receive the grader before July 1, 2025.
8. The complete unit, including all accessories and extras, together with complete parts lists, service manuals, and operator's manuals, is to be delivered to the Highway Garage, 220 Bell Road, Grafton, Vermont.
9. All proposals must be submitted on the attached bid sheets and each bidder is required to submit with their bid, complete manufacturer specifications on the unit to be furnished.
10. Bids offered which do not meet the minimum requirements and specifications will not be considered. All bidders must include an exemption sheet that clearly lists any item or items not meeting the enclosed minimum specifications. Not included this exemption sheet may disqualify the bid.
11. The Town of Grafton, Vermont reserves the right to reject any and all bids or to accept the bid deemed to be in the best interest of the Town of Grafton.

TOWN OF GRAFTON, VERMONT  
ARTICULATED MOTOR GRADER BID SPECIFICATIONS

OPERATING WEIGHT:

The minimum operating weight of the unit included in these specifications, without the snow wing shall be 33,000 pounds.

ENGINE:

Minimum of 173 Net (not max net) variable horsepower, turbocharged, air-to-air aftercooled six-cylinder diesel engine with 24-volt electric starter, cold starting aid, engine block heater, as well as a two-stage dry type air cleaner. Engine must meet all applicable Federal Governmental Tier III standards for smoke and emissions, as well as OSHA standards for noise. Engine to be protected with extended life anti-freeze.

TRANSMISSION:

Direct Drive, full powershift 8-speeds forward, 6-speeds reverse. Autoshift transmission with overspeed protection. Unit will have a minimum of 4 working gears under 7 mph.

REAR AXLE, DIFFERENTIAL AND BRAKES:

Rear tandem axle and differential shall be heavy duty with inboard planetary final drive, with hydraulically operated rear differential lock. Rear tandem axle shall oscillate a minimum of 40 degrees. Service brakes shall be hydraulic operated multiple wet disc. Parking brake shall be manual or hydraulically operated multi-wet disc. Minimum of 1.8" pitch drive chain. Service brakes will work independently on the left and right, should one side fail, the other will still function. Unit must have secondary braking as standard equipment.

ELECTRICAL:

24-volt electrical system. Alternator shall be a minimum of 150 amp., and batteries shall be a minimum of 1400 CCA. A minimum of 25 amp. 24-12 volt converter shall be included in the unit.

LIGHTS:

Unit shall have a minimum of 2 front headlights and directional lights, 2 rear stop/tail/directional lights, 2 front work floodlights and 2 blade work lights, 2 rear work flood lights, 2 mid work lights, and 1 work flood light for the wing. Strobe light mounted on the rear of the cab, with a switch in the cab. All lights must be LED.

TIRES:

Tires shall be 17.5-25 Radial Traction type on wide multi-piece wheels, with space wheel/tire.

#### HYDRAULIC/ARTICULATION/STEERING:

Variable closed center variable piston pump load sensing 6 cubic yards 40 gallons per minute hydraulic system. Total of 40 degrees of articulation, with in-cab indicator. Steering/wheel lean shall be full power. Unit must have secondary steering as standard equipment.

#### BLADE/MOLDBOARD/CIRCLE FRAME:

Unit must have a moldboard protection package, which shall include a minimum of a circle drive slip clutch and blade lift accumulators to protect the components from shock loading. Drawbar shall be "Y" or "V" style. Replaceable nylon wear inserts shall be installed between the drawbar and circle. Replaceable brass inserts will be installed between the moldboard slide surfaces. The moldboard shall be a minimum of 12' x 24" x 7/8", with 6" cutting edges and end bits. Moldboard shall side shift a total of 46 inches. Unit shall be able to bank left and right to an angle of 90 degrees. Circle to be a minimum of 60" in diameter and shall have inside mounted teeth. Circle must rotate 360 degrees. Controls for all blade/circle functions, including float for both ends of the moldboard. Unit shall be delivered with an additional set of 12' x 6" carbide grader blades and an additional set of grader edges with a carbide bit system.

#### CAB:

Deluxe cab with dual doors, front, side, rear windows with wipers, HVAC, AM/FM Radio, defroster fan, and air suspension seat. Grader steering shall be controlled by a joystick. Moldboard functions shall be controlled by electric over hydraulic controls. Unit will also have a return-to-center articulation button. Rear sunshade. Front and side windows must open or slide.

#### OTHER EQUIPMENT:

Rear drawbar, vandalism protection, bottom guards, outside mounted heated mirrors, and outside mounted toolbox.

Unit shall have a satellite-based GPS/monitoring system which will allow the Town to monitor the unit remotely for location, servicing, etc.

Unit shall have a minimum of a quick engine and transmission fluid dumping system.

#### ATTACHMENTS:

12' all hydraulic snow wing including three function auxiliary electric over hydraulics to power the wing with in cab controls. Installation of the wing shall be done by the bidder.

#### WARRANTY:

Unit shall have a 7 year/5,000 hour full machine, No Cost warranty.

TOWN OF GRAFTON, VERMONT  
ARTICULATED MOTOR GRADER BID  
BID SHEET

Per Specifications dated 11/5/24

Make of Unit Bid: \_\_\_\_\_

Model of Unit Bid: \_\_\_\_\_

Year of Unit Bid: \_\_\_\_\_

Discounted Price of Unit: \$ \_\_\_\_\_

Less Trade of Caterpillar 120M: \$ \_\_\_\_\_

Net Cost: \$ \_\_\_\_\_

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Company Representative Name

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

\_\_\_\_\_  
Date

**TO BID INCLUDED WITH BID**

TOWN OF GRAFTON, VERMONT  
ARTICULATED MOTOR GRADER BID  
EXEMPTION SHEET  
Per Specifications dated 11/5/24

DRAFT

**TO BID INCLUDED WITH BID**



TOWN OF GRAFTON, VERMONT  
 ARTICULATED MOTOR GRADER BID  
SPECIFICATION SHEET

Per Specifications dated 11/5/24

Specification Comparisons

MANUFACTURER AND UNIT QUOTED:

ITEM	SPECIFICATION	YOUR UNIT BID
Operating Weight	33,000 Pounds	_____ pounds
Variable Net Horsepower	173 Net	_____ VHP
	Tier III	_____
Transmission	8 Speed F, Auto Shift	_____
	4 Gears under 7 mph	_____
Rear Axle	Locking Tandem	_____
	1.8" Drive Pitch	_____
Tires	17.5-25 Radial Traction	_____
	Spare	_____
Steering	Secondary Steering	_____
Braking	Left/Right Braking	_____
	Secondary Braking	_____
Electrical System	150 Amp. Alt.	_____
	1400CCA Batts.	_____
Cab	Air Seat	_____
	HVAC	_____
	Steering Joystick	_____
	Moldboard Func. E/H	_____
	Return to Center Button	_____
Hydraulic Pump	Closed Center	_____
	40 GPM	_____ GPM
Circle	60" Inside Teeth	_____
	Slip Clutch	_____
	Blade Lift Accumulators	_____
Moldboard	12' x 24" x 7/8"	_____
	Carbide & Carbide Bit Sys.	_____
Snow Wing	12' Snow Wing	_____
	E/H Wing Controls	_____
Quick Maintenance	Quick Engine Oil Dump	_____
	Quick Trans. Oil Dump	_____
	Quick Tandem Oil Dump	_____
GPS System	Location/Maint.	_____
Warranty	7 Yr/5,000 Hr. No Cost	_____

**TO BID INCLUDED WITH BID**