

## ***Request For Bid (RFB)***

***Rick Riendeau***

***Director of Public Works***

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### ***Bid Data***

Commodity Title: **4 Wheel Drive Loader Backhoe**

### ***Bid Opening***

Day / Date: Wednesday, January 27, 2016

Time: 1:00 P.M.

Location / Address: MILFORD TOWN HALL  
BOARD OF SELECTMENS ROOM  
1 UNION SQUARE  
MILFORD, NH

**ITEM TO BE BID** - Year 2016 Model All-Wheel Drive Backhoe Loader with manufacturer's standard equipment and features specified below.

## **SPECIFICATIONS**

**Operating Weight:** A minimum of 16,000 lb., Including loader bucket, extendable stick, ROPS/FOPS enclosed cab, backhoe bucket and counter weight(s).

**Engine:** Turbo-charged diesel type, four (4) stroke, four (4) cylinder, replaceable air cleaner and pre-cleaner with air service indicator, water pump, lubricating oil pump with full flow spin-on type oil filter, fuel pump with **water/sediment** bowl and spin-on type replaceable filter, hand and foot throttle controls, muffler and **120 amp** minimum alternator. The engine shall be equipped with key start/stop system, engine enclosure, grill, front bumper and tilt type hood and a 12-volt direct electric starting and charging system. The starting system shall be equipped with two (2) 12-volt maintenance-free batteries and protective cover, **Cold weather starting package**

**Transmission:** Fully synchronized, power-shuttle, torque converter driven transmission with spin-on type oil filter and a minimum of Four (4) Forward and Three (3) Reverse shuttle clutches/gears. Unit shall be able to **change direction and travel speed "on-the-go"**. Unit shall have a high gear forward speed of no less than 20 mph. Unit shall be equipped with a **transmission disconnect button** on the gear shifter and loader to maintain engine and hydraulic speed when dumping into trucks. Unit shall be equipped with **Ride-Control** for a smooth ride under all operating conditions. Radiator shall have a heavy-duty guard to resist continued impact at low speeds. Transmission, differentials and hydraulics shall have **separate fluid reservoirs**.

**Axles (Front and Rear):** Front Axle, All-Wheel Planetary Drive shall be heavy-duty industrial grade with guard(s) to protect driveshaft. Front tires shall ride inside loader bucket cutting width. All-Wheel Drive front axle shall have a minimum static load rating of 25,000 lb. Heavy-duty Planetary Drive rear axle shall have **differential lock with "on-the-go"** engagement and semi-floating with self-adjusting inboard brakes. Unit shall be equipped with transport tie-downs and optimum number of counterweight(s) that ensure for exact balance of machine.

**Brakes:** Brakes shall be inboard oil-immersed and completely enclosed and sealed, fully self-adjusting. Foot operated dual brake pedals shall be able to be interlocked for road travel. Parking/secondary brakes shall be independent of the service brake system and be able to set parking brake from either loader or backhoe operating position. **Four wheel braking** at any speed or gear.

**Steering:** Hydrostatic power

**Hydraulic System:** **load sensing**, pump capable of reaching maximum lift capacity at any engine speed. Backhoe shall be equipped with spin-on replaceable filter, **high-pressure hoses** and fittings and heavy-duty oil cooler. Unit shall be equipped with all hydraulics and shall include all spool valve(s), directional flow valve(s), hydraulic line(s), and fittings for **extendible dipper stick** and **hydraulically operated thumb** attachment. Unit shall include all hydraulics for auxiliary equipment. **Demonstrate the unit will be capable of lifting a 4' diameter manhole base section (@5,000#) and setting it, in a hole at a min. distance of 4' from the machine.**

**Operator's Station:** Walk-through, OSHA approved, ROPS/FOPS with deluxe cab. Cab shall include factory-installed heater/defroster and multiple speed blower with the control in easy reach by the operator from the front and rear of the machine. Cab shall be equipped with two (2) doors, **rubber floor mat** instruments that shall include tachometer, fuel gauge, transmission/converter oil temperature gauge and coolant temperature gauge. Machine shall come standard with horn, audible backup alarm and electric fuel shut off. Operator's compartment shall come equipped with an **air ride suspension seat** with armrests and adjustable in the fore/aft position and has a lever that controls the release for rotation at 180 degree swivel from anywhere on a sliding track mechanism. Cab shall be equipped with heavy-duty factory installed air conditioning system that provides the operator with a choice of fresh outside air drawn through filters or recirculating cab air, front and rear windshield wipers and washers, adjustable tilt steering wheel/console, hour meter, interior cab light(s), cup holder, convex wide-view interior rear-view mirror, **toolbox**, sun visor, retractable 3 inch wide seat belt, factory tinted glass on all windows, two (2) auxiliary 30-amp 12-volt power outlets, and 12-volt AM/FM electronic **stereo radio** with antenna and deluxe stereo speakers.

**Lighting Systems:** Machine shall include two (2) front and four (4) rear flood lights actuated by separate switches in addition to two (2) halogen head lights. Machine shall have two (2) stop and two (2) turn signal lights with flashing hazard lamps visible from front and rear. Cab shall be installed with a **12-volt rotating low-profile amber beacon warning light**, roof lights and radio; includes installation, all switches, wiring and hardware.

**Loader:** Loader bucket shall be heavy-duty minimum capacity of 1.3 cu. yd. Loader will be equipped with a **hydraulic quick coupler** operated from the cab for multiple work tool use. Loader control valve must be equipped with **return-to-dig** and float positions. Loader shall have positive down pressure sufficient to lift tractor front end off level ground, loaded or unloaded. Bucket shall be **self-leveling** and equipped with a bucket position indicator, skid plates, lift eyes and have **bolt-on cutting edge(s)**. Loader shall be equipped with a **lift cylinder brace** to mechanically hold the loader arms in the raised position.

**Backhoe:** Backhoe shall be complete with hydraulic stabilizers and stabilizer guards, extendable dipper stick, Thumb and all controls to make machine complete. Backhoe shall be equipped with a **swing transport lock**. Backhoe shall be equipped with a **boom lock** that can be controlled from the seat. **Flip-over stabilizer** pads must have a dirt grouser and equipped with street pad material. Backhoe shall have **stabilizer antidrift / lock valves** as standard equipment. Backhoe shall have a minimum cushioned swing arc of 180 degrees. Backhoe shall be equipped with a heavy duty minimum **30 in. rock type digging bucket** as standard equipment.

Backhoe shall be equipped with **excavator 2-lever/joystick pilot** operated controls that are built into seat arms if unit so equipped as manufacturer's standard equipment and capable of **switching backhoe and excavator patterns** with a simple turn of a lever or switch. Backhoe shall be outfitted with a hydraulically operated thumb attachment and sized to fit machine as standard equipment

**Manuals/Videos:** Operator's manual, safety and operation video, parts book(s) and **service/repair manual(s)** shall be furnished with machine upon delivery. Manual(s) may be in the form of CD's or DVD's.

**Warranty:** Specify full Factory machine warranty, with additional options and pricing for extended warranties.

**Deviation(s):** Any deviation(s) to the above specification(s) shall be listed on a separate sheet(s) of paper and attached to the response form stating section, component(s) with deviation(s) and a clearly defined explanation for deviation(s).

**AWARD -** Award will be made to the Bidder/s whose offer/s provide the greatest value to the Town from the standpoint of suitability to purpose, quality, service, previous experience, price, lifecycle cost, ability to deliver, or for any other reason deemed by the Town to be in the best interest of the Town. Thus, the result will not be determined by price alone.

## ***Response Form***

Company Name:

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Address:

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City/Zip:

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Phone Number:

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Fax Number:

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Federal Tax ID:

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### **Base Unit Price**

**2016 Model Backhoe \$** \_\_\_\_\_

**Standard Warranty** \_\_\_ **Months** \_\_\_\_\_ **Hrs**

### **OPTIONS**

### **U N I T P R I C E**

Extended Warranty \_\_\_ months \_\_\_\_\_ Hrs      \_\_\_\_\_

Extended Warranty \_\_\_ months \_\_\_\_\_ Hrs      \_\_\_\_\_

Extended Warranty \_\_\_ months \_\_\_\_\_ Hrs      \_\_\_\_\_

# ATTACHMENT A

**Instructions:** The intent of this form is to determine the total scheduled maintenance costs that can be expected during the first 5,000 hours of ownership. Service intervals, number of grease fittings, and capacities should be taken directly from the manufacturer's lubrication and maintenance manual. Unit costs given are equal for all vendors. Although there may be a slight variance due to refill capacities, these total costs are made up of labor, overhead, lost production, gaskets, lubricants, filters, and supervisory time. The comparison examines the service intervals for the various units bid and assumes that the manufacturer's recommendations, if followed exactly, will allow the costs that are to be incurred on each unit, to be calculated with reasonable accuracy.

**A. Grease Fittings:**

Determine the number of fittings at each interval, insert each number as indicated ( if none, write none). Perform calculations and total in the last column.

No. / 5000hrs	Service Interval	No. of Fittings	Cost / Fitting	Total Cost (a)
500	x 10 hrs or Daily	x _____	x \$ .55	= _____
100	x 50hrs	x _____	x \$ .55	= _____
50	x 100hrs	x _____	x \$ .55	= _____
25	x 200hrs	x _____	x \$ .55	= _____
20	x 250hrs	x _____	x \$ .55	= _____
10	x 500hrs	x _____	x \$ .55	= _____
5	x 1000hrs	x _____	x \$ .55	= _____
2.5	x 2000hrs	x _____	x \$ .55	= _____
<b>TOTAL COST @ 5000 hrs (a)</b>				<b>= \$ _____</b>

**B. Engine Oil and Filter:** From manufacturer's maintenance manual determine crankcase drain and refill interval. Insert this hourly number and perform the calculation to arrive at the total cost for an engine oil change.

No. / 5000hrs	Service Interval	Cost Per Change	Total Cost (b)
_____	x _____ hrs	x \$65.00	= \$ _____

**C. Transmission Oil and Filter:** From manufacturer's maintenance manual determine transmission drain and refill interval. Insert this hourly number and perform the calculation to arrive at the total cost for a transmission oil change.

No. / 5000hrs		Service Interval		Cost Per Change		<b>Total Cost (c)</b>
_____	x	_____hrs	x	\$115.00		= \$ _____

**D. Hydraulic Fluid and Filter:** From the manufacturer's maintenance manual determine the hydraulic system's drain and refill interval. Insert this hourly number, insert the total capacity (in gallons) and perform the calculation to arrive at the total cost for a hydraulic system service.

No. / 5000 hrs		Service Interval		Hyd System Capacity (Gal)		Cost Per Gal		<b>Total Cost (d)</b>
_____	x	_____hrs	x	_____	x	\$65.00		= \$ _____

**E. Coolant System:** From the manufacturer's maintenance manual determine the Coolant system's drain and refill interval. Insert this hourly number, insert the total capacity (in gallons) and perform the calculation to arrive at the total cost for a Coolant system service.

No. / 5000 hrs		Service Interval		Coolant Capacity (Gal)		Cost Per Gal		<b>Total Cost (e)</b>
_____	x	_____hrs	x	_____	x	\$5.00		= \$ _____

**TOTALS:** Listed below are each of the categories just calculated. Insert the total number of each category in the space provided and add the column.

- a. Grease Fittings \$ \_\_\_\_\_
- b. Engine Oil and Filters \$ \_\_\_\_\_
- c. Transmission Oil \$ \_\_\_\_\_
- d. Hydraulic Fluids and Filters \$ \_\_\_\_\_
- e. Coolant Fluids and Oil Changes \$ \_\_\_\_\_

**TOTAL SCHEDULED MAINTENANCE COSTS: \$ \_\_\_\_\_**