

Town of Goffstown

Goffstown, NH

INVITATION TO BID

Sealed bids will be received at the office of the Board of Selectmen, 16 Main Street, Goffstown, New Hampshire for the Furnishing and Delivery of the below listed equipment to the Town of Goffstown Public Works Facility, 404 Elm Street, Goffstown, New Hampshire 03045.

One (1) 2014 Backhoe-Loader

Bids will be received until 11:15 AM, April 2, 2014 at the Town Offices, 16 Main Street, Goffstown, NH 03045. Bids will be publicly opened and read at that time.

Copies of the Bid Documents/Bid Specifications may be obtained, without charge, on the Town's website at <http://www.goffstown.com> or at the Public Works Office, 404 Elm Street, Goffstown, NH 03045 between the hours of 7:00 AM-3:30 PM, Monday through Friday. All questions will be directed to Mark Urella at the Highway Department (603) 497-8994 extension 222.

Bids, when opened, shall be irrevocable for a period of sixty (60) calendar days following the bid opening date. Following a review of all bids by the Public Works Director, a recommendation will be sent to the Board of Selectmen. This judgment shall be final and the right is reserved by the Town, through the Board of Selectmen, to reject any or all bids as it may determine and to waive defects in form or minor irregularities where the best interest of the Town would be served.

**Town of Goffstown
16 Main Street
Goffstown, New Hampshire 03045**

BIDDING SHEET FOR

2014 BID SPECIFICATIONS

Backhoe-Loader

Manufacturer/Model _____ Price \$ _____

Total price Delivered _____ Price \$ _____

Delivery _____ days after receipt of Purchase Order.

Do you have optional proposal submitted/attached? Yes ___ No ___

Name of Firm: _____ State of Incorporation _____

Business Address: _____

Signature of Responsible Official: _____

Title: _____ Printed Name: _____

Telephone Number: _____ Fax: _____

Cell Phone: _____ E-mail: _____

ONE (1) 2014 Backhoe-Loader
GENERAL PROVISIONS

1. Each bid shall be submitted on the Proposal form included in these Bid Documents in a sealed envelope clearly identified with the Bidder's Name and marked "2014 Backhoe-Loader" and will be received at the Town Hall-Board of Selectmen's Office, 16 Main St., Goffstown, NH until 11:15 AM, April 2, 2014.
2. Bids when opened shall be irrevocable for a period of sixty (60) calendar days following the bid opening date. Following a review of all bids by the Public works Director, a recommendation will be sent to the Board of Selectmen. The judgment shall be final and the right is reserved by the Town, through the Board of Selectmen, to reject any or all bids as it may determine and to waive defects in form or minor irregularities where the best interest of the Town would be served.
3. The price bid shall not include Federal or State taxes. If such are applicable, the successful bidder shall furnish the Town with the necessary tax exemption forms in triplicate upon submission of their invoice.
4. The bidder shall not, directly or indirectly, enter into any agreement, participate in any collusion, or otherwise take any action in restraint of free competitive bidding in connection with this bid.
5. The successful bidder shall not use the name of the Town in any advertisement without first obtaining the written consent of the Board of Selectmen.
6. Any change to the provisions or specifications of this bid shall be made by written addendum issued no later than two (2) working days prior to the bid due date. Prospective bidders shall have complete responsibility for being aware of any and all addenda.
7. The bidder shall indemnify the Town and its representatives against any and all suits and assume all liability for the use of any patented process, device or article forming a part of the apparatus or appliance furnished under the bid.
8. Each bidder shall furnish satisfactory evidence of their ability to furnish the apparatus specified, and shall state the location of the factory where the apparatus is to be built. The bidder shall show that they are in a position to render prompt service and to furnish replacement parts for said apparatus.
9. EXCEPTIONS: Specifications contained herein are to be construed minimums. Apparatus will be inspected upon delivery for compliance with specifications. Exceptions taken to any of the bid specifications are grounds for rejection of a bid as determined by the Board of Selectmen. However, bids listing exceptions may still be considered for award by the Town where it is determined to be in the Town's interest to do so. Any and all exceptions taken to any bid requirements or specifications shall be listed and fully explained on page(s) provided in the Proposal. Exceptions shall be listed on any item not meeting specifications. Exceptions shall refer to specification page number, paragraph and item. Descriptive information covering the apparatus to be supplied shall also be submitted with the proposal but this submission shall not relieve any bidder from clearly listing any and all exceptions.

10. The Town wishes to take possession of the Backhoe-Loader as soon as possible after the bid is awarded. The vendor shall include the estimated availability date on the bid form. The vendor shall include in the bid price any costs involved in supplying the Town the apparatus as soon as possible. The vendor shall invoice the Town upon delivery of the apparatus. The Town of Goffstown shall inspect the apparatus for compliance with the specifications.
11. The bid documents shall include the "Invitation to Bid", "General Provisions", "Minimum Specifications", and "Proposal", any issued addenda, and the final executed purchase order. The documents are to be considered as one, and whatever is called for by any one of the documents shall be as binding as if called for by all. The intent of these documents is to include all labor, materials, appliances, and services of every kind necessary for the Furnishing and Delivery of equipment listed above to the Town of Goffstown Public Works Garage, 404 Elm Street, Goffstown, NH, and the terms and conditions of payment therefore.
12. It is not the intention of these specifications to specify any particular make of units or assemblies, although names may be used for reference. Others may be submitted for consideration as approved equals as provided in the specifications.
13. Should the bidder find, during examination of the Documents/Bid Specifications, any discrepancies, omissions, ambiguities or conflicts in or among the documents, or be in doubt as to their meaning, they shall, in writing, bring the question to the Town of Goffstown, Director of Public Works attention not later than four (4) working days before bid due date. The Town of Goffstown Director of Public Works will review the question(s) and, where information sought is not clearly indicated or specified, he/she will issue a clarifying addendum, which will become part of the bid.
14. This bid shall be interpreted as a Town of Goffstown bid in accordance with applicable ordinances of the Town of Goffstown, NH.
15. Unit bid on must be of the 2014 model, which were recently produced by the manufacturer.
16. The bidder shall submit their proposal showing unit price for furnishing and delivering the Backhoe-Loader as soon as possible upon bid award to the Town of Goffstown Public Works Garage, 404 Elm Street, Goffstown, NH.
17. Time is of the essence of any bid and bidder shall state in their proposal time to make delivery and is requested to submit a delivery time period they know they can meet.

2014 BID SPECIFICATIONS
BACKHOE-LOADER

Bid Specifications for Tier 4i Backhoe-Loader: Unit bid shall be currently advertised and produced model with all the latest standard features whether or not called for in these specifications. It shall be furnished completely assembled, fully serviced, and ready for immediate operation. Standard equipment shall be defined in current manufacturer's literature. (Provide current brochure/specifications of the unit bid).

Description: This specification describes a 15 foot size class pneumatic-tired 4-Wheel Drive Backhoe Loader equipped with a diesel engine, front-end loader bucket, and rear mounted backhoe of integral design. The unit shall safely dig, break out, lift, carry and dump the loads required by the specifications. Units supplied to this specification shall meet or exceed these requirements.

Dimensions and Weight:

- Base machine is four-wheel-drive with FOPS and ROPS enclosed cab and manufacturer's standard loader, backhoe, and buckets and items listed in Equipment paragraph and shall weigh a minimum 17,400 lbs., as bid, without tire ballast.
- Overall transport width: 100 inches maximum.

Counterweights:

- The complete unit with front-end loader and backhoe including option(s) identified shall have necessary factory counterweights installed for proper balance and stability during operation and loading. Total weight of available Optional Counterweights minimum 1,080 lbs.

Wheelbase:

- Minimum 88 inches.

Engine: The unit shall be powered by a heavy-duty, liquid-cooled Tier 4i diesel engine with DPF filter. The engine shall be equipped, a minimum, as follows:

- Minimum net SAE Horsepower 101 hp.net @ not more than 2200 rpm with max torque of 276.5 ft. lbs. @ 1500 rpms.
- Equipped with automatic barometry detection system that adjust engine to weather conditions and altitude.
- Meet current EPA emission requirements.
- Electrical system (12-volt) with 115 amp alternator and two heavy-duty 690cca batteries.
- Keyed ignition switch with safety device to prevent starting engine if shift lever is not in the neutral position.
- Air cleaner, heavy-duty, two-stage, dry-type, with restriction indicator. Indicator shall be easily visible from the operator's station.
- Oil filter, heavy-duty spin-on replaceable element.
- Fuel filter/water separator (one unit) with replaceable filter element.
- Heavy-duty radiator and cooling system with 50-50 mixture of water and extended life-type antifreeze.
- Machine shall be equipped with tilting Hyd. Cooler to allow cleaning of both cooler and radiator without need of wrenches or hood dis-assembly.
- Fuel tank minimum of 40 gallons and sufficient capacity of 9 hours operation.

- Muffler and exhaust pipe of sufficient length to exhaust fumes away from the operator's cab. If muffler is of a vertical design, exhaust pipe shall prevent rain from directly entering the exhaust.
- Equipped with electric hour meter.
- Oil pressure gauge or low pressure indicator.
- Coolant temperature gauge or high temperature indicator.
- Engine warning system with audible and visible signal to warn of low oil pressure and high coolant temperature.
- An electronic display system that incorporates the above indicators, gauges, and indicates is acceptable.
- Machine shall be equipped with a selectable (on/off) engine auto-idle.

Operators Station: Enclosed cab, full and integral type, providing both ROPS & FOPS certification in accordance with the current SAE. Sound dba rating inside cab, no greater than 75 dba and outside, no greater than 102 dba.

Cab to be equipped with the following:

- Factory-installed air conditioner (min. BTU's 21,000). Heater/defroster (min. BTU's 40,900). A/C and heat unit will not interfere with operator entering or exiting the cab or operating the equipment. Tinted windows required.
- Sound suppression to meet OSHA requirements measured in accordance with the current SAE J1166 not to exceed 75 dba inside cab.
- Pressurized filter system 10 micron max required.
- Windshield wipers on both front and rear windows with washer.
- Interior rear-view mirror.
- West Coast style rear view mirrors, left and right outside mounted.
- Adjustable air-suspension heated seat with upholstered arm rests and retractable seat belt.
- Horn with buttons located convenient to operator facing both forward and rearward.
- Cab floor shall be equipped with a two-piece, form fitting rubber mat.
- Two swing-out 3 position windows for fresh air ventilation.
- Two doors.
- Hand and foot throttle.
- Instrumentation shall include the manufacturer's standard instrumentation package including, but not limited to, the following gauges, indicators and alarms located at the operator's station. If an electronic monitoring system is furnished and monitors at least the following conditions, it is acceptable:
 - Fuel gauge.
 - Hour meter, electric quartz type, shock proof, totally sealed case, with readout up to 9,999.9 hours.
 - Tachometer.
 - Engine oil pressure gauge or indicator light visible to the operator during operations.
 - Engine coolant temperature gauge visible to the operator during operations.
 - Torque convertor and or transmission oil temperature gauge.
 - Ammeter or volt meter or indicator light.
 - Audible alarm and warning light for high engine coolant temperature and low engine oil pressure.
 - Tilting & telescoping steering column and two 12 volt outlets.

Steering:

- Hydraulic power steering with 4 turns minimum, lock to lock.
- Steer cylinders and linkage to be located behind the front axle housing.

Transmission: Unit shall be equipped with a synchronized power shuttle or power shift transmission having not fewer than four forward gear speeds and four reverse gear speeds.

- Directional changes via F/R switch on front loader joystick or shift lever located on steering column.
- Machine road speed capable of 20.7 mph on level ground with the tires required by this specification.
- Machine shall have a neutral start feature to prevent engine from being started if F/R switch is not in neutral.

Differential: Differential lock, positive lockup of both rear wheels only when floor activation switch is depressed.

Axles: Manufacturer's heavy-duty front and rear axles shall be provided with minimum front static axle load rating 53,391 lbs. Minimum rear axle static load rating of 42,152 lbs.

Brakes:

- Service brakes shall be wet-disc type located in each side of the rear axle with two pedals that can be locked together when roading and used individually for job site applications.
- The parking brake system shall be mechanical type located on rear axle input shaft and adjustable by operator from the seat without tools.

Tires: Tire and rim load capacity shall meet or exceed front axle load capacity.

- Front axle minimum size 12.5/80X18. Rear axle 19.5L-24.
- Urethane filled – all 4 tires.

Hydraulics:

- Main hydraulic pump must be load sensing variable-flow piston type.
- System must be equipped with a flow-sharing valve to allow multi-functions at the same time.
- Cooling system shall maintain hydraulic oil at satisfactory operating temperatures up to at least 90 degrees F ambient temperature during continuous heavy-duty operations.
- Machine to be equipped with a “**hydraulic safeguard system**”, which works by monitoring the hydraulic oil temperature and if required, automatically adjusts the hydraulic power to optimize the performance of the cooling system.
- Hydraulic oil filter(s) spin-on or replaceable element(s).
- Hydraulic reservoir with visual oil level indicator.
- All hydraulic cylinders shall be double acting type.
- Backhoe boom and swing cylinders shall be cushioned.
- There shall be three selectable digging modes for the backhoe to optimize performance and fuel efficiency.

Loader: Each unit shall be equipped with general purpose type loader bucket meeting the following requirements:

- **Bucket to be a hook-on design** when machine is equipped with the loader attachment bracket (used to enable also various other attachments, like pallet forks, rotary brooms, etc.)
- Minimum 1.3 cu. yd. capacity (heaped) per SAE J742 for both hook-on and pin-on.
- Minimum lift capacity to maximum height: 6,658 lbs.
- Maximum dumping clearance under bucket shall not be less than 9' 2".
- Bolt-on edge saver required for bucket front lip.
- Bucket control shall be by single joystick type. Controls shall be easily accessible to the operator.
- Bucket raise to be self-leveling.
- Reach at maximum height shall be at least 40 inches.
- Lift control positions: raise, lower, hold and float.
- Bucket hinge-pin height minimum 11' 2".

- Bucket width shall not exceed 93 inches and shall extend beyond the front tire outside edge.
- Maximum dump angle at least 49 degrees.

Backhoe: Must be equipped pilot controls with a switch inside cab to set operating pattern to ISO or SAE without the use of wrenches. The backhoe shall be equipped with a flow sharing control valve for raising, lowering, digging, swinging, and dumping the bucket simultaneously. **Specify either 16.1 for Standard Dipper or 16.2 for Extendible Dipper.**

- **Performance with Standard Dipper and 24" trenching bucket**
 - Backhoe performance with standard dipper, 24" trenching bucket and quick-attach shall be as follows. Boom shall be box frame welded design.
 - Quick-attach to be manual.
 - Boom lift capacity (at a 10' height) shall not be less than 3,318 lbs.
 - Maximum digging depth shall not be less than 14' 11".
 - Maximum reach at ground level not less than 19' 9".
 - Maximum dumping clearance shall not be less than 11' 11".
 - Minimum bucket rotation 205 degrees without changing pin location.
 - Lifting eye to be included in bucket curl linkage.
- **Extendible Dipper**
 - Backhoe performance with extendible dipper, 24" trenching bucket and quick-attach shall be as follows. Boom shall be box framed welded design.
 - The boom lift capacity (at a 10' height) extended per SAE J31 shall not be less than 1,833 lbs.
 - Maximum digging depth extended shall not be less than 18' 4".
 - Maximum reach extended at ground level shall not be less than 23'.
 - Maximum dumping clearance extended shall not be less than 13' 11".
 - Minimum bucket rotation 205 degrees without changing pin location.
 - Lifting eye to be included in bucket curl linkage.
- **Backhoe Controls**
 - Backhoe control shall be by two pilot-operated joysticks. Controls shall be switchable between "backhoe" and "excavator" control patterns.
 - Stabilizers or outriggers shall be individually, hydraulically controlled from the operator's seated position, shall provide a 12' 8" minimum stance. Also required combination dirt and street pads (flip over design).
 - Backhoe shall be equipped with a heavy-duty trenching bucket of 24" width.
 - Backhoe shall be capable of digging at any angle within a swing arc of not less than 180 degrees.
 - Positive locking of the boom assembly in the transport position to provide safety and reduce stresses on the hydraulic system required.
 - Stabilizer guards required to protect cylinder rods.

Equipment: Unit shall be complete with all standard accessories normally furnished. In addition, equipment shall be furnished as follows:

- Unit to meet all applicable OSHA and SAE requirements.
- Two red taillights, turn signals and brake lights, and two double-face amber flashing lights.
- Horn.
- Adjustable air-suspension, upholstered heated seat with retractable seat belt meeting the current SAE J386 standard.
- West Coast style rear view mirrors, left and right outside mounted.

- Four front and four rear work lights mounted on top front and top rear of ROPS/cab, switch controlled from the operators station.
- Non-skid access steps and grab handles.
- Back-up alarm meeting current SAE J994 and SAE J1446 standards, 102 dba minimum and permanently marked as such.
- Rear fenders.
- Boom safety lock(s) or other mechanical means to hold boom in the raised position while in transit.
- All exposed electrical wiring shall be insulated and enclosed in a fibrous loom, plastic loom or flexible conduit for protection from external damage and short circuits. Wiring shall be securely fastened at sufficient intervals to prevent sagging and insure clearance of mechanical parts. Routing of the wiring through the sub-frame, operator's platform or the like shall not interfere with the normal operation and use or present a safety hazard. A sealed, splice-free modular wiring harness is acceptable. Rubber grommets shall be used wherever wire or harness pass through metal.
- Machine to have three tie-down points for transport.
- Front and rear corner strobes (4).

Optional Equipment:

- Pallet forks
- 12' snow pusher
- 5 finger claw with fixed adjustable arm

Training: In conjunction with the delivery of each unit, the successful bidder shall provide dealer familiarization training of proper operation and daily maintenance.

Warranty: Manufacture standard warranty of 12 month on full machine with unlimited hours.

- Provide list of available extended coverages.