#### **INVITATION TO BID**

The City of Rochester, New Hampshire is accepting sealed bids for a Loader Mounted Snow Blower" Bids must be submitted to the City at the address below in a sealed envelope plainly marked as follows:

## "Sealed Bid, Loader Mounted Snow Blower "Bid # 15-15"

City of Rochester 31 Wakefield Street Rochester, NH 03867 Attn: Purchasing Agent

All bids must be received no later than **"September 11, 2014"** at **2:45 PM** Actual bid opening will be at Rochester City Hall, 31 Wakefield Street in Rochester NH, at **3:00 PM**. No late bids, faxed, e-mailed or telephone bids will be accepted. Bid proposals and specifications may be obtained by visiting <u>www.rochesternh.net</u>, or emailing <u>purchasing@rochesternh.net</u>, or by contacting the Purchasing Agent at City Hall, 31 Wakefield Street, Rochester, NH 03867, (603) 335-7602. All bid questions must be submitted in writing (email preferred) to the Purchasing Agent. Bidders are to monitor website for addendums, and postings of all bid questions and answers. All bid proposals must be fully completed when submitted.

## Loader Mounted Snow Blower

The City of Rochester is looking to purchase a two stage loader mounted snow blower. Must be able to attach to a 938H Cat Loader meeting the minimum requirements in the specifications below.

## DESCRIPTION

Two stage detachable snow blower for installation onto a front end loader. The two stage type snow blower is to equipped with a power unit, two or more augers, impeller and truck loading chute.

## OPERATING CAPACITY

Minimum of 1800 tons/hour with a casting distance up to 100 ft.

### BASIC SNOWBLOWER'S DIMENSIONS AND WEIGHT

Overall width:	102 in. with side cutters		
Overall height:	136 in. with deflector in closed position		
Overall length:	69.25 in. without female coupler		
Working height:	50 in.		
Weight:	7950 pounds approx. (certain options will increase weight)		

### SNOWBLOWER FRAME

Fabricated with ASTM A242 sheet 3/16 in. and structural metal. Fully welded construction.

## SCRAPER BLADES AND SKATES

Six outside and four inside skates fabricated from ASTM A514 metal for a total contact area of 352 sq. in. Two piece metal scraper blade 3/8 in. x 6 in..

#### **OPTION**

- 1- Skates with carbide inserts.
- 2- Scraper blade with carbide inserts.

## SIDE CUTTERS

Bolt-on side cutters with a height of 68 in. Side cutters provide an overall width of 102 in.

# LOADING CHUTE

Loading chute is 13 in. diameter and consists of three vertical sections. A rigid rotation system utilizes two different materials (steel and U.H.M.W. (polyethylene)) to prevent wear and friction. Hydraulic rotation is 300°. Chute deflector is fabricated from 3/16 in. steel and tilts through two hydraulic cylinders on each side to control the projection distance from 3ft. to 40ft. The loading chute is 136 in. in height in the basic configuration.

### **OPTION**

1- 20 in. hydraulic chute extension to allow the loading chute to have an adjustable height from 136 in. to 156 in. Five chute guides with hard induction chromed shafts permits good stability at full extension. With this option, the loading chute is in four sections.

### IMPELLER AND IMPELLER CASING

The impeller is 34 in. diameter. It consists of five bolt-on and concave impeller blades fabricated from <sup>1</sup>/<sub>4</sub> in. thick QT-100 steel. The maximum casting distance is 150 in. The fan is powered by a right angle gear box with spiral bevel gears (pinion-gear). The impeller casing is constructed 3/8 in. thick AR360 steel. The hydraulic rotation for the impeller casing is operated through a reducer with a worm gear. The greaseable impeller casing rotates on a U.H.M.W. (polyethylene) ring to prevent wear and friction. Capable of rotating 90° to the right and 60° to the left (minimum total rotation of 150°).

#### AUGERS

Two 16 in. diameter augers (welded in one piece) that can be interchangeable. The augers include open type flights and high tensile steel CSA G40.21-44W construction with ice cutters. 3/8 in. thick flights are welded on a 4 in. diameter tube with a <sup>1</sup>/<sub>4</sub> in. wall thickness. A rubber deflector is bolted on the top of the blower frame, over the upper auger.

#### POWER UNIT GROUP

The power unit is mounted on four anti-vibration engine type "H" urethane supports.

## ENGINE

The fully electronic diesel engine is TIER II1 turbo-charged with a minimum of 225 hp@ 2 200 rpmNumber of cylinders:six (6)Displacement:442 cu inPeak torque:758 lb.-ft. @ 1 400 rpm

#### FUEL SYSTEM

Engine governor is of industrial type to control and limit engine speeds. Diesel temperature compensator and atmospheric pressure controlled by ECM Spin-on fuel filter. Heated fuel and water separator

er and water separator

#### AIR INTAKE SYSTEM

Dual stage type air cleaner. Air filter restriction indicator.

STARTING AID Block heater 120 v / 1000 w Intake heater 12 volts

#### EXHAUST SYSTEM

Engine is equipped with a NELSON resonator with a rain cap.

### LUBRICATING OIL SYSTEM

Pressurised oil system Full flow oil filter element

### ENGINE COOLING SYSTEM

Centrifugal pump system. Radiator with tubes and fins. Charge air cooler Six blades sucker type fan.

#### CLUTCH

Over-center type clutch (TWIN-DISC model SP-111-HP2) with one sintered iron steel plate and a throw-out bearing to minimise service. The clutch is actuated by an hydraulic cylinder with in-cab control. The two ports on the cylinder are both open to prevent an over pressure on a clutch bearing.

#### ENGINE ELECTRICAL SYSTEM

Starter:12 voltsAlternator:12 volts, 115 amp.Battery:Two 950CCA maintenance freeThe micro switch prevent an engine start-up when the clutch is engaged. A<br/>warning light indicates maintenance due matched with a reset push button.Another warning light giving engine error codes is also placed on the electrical<br/>box. All electrical components are in a weather proof sealed electrical box<br/>located with the power unit.

## ENGINE HYDRAULIC SYSTEM

Direct drive hydraulic pump gives around 5 GPM is matched with an electrohydraulic valve equipped with an adjustable relief set at 10.4 Mpa (1500 PSI). Hydraulic hoses are 100R17 type.

Ten (10) microns oil filter on the return line with an oil restriction indicator color coded.

Hydraulic oil tank capacity is 6.1 u.s. gal. TELLUS T22 hydraulic oil.

## ENGINE COWLING

An access door allows engine maintenance and another one access to the radiator.

### ENGINE OPTIONS

- 1- Coolant heaters: circulator type
- 2- Variety of level and temperature switches

### FUEL TANK:

Fuel tank capacity is 238 litres (63 u.s. gal.) Polyethylene fuel tank with stainless steel accessories.

### POWER TRAIN

Power to the augers and impeller is provided by roller chains and spiral bevel gears (pinion-crown). All components are constantly lubricated by mean of an oil bath. All oil baths have level gauges. All drive shafts are splined type. Two sets of shear bolts protect the impeller and augers. Shear bolts are located in easily accessible location. One (1) set

of shear bolts is located on the drive shaft between the power unit and chain case to protect augers. A second set is located on the drive shaft between the impeller gear box and chain case to protect impeller.

## ATTACHMENT TO LOADER

A bolt-on female caterpillar coupler to fit 938H cat loader is provided on the snowblower.

## ELECTRICAL SYSTEM

22 ft. long electrical cord connects the control panel in the cab to the snowblower. Quick couplings are provided at each end of the cord.

First console include:

- Lighted digital Murphy console who display tachometer, hour meter, voltmeter gauge, temperatures gauges, engine oil pressure gauge and engine load percentage.

- Lighted fuel level gauge
- Warning light for engine problem
- On/off toggle switch for working lights
- Key ignition switch

Second console include:

- Emergency stop button for the engine
- \_ Toggle switch for impeller casing rotation \_
- Toggle switch for clutch engagement/disengagement \_
- Toggle switch for throttle -
- Four position joystick to control chute rotation and chute deflector \_
- Four position joystick to control steering vanes and chute extension \_

## **OPTIONS**

- 1- Two halogen working lights, protected in boxed steel enclosure and mounted on truck loading chute. Controlled by on/off toggle switch located on the electrical box on the power unit.
- 2- Emergency push button mounted on the snowblower.
- 3- Chromed general electric plug.
- 4- Master switch

## PAINT

Sand blast Two coat of two components primer Two coats of polyurethane yellow finish paint

## **MANUALS**

One (1) operations, parts and maintenance manual for snowblower and engine.

Training session is required by the vendor.

#### WARRANTY:

Unit shall have a 7 Year/4000 Hour Powertrain and Hydraulics Warranty

## BID FORM BID #15-00 Loader Mounted Snow Blower

Vendor Name:			
Address:			
Phone:Fax			
Prices Good:			
Date Submitted:			
Contact Person:			
Authorized Signature:			
Description	Year	Brand	Amount
Two Stage Detachable Snow			
Blower overall width 102", with			
Cat Coupler			
Two Stage Detachable Snow			

Blower overall width 110", with a bolt on ACS female coupler to fit a Dawoo Mega 300

Bid results will be posted after 48 hours on the City of Rochester's web site: <u>www.rochesternh.net</u> or will be available by request via e-mail at the following address: <u>purchasing@rochesternh.net</u>

# **INSTRUCTION TO BIDDERS**

## PREPARATION OF BID PROPOSAL

- 1. The Bidder shall submit her/his proposal upon the form(s) furnished by the City (attached). The bidder shall specify a unit price for each pay item. All figures shall be in ink or typed.
- 2. If a unit price or lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it, and initialed by the bidder, also with ink. In case of discrepancy between the prices written in words and those written in figures, the prices written in words shall govern.
- 3. The bidder's proposal must be signed with ink by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, by one or more officers of a corporation, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his name and post office address must be shown, by a partnership the name and post office address of each partnership member must be shown; as a joint venture, the name and post office address of each must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles, and business addresses of the President, Secretary, and Treasurer.
- 4. All questions shall be submitted in writing to and received by the Purchasing Agent at the above address, a minimum of 7 days prior to the scheduled bid opening. The Purchasing Agent, will then forward both the question and the city's response to the question to all prospective bidders.

# **IRREGULAR PROPOSALS**

Bid proposals will be considered irregular and may be rejected for any of the following reasons:

- 1. If the proposal is on a form other than that furnished by the Owner or if the form is altered or any part thereof is detached.
- 2. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
- 3. If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 4. If the proposal does not contain a unit price for each pay item listed, except in the case of authorized alternate pay items.

# **DELIVERY OF BID PROPOSALS**

When sent by mail, the sealed proposal shall be addressed to the City of Rochester, Purchasing Agent, 31 Wakefield Street, Rochester, NH 03867. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened. Emailed or faxed bid proposals are <u>not</u> acceptable.

# WITHDRAWAL OF BID PROPOSALS

A bidder will be permitted to withdraw his proposal unopened after it has been deposited if such request is received in writing prior to the time specified for opening the proposals.

# PUBLIC OPENING OF BID PROPOSALS

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

# **DISQUALIFICATION OF BIDDERS**

Either of the following reasons may be considered as being sufficient for the disqualification of a bidder and the rejection of her/his bid proposal(s):

- 1. Evidence of collusion among bidders.
- 2. Failure to supply complete information as requested by the bid specifications.

# **CONSIDERATION OF PROPOSALS**

- 1. Bids will be made public at the time of opening and may be reviewed only after they have been properly recorded. In case of discrepancy between the prices written in words and those written figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.
- 2. The right is reserved to reject any or all proposals, to waive technicalities or to advertise for new proposals, if in the judgment of the City, the best interest of the City of Rochester will be promoted thereby.
- 3. Bid results will be available on the website at www.rochesternh.net within 48 hours of the bid opening.

# AWARD OF CONTRACT

The City holds the right, in its judgment, to award the contract to the bidder, which it feels is in the best interest of the City. If a contract is to be awarded, the Contractor/Vendor selection shall be based in part on possession of the necessary experience, organization, technical and professional qualifications, skills and facilities, reference checks, project understanding, approach, ability to comply with proposed or required time to completion or performance, licensing or certification, in good standing with Federal, State and Local agencies, possession of satisfactory record of performance, cost and to a responsible and qualified bidder whose proposal complies with all the requirements prescribed as soon as practical after the bid opening. No bid shall be withdrawn for a period of (60) sixty days subsequent to the opening of bids without the consent of the City of Rochester. The successful bidder will be notified, by the form mailed to the address on his proposal, that his bid has been accepted and that he has been awarded the contract.

# CANCELLATION OF AWARD

The City reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability against the City.

# **BID EVALUATION**

In addition to the bid amount, additional factors will be considered as an integral part of the bid evaluation process, including, but not limited to:

- 1. The bidder's ability, capacity, and skill to perform within the specified time limits.
- 2. The bidder's experience, reputation, efficiency, judgment, and integrity.
- 3. The quality, availability and adaptability of the supplies and materials sold.
- 4. The bidder's past performance.
- 5. The sufficiency of bidder's financial resources to fulfill the contract.
- 6. The bidder's ability to provide future maintenance and/or services.
- 7. Any other applicable factors as the City determines necessary and appropriate (such as compatibility with existing equipment).

## **CONDITIONS AT SITE**

Bidders shall be responsible for having ascertained pertinent local conditions, such as: location, accessibility and general character of the site of the building. The character and extent of existing work within or adjacent to the site, and any other work being performed thereon at the time of the submission of her/his bid.

## LAWS, PERMITS AND REGULATIONS

- 1. The Contractor shall obtain and pay for all licenses and permits as may be required of him by law, and shall pay for all fees and charges for connection to outside services, and use of property other than the site of the work for storage of materials or other purposes.
- 2. The Contractor shall comply with all State and Local laws, ordinances, regulations and requirements applicable to work hereunder, including building code requirements. If the Contractor ascertains at any time that any requirement of this Contract is at variance with applicable laws, ordinances, regulations or building code requirements, she/he shall promptly notify the City of Rochester in writing.

## **STANDARDS**

- 1. Materials specified by reference to the number, symbol or title of a specific standard, such as a Commercial Standard, a Federal Specification, Department's Standard Specifications, a trade association standard or other similar standard. Shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the data of advertisement, except as limited to type, class or grade or modified in such reference.
- 2. Reference in the Specifications to any article, device, product, material, fixture, form or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition.

In such cases the Contractor may, at his option, use any articles, device, product, material fixture, form or type of construction that, in the judgment of the City expressed in writing to all Bidders before opening of bids as an addendum, is an acceptable substitute to the specified.

- 3. <u>Substitution During Bid Time:</u> Whenever any particular brand or make of material or apparatus is called for in the Specifications, a Bidder's Proposal must be based upon such material or apparatus, or upon a brand or make which has been specifically approved as a substitution in an Addendum issued to all Bidders during the bidding time.
- 4. The intent is that the brand or make of material or apparatus that is called for herein establishes a standard of excellence that, in the opinion of the Consultant and Engineer, is necessary for this particular Project.
- 5. <u>Substitution After Bid Opening:</u> No substitutions will be considered after bids have been opened unless necessary due to strikes, lockouts, bankruptcy or discontinuance of manufacture, etceteras. In such cases, the Contractor shall apply to the City, in writing within ten (10) days of his realizing his inability to furnish the article specified, describing completely the substitution he desires to make.

# EXTRAS

Except as otherwise herein provided, no charge for any extra work or material will be allowed unless the Director of Public Works has ordered the same, in writing.

## **GUARANTEE OF WORK**

- 1. Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment or workmanship for one (1) year from the Date of Final Acceptance.
- 2. Make good any work or material, or the equipment and contents of said building or site disturbed in fulfilling any such guarantee.
- 3. In any case, wherein fulfilling the requirements of the Contract or of any guarantee, should the Contractor disturb any work guaranteed under another contract, the Contractor shall restore such disturbed work to a condition satisfactory to the Director of Public Works. And guarantee such restored work to the same extent as it was guaranteed under such other contracts.
- 4. If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the City of Rochester may have the defects corrected and the Contractor shall be liable for all expense incurred.
- 5. All special guarantees applicable to definite parts of the work that may be stipulated in the Specifications or other papers forming a part of the Contract shall be subject to the terms of this paragraph during the first year of the life of such special guarantee.

# DEFAULT AND TERMINATION OF CONTRACT

If the Contractor:

1. Fails to begin work under Contract within the time specified in the notice to proceed; or

- 2. Fails to perform the work with sufficient workers and equipment, or with sufficient materials to assume prompt completion of said work; or
- 3. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable; or
- 4. Discontinues the prosecution of the work; or
- 5. Fails to resume work, which has been discontinued, within a reasonable time after notice to do so; or
- 6. Becomes insolvent or has declared bankruptcy, or commits any act of bankruptcy or insolvency; or
- 7. Makes an assignment for the benefit of creditors; or
- 8. For any other causes whatsoever, fails to carry on the work in an acceptable manner the City of Rochester will give notice, in writing, to the Contractor for such delay, neglect, and default.

If the Contractor does not proceed in accordance with the Notice, then the City of Rochester will have full power and authority without violating the Contract to take the prosecution of the work out of the hands of the Contractor. The City of Rochester may enter into an agreement for the completion of said Contract according to the terms and conditions thereof, or use such other methods as in the City's opinion will be required for the completion of said Contract in an acceptable manner.

All extra costs and charges incurred by the City of Rochester as a result of such delay, neglect or default, together with the cost of completing the work under the Contract will be deducted from any monies due or which may become due to said Contractor. If such expenses exceed the sum which would have been payable under the contract, then the Contractor shall be liable and shall pay to the City of Rochester the amount of such excess.

## **OBTAINING BID RESULTS**

Bid results will be available on the website at www.rochesternh.net within 48 hours of the bid opening.