

City of Portsmouth
Portsmouth New Hampshire

INVITATION TO BID

Sealed bid proposals, **plainly marked** “Bid #60-08 Hooklift and Plow System” **on the outside of the envelope**, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until 2:00 p.m. July 11, 2008 at which time all bids will be publicly opened and read aloud.

Bid specifications may be obtained from the Finance/Purchasing Department on the third floor at the above address, on-line at **www.cityofportsmouth.com**, or by calling the Purchasing Coordinator at 603-610-7227. **Continue below for the bid specifications.**

The City of Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, and to accept any bid that it may deem to be in the best interest of the City.

Questions may be directed to the Purchasing Coordinator at 603-610-7227.

INSTRUCTION TO BIDDERS

I. Preparation of Bid Proposal

- A. The Bidder shall submit its proposal upon the form furnished by the City (attached). Prices shall be given in both in words and figures.
- B. Corrections made to amounts or information requested on the bid form should be made by crossing out the error and entering the new price or information above or below it. The correction must be initialed. In case of discrepancy between the prices written in words and those written in figures, the prices written in words shall govern.
- C. The bidder's proposal must be signed 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 if 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.
- D. All words, figures, corrections shall be in ink or typed. All signatures shall be in ink.

II. Delivery of Bid Proposals

When sent by mail, the sealed proposal shall be addressed to the owner at the address and in the care of the official in whose office the bids are to be received. 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. Faxed bid proposals are not acceptable.

III. 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.

IV. 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.

V. Irregular Proposals and Disqualification of Bidders

Bid proposals that are irregular may be rejected. Irregular bid proposals include the following:

- A. Failure to use the bid form provided or alteration of the form.
- B. Unauthorized additions, conditional or alternated bids, incomplete bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
- C. The addition of any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

Bidders may be disqualified and the bid proposal rejected for the following reasons:

- D. More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- E. Evidence of collusion among bidders;
- F. Failure to submit all required information requested in bid specifications;
- G. Bidder is not qualified or able to provide the provide the services or product(s) described in the bid specifications; or
- H. Disqualification is in the best interest of the City of Portsmouth.

AWARD

I. Consideration of Proposals and Award

After the proposals are opened and read, bid results will be available to the public. In case of discrepancy between the prices written in words and those written figures, the prices written in words shall govern.

Within 30 calendar days after the opening of proposals, if an award is made, it will be made to the lowest, responsible, qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by mail at the address indicated on the proposal.

The award shall not be considered official until such time that a Purchase Order, fully executed contract or an award letter has been issued by the Finance Director. No presumption of award shall be made by the bidder until such documents are in hand. Verbal notification of award is not considered official. Any action by the bidder to assume otherwise is done so at his/her own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

II. Reservation of Rights

The City reserves the right to cancel the award at any time before final notification of the successful bidder without any liability against the City. The City of

Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, and to accept any bid that it may deem to be in the best interest of the City. The City of Portsmouth also reserves the right to reject the bid of a bidder who has failed to perform properly or complete on time contracts of a similar nature.

BID SPECIFICATIONS
FOR
HIGHWAY #40
HOOKLIFT AND PLOW SYSTEM

CITY OF PORTSMOUTH, NEW HAMPSHIRE

PUBLIC WORKS DEPARTMENT

MINIMUM SPECIFICATIONS

HEAVY DUTY HOOKLIFT SYSTEM AND FRONT PLOW

CITY OF PORTSMOUTH, NEW HAMPSHIRE
PUBLIC WORKS DEPARTMENT

SCOPE

It is the intent of this specification to describe a 22,000 lbs. heavy duty hooklift system with 11 foot angle plow mounted on a City supplied 37,000 lbs GVWR truck chassis. The following minimum specifications considered necessary to perform the function indicated. The unit shall be new, unused, of current production, design and source from an established, recognizable, manufacturer. Standard items in the manufacturers published literature, furnished by the bidder, shall be included in the bid. A copy of the specifications for the unit being proposed shall be included with the bid. Any exceptions variations, and/or deletions must be noted or the bid may be rejected. The equipment described herein will be utilized by the Public Works Department. All components furnished under this specification shall be capable of the stress of municipal snow plowing, and general highway maintenance.

HYDRAULIC HOOK HOIST MECHANISM:

HOOK LIFT SYSTEM:

Minimum of 22,000 pounds lifting and dumping capacity.

The hook lift shall have a minimum of 53 degree dump angle, on a 41" truck frame height chassis.

Hook lift not to exceed 4,100 lb. in shipping weight.

Hook lift must be able to handle skid-mounted containers/bodies with sub frame lengths of 16' through 20' feet.

The skid-mounted containers/bodies must be supported by flanged rollers at the rear of the hoist. The rear-flanged rollers must have a minimum diameter of 6 1/4".

The flanged rollers at the rear of the hoist must be adjustable to accommodate bodies/containers with outside sub frame rail widths of 41 5/8" to 40 1/2".

The hook to rear roller dimension to be 179.81" in length.

Dump/load cylinders are double acting, twin cylinders, sized for unit capacity with double integral counterbalance valves. Dump/load cylinders to be a minimum 6" bore by 54 stroke and manufactured in the USA.

Telescoping jib section shall be double acting, single cylinder sized to unit capacity with a single counterbalance valve. Jib cylinder to be a minimum 3.5" bore by 34" stroke and manufactured in the USA.

The hook lift jib must be capable of hydraulically sliding the body/container horizontally on the chassis, without lifting off the hoist frame rails, to adjust weight distribution while remaining in the body locks.

Must have a jib lock out valve to prevent jib operation while in the dump mode.

Jib hook to be capable of reaching rearward to A-frame lifting bar by double articulating hinge points in the hoist mechanism.

All lift sections must lock into a common rigid full-length frame to support the body/container when dumping. This must be accomplished by mechanical operated latches, which lock the mast without relying on gravity, or hydraulic locks.

MAINFRAME OF HOIST:

The mainframe of the hoist is to be constructed of a "Z" rail configuration. The "Z" rail mainframe is to be a maximum of 9" in height and constructed of 1/4" grade 50 steel.

Hoist "Z" frame rails to include a minimum of 8 (4 per side), 11 3/4" X 2 3/4" X 1/2" nylatron wear pads at the front of the "Z" for front body/container support. This nylatron pad will allow the containers/bodies to slide back and forth on the rail of the hoist with ease. Metal to metal contact (the metal sub frame of the container/body ride on the sub frame of the hoist) will not be allowed.

HYDRAULIC SYSTEM:

Direct mount gear type pump, 17.4 gpm at 1500 rpm, 2,800 psi maximum system operating pressure.

25-gallon oil reservoir tank (minimum) is to have a sight glass to indicate fluid level with integral thermometer. Must contain a 200 mesh, 74 micron screen strainer.

Must contain a return filter assembly with replaceable 10-Micron filter cartridge.

Control valves to be stackable type with J.I.C. 37-degree fittings.

High-pressure hoses to be SAE 100R2 type AT or equivalent, rated for 2800 PSI (maximum) working pressure.

System must contain an integral 2,800-psi relief valve.

Dual control levers cable operated mounted in truck cab. Controls are to be spring centering type for safe operation.

HOOK LIFT SYSTEM:

The complete mechanism, including hydraulics, to be made in the U.S.A. with service and parts readily available.

BODY LOCKS:

Must have integral slide through lock down plates to secure body to hook lift in dump and transport positions, to accommodate different length bodies and to allow for weight distribution changes while remaining in the body locks when in the transport or in dump cycle.

HOOK ASSEMBLY:

Jib Hook height 54" inches from the bottom of the long sills to the bottom of the hook.

Hook-lift must be able to pick up body or container resting on a grade 5" below the grade the truck is on (assumes 41" truck frame height).

Jib hook to be so designed to secure body to hoist without the need of a security safety latch.

Jib hook to be permanently welded to jib. (No bolt on jib hook will be accepted).

BODY / CONTAINER

SUB-FRAME:

The "A" frame of the container/body shall be constructed to allow the hook lift operator to approach and load the container/body on the truck chassis from an angle.

The skid-mounted container/body must have integral slide through lock down plates to secure body to hook lift in dump and transport positions, and to accommodate different length bodies or weight distribution changes while remaining in the body locks.

WARRANTY:

The complete mechanism, including hydraulics, will be factory warranted free of defects in material and workmanship for a period of thirty-six (36) months on parts, 90 days on labor from the date of installation.

NOTE:

Hoist must be capable of being mounted to a truck chassis of 142" to 160" cab-to-axle dimension.

Truck frame to have RBM of 900,000 in.-lbs. per frame rail (1,800,000 in.-lbs. total).

FRONT PLOW:

1. This equipment to be heavy-duty and of the latest design.
2. Plow is to be a poly power reversible trip edge front mounted;
3. Eleven [11] foot in length, trip edge design;
4. RR85 drive frame with three and one half [3 ½] inch by twenty [20] inch reversing cylinders with cushion valve protection;
5. Six [6] trip edge torsion springs made from three quarter [¾] inch wire;
6. Thirty one [31] inch drive centers;
7. Integral curb protection shoes;
8. Three quarter [¾] inch cutting edge backer angle with reinforcing gussets;
9. Eight [8] full length vertical ribs reinforced and welded to trip edge support;
10. 11 SHP inch punched five eighths (5/8) inch C1090 cutting edge;
11. One pair of mold board shoes, lift chain, marker guides and bolt on rubber deflector;
12. Installed and connected via quick disconnects to hydraulic system;

PLOW FRAMES:

1. Front mounted plow frame shall be of custom-design, mounted to truck frame and shall include all necessary full frame cheek side plates of one half [1/2] inch reinforced gusseted steel plating and reinforcing to truck frame and extensions to provide a truly heavy-duty arrangement.

2. Plow frame is to be equipped with headlights and directional lights suitable for night plowing with halogen head lamps.
3. The chassis may have a hood design which opens forward, therefore, the plow frame shall be full movement of the hood utilizing a power tilt plow frame with three and one half [3 ½] inch double acting lifting ram for both plow lift and tilt function of plow hitch utilizing the same lifting ram.

HYDRAULIC SYSTEM:

1. Commercial front constant run pump assembly with heavy-duty Spicer drive line;
2. Plumbing to rear of chassis with quick disconnects for salter operations;
3. Commercial A20 series valve with sections for plow lift, plow reverse, and power beyond for salter operations;
4. Cab controls to be cablecraft lo-friction cables with identification on each lever;
5. Frame mounted twenty [20] gallon hydraulic tank with filter, sight glass gauge and shutoff valve with piping necessary for a complete system ;
6. The bidder shall confirm the location of all controls, before mounting inside cab, with City of Portsmouth;
7. Ground speed control unit, for City supplied Salter, installed and calibrated to Spec, with training for operations and garage personnel

WARNING SYSTEMS:

1. The back-up alarm to be mounted on pintle plate.
2. A complete set of halogen plow lights and turn signals, mounted on the plow frame controlled from the cab shall be installed;
3. Emergency lighting shall be as follows;
4. A Whelen Engineering DOT 3 SYSTEM 102-D three light strobe system is indicative of the type and quality desired but not restricted thereto;
5. Rear facing two strobe lights, two oval taillights to be installed in rear bumper of truck chassis. The two oval backup lights to be in the rear apron;
6. A strobe light is to be mounted on the top of cab in the center with no interference with the dump body cab protector;
7. The cab-mounted strobe shall operate in conjunction with the rear units;
8. All wiring to be sealed wiring harnesses;
9. All controls and power pack shall be mounted inside the cab;
10. Controls shall be a switch rocker panel to function lights, Include complete specifications on the make, model and type of light system offered;

TWO-WAY RADIO:

A two-way radio, antenna, wiring and noise filter shall be installed. The bidder shall obtain frequency and rapidcall programming information from the city of Portsmouth, Public Works Department once the bid has been awarded. The radio shall be, with no exceptions, a Motorola Radius CM-300, model-AAM50KQF9AA1, 45 watt RF output, 16-channel

capacity, 20/25/30 kHz channel spacing with MDC-1200 rapidcall. Heavy duty ¼ wave complete with roof mount antenna.

MANUALS:

At least one (1) COMPLETE SET of SHOP MANUALS for all the components (I.E.: parts manual, wiring manual, one (1) operational manual, plows, hydraulic systems, ground speed control unit, lights, and radios) are required. (Can be in CD-ROM.).

TRAINING:

A minimum of four (4) hours of operational and four (4) hours of mechanical factory training are required on the complete unit.

ADDITIONAL EQUIPMENT:

1. The dump body shall be heavy duty dump body of current design, 10 feet in length, mounted on a hooklift frame.
2. Three sixteen's [3 /16] construction throughout with full seam welding, four [4] inch structural channel cross members on sixteen (16) inch centers, six (6) inch structural channel long members, one piece floor one quarter [1/4] inch AR steel plate floor with full height steel sideboards of three sixteen`s [3/16] HT steel.
3. The body ends are to be higher than the sides, with pockets front and rear to allow for the installation of sideboards.
4. The tailgate shall be one [1] piece skin plate of same material as floor, with perimeter box reinforcement plus nine [9] panel bracing, horizontal intermediate stiffeners plus lower rub rail material of shedder design.full box section section top horizontal.two way action standard, three eight`s [3/8] adjustment chains standard, one and one half [1 ½] inch flame cut hinge ears with one and one quarter [1 ¼] inch diameter handle pins and one and one quarter [1 ¼] inch diameter lower latch rod.
5. 3 Coal doors standard issue equally spaced and weld to sides and middle of tailgate and level to body floor;
6. Install plastic fenders over rear wheels.
7. Front and rear mud flaps on rear wheels.
8. The body shall be painted BLACK.
9. All lighting must conform to FCC.
10. The body shall be warranted against all defects for a period of one-year or longer, **if the** manufacturers standard warranty is for a longer time frame.
11. Supply 2 (two) additional hooklift frames for City to install a van body and flatbed for sander.
12. Install ICC bumper.

Bid Price:

Hooklift and plow system installed:

\$ _____
Price in Figures

\$ _____
Price in Words

Standard Warranty

\$ _____
Price in Figures

\$ _____
Price in Words

Total Bid Proposal = Base Bid plus Standard Warranty:

\$ _____
Price in Figures

\$ _____
Price in Words

DELIVERY:

Bidder must state approximate date from receipt of order delivery will be made: _____.

Delivery must be made no later than 90 days from receipt order date.

The undersigned agrees that he/she on behalf of Bidder has read the bid proposal documents, the instruction to bidders specifications and agrees to the terms, conditions and specifications set forth herein. Bidder understands that bid prices shall include delivery FOB to the Department of Public Works, 680 Peverly Hill Road, Portsmouth, New Hampshire.

Bidder further agrees that this bid is not made jointly or in conjunction, cooperation or collusion with any person, firm, corporation or other legal entity. Bidder agrees no officer, agent or employee of the Owner is directly or indirectly interested in this Bid.

Submitted by Authorized Agent:

(Print Name & Title)

Signature: _____

Date: _____

Company: _____

Address: _____

City/State/Zip: _____

Telephone: _____
Fax: _____