

City of Portsmouth
Portsmouth, New Hampshire
Public Works Department

INVITATION TO BID

Sealed bid proposals, **plainly marked** "WATER DEPARTMENT DUMP TRUCK WITH FRONT PLOW AND PATROL WING Bid #41-07" **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 **July 3, 2007 @ 2:00 p.m.** at which time all bids will be publicly opened and read aloud.

Scope: The Portsmouth Water Department is seeking to purchase a 2008 -7600 SBA 6x4 Dump Truck with Front Plow and Patrol Wing.

Specifications and Proposal forms 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. **Please continue below for the complete bid document.**

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 or 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.

III. 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.

BID SPECIFICATIONS

For

Water Truck #108

City of Portsmouth, New Hampshire

Public Works Department

Specifications for a 2008-7600 SBA 6x4

MINIMUM SPECIFICATIONS

66000 lb. GVWR, Cab and Chassis, 14 yd Dump Body
With Front Plow and Patrol Wing

City of Portsmouth, New Hampshire
Public Works Department

SCOPE

It is the intent of this specification to describe a 66,000 lb. GVWR cab and chassis, 14 yd Dump Body with 11foot angle plow and 11foot patrol wing, 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 vehicle described herein will be utilized as a dump truck and snowplow. All components furnished under this specification shall be capable of the stress of municipal snow plowing, and general highway maintenance.

64,000 lb. GVWR CAB and CHASSIS, 14 YD. DUMP BODY

DIMENSION:

Wheelbase: 177, CA: 109.9, Axle to frame: 75

ENGINE, DIESEL:

Caterpillar C13 ACERT 50 State 410 HP @ 2100 RPM
Governed Speed; 1450 lb-ft Torque @ 1200 RPM; Governor speed 425 peak HP and with Electronic controls and ADEM A4E4 ECM

ENGINE EQUIPMENT:

1. Anti-freeze to be permanent, to minus 40 degrees Fahrenheit;
2. A water to oil engine oil cooler.
3. Starter Motor 42MT
4. Alternator 22 SI 12 volt 130 amp

5. Gauge, Air Cleaner Restriction Air Cleaner Mounted
6. Air cleaner with Vacuator remote mounted
7. Engine Shutdown Electric, Key operated
8. Governor Electronic
9. Throttle, Hand Control Electronic, instrument Panel Mounted
10. Engine oil drain plug Magnetic
11. Oil filter, Engine Spin-on type
12. Water Filter Engine Mounted
13. Fuel Filter Engine Mounted
14. Fan Drive {Horton } Automatic On/Off Type Control; with Normally Closed Temperature Control;
15. Front PTO adapter
16. Fan Nylon
17. Radiator cross Flow, Series System, 1150 Sq.In. Area and 1030 Sq.In. Charge Air Cooler, Front PTO Provision
18. Deaeration System with remote-mounted surge tank and sight glass
19. Radiator Hoses Premium, rubber
20. Block Heater, Engine {Phillips} 120 volt/2500 Watt; includes 20 AMP plug

TRANSMISSION, AUTO:

Allison 4500-RDS-p 4th generation controls: wide ratio 5 speed with overdrive: includes oil level sensor with PTO provisions less retarder

AXLE, FRONT, I-BEAM TYPE:

Meritor MFS-20-133a wide track, I beam type 20,000 lbs

AXLE, REAR, TANDEM:

Meritor RT-46-160P single reduction, 46,000 lbs Capacity, with lube pump, Driver controlled main locking differential in rear axle and 200 wheel ends. Gear ratio 5.38

BRAKES:

1. Brake system air dual for tandem truck application with bendix antilock system-ABS
2. Air compressor
3. Wabco air dryer
4. 4 (four) spring brake chambers for rear parking
5. Brake line shall be color coded
6. Drain valves for air tank shall be twist type except for wet tank which shall be manual valve with pull chain
7. Front brakes–air cam 16.5 x 6” includes 24 square inch long stroke chamber
8. Rear brakes-air cam 16.5 x 7” includes MGM3030 long stroke chamber and heavy duty spring actuated parking brake
9. Dust shields for all brakes
10. Air pressure gauge in dash
11. Parking brake release valve mounted in dash, color coded yellow
12. All slack adjusters shall be automatic

CAB:

Conventional, Steel, 80" Wide

TIRE, FRONT:

2 (two) 315/80R22.5 XZY-3 Michelin 478 rev/mile, load range G, 20 ply and (1) spare rim and tire mounted

Front rims are to be disc type hub pilot 22.5 x9.00

TIRE, REAR:

8 (eight) 11R22.5 XDEM/S Michelin 497 rev/mile, load range H, 16 ply (2) spare rims and tires mounted

rear rims are to be disc type hub pilot 22.5 x 8.25

SUSPENSION, REAR, TANDEM:

Hendrickson HMX-460-54 46,000-lb Capacity Walking Beam Type 54" Axle spacing with rubber end bushings and Transverse torque rods

SUSPENSION, FRONT SPRING:

Multileaf front shackle type; 20,000 lb. Capacity; front right spring shall have spring built up to soot weight of wing plow.

STEERING:

1. Steering column shall be tilt and telescoping
2. Steering wheel shall be 2 spoke 18" diameter black in color
3. Steering gear shall be 2 Sheppard M100/M-80 dual power

FRAME AND FRAME REINFORCEMENT:

Outer "C" Channel, Heat Treated Alloy Steel (110,000 PSI Yield); 10.813" x 3.812" x 0.312"; and twenty [20] inch front frame extension for mounting PTO pump and plow

Frame rails Heat treated alloy steel [110,000PSI Yield] 10.813"x 3.812" x0.312

ELECTRICAL SYSTEM:

Electrical system to be 12 volt, standard equipment includes the following:

1. Body Circuits, with 6 body switches instrument panel One power module with 6 channels 20 amps maximum per channel and 80 amp maximum output , switches control the power module through multi module through multiplex wiring mounted in cab
2. Body Builder wiring-Back of the standard cab at left frame rail includes seal connectors for Tail/amber, turn/marker, backup/accessory, power/ground and sealed connector for stop/turn
3. Turn signal switch, self canceling with integral switch,
4. Circuit breakers – manual reset SAE type III with trip indicator that replaces all fuses except 5 amp
5. Headlight dimmer switch integral turn signal switch,
6. Parking light integral with front turn signal and light,
7. Stop, turn, tail and backup lights dual, rear, reflector,
8. Starter switch electric key operated, with buzzer warning tone,
9. Turn signals, front flush mounted with reflectors and turn signals,

10. Windshield wipers with switch for intermittent operation,
11. Cigar lighter,
12. Electric horn, 1 each,
13. Alternator to be maximum capacity of 130 amps.
14. Battery system to be, maintenance free, (3) 12-volt, 1950CCA total
15. Radio to be AM/FM stereo with CD and speakers in cab,
16. Radio filter noise suppression shall be required with all electronic engines,
17. Electronic controlled indicators shall include low oil pressure and high temperature with light in audible alarm,
18. Roof marker lamps,
19. Headlights to be long life halogen,
20. Light set up for daytime running,
21. Dome light with LH & RH door switch,
22. Dual covered power points,
23. Hour Meter

CAB / CHASSIS:

1. Front bumper
2. Flare wheel openings
3. Grille to be stationary and Chrome
4. Paint color to be CHROME YELLOW CAB, BLACK BODY, with clear coat paint or manufacturers nearest color to be approved by City of Portsmouth,
5. Cab to be conventional, steel, and to include the following:
6. Passenger assist handles,
7. Floor covering to be black rubber;
8. Interior sheet metal to be painted, color based on the exterior color;
9. Headliner color keyed vinyl;
10. Steering wheel to be black in color
11. Sunshades both sides, vinyl
12. Front head restraints;
13. Windows all glass;
14. Interior color to be charcoal;
15. Mirrors to be stainless steel senior west coast type;
16. Convex mirrors, 2 each, to be stainless-steel, 8 in. diameter, mounted below primary mirrors;
17. Fuel tank-70gallons
18. Gauge cluster to be English with English electronic speedometer with trip odometer, engine oil pressure gauge, electronic water temperature gauge, voltmeter, hourmeter;
19. Drivers seat , [National 2000 Model 295] Air suspension, intermediate back, vinyl ,isolated adjustments, two [2] position front cushion adjustment, minus 2-degree to plus 15-degree back cushion adjustment, mechanical lumbar support
20. Passenger seat ,mid-back fixed base
21. Heater to be blend air type, with defroster, heater hoses to be premium rubber; front side window defoggers and a/c
22. Cab interior trim to be deluxe, to include the following,
23. Storage pocket, door molded plastic, charcoal and color, mounted on door;

24. Instrument to handle trim to be molded plastic, charcoal in color;
25. Theft deterrent security passlock;
26. Hood same have dual hood hatch; with access opening to check and fill fluids in engine compartment with hood in closed position
27. Trailer tow package with air valves and controls install in cab and air line installed through pintal plate with glad-hands
28. First-Aid kit 25 person, mounted in area for quick access
29. Fire extinguisher and triangle flare kit;
30. Full mud flaps shall be installed at all four (4) tires.

DUMP BODY, PLOW GEAR, and WARNING SYSTEMS:

It is the intent of this specification to describe a 14 yard dump body, a complete plow with the following minimum specifications. The units shall be new, unused, of current production, design and source an established, recognizable, manufacturer. Standard items in the manufacturers published literature, furnished by the bidder, shall be included in the bid. Any exceptions variations, and/or deletions must be noted or the bid may be rejected. This vehicle shall be in accordance with all federal and state standards, in effect at the time manufacturer.

DUMP BODY:

1. The body shall be heavy duty dump body of current design.
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. Rear corner posts with integral oval cut outs for an in body light system.
4. The body ends are to be higher than the sides, with pockets front and rear to allow for the installation of sideboards.
5. 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 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.
6. Coal door standard issue weld to middle of tailgate and level to body floor;
7. The tailgate operating device shall be air operated and positive locking, with a control in cab on hydraulic control lever tower for ease of operation
8. Front and rear mud flaps on rear wheels.
9. The dump body shall include a under body lift arm type with two [2] eight [8] inch by twenty four [24] inch stroke double action and armlift assembly shall be of weld steel construction twin lift arms fabricated from steel tubing .All moving parts shall be greaseable;
10. Sub-frame formed 'c' three eighth [3/8]' plate long sill with weld-on rear hinge ears on two and quarter [2 ¼] inch diameter pins;
11. Body shall be heated;
12. Hoist shall have a capacity of 30 ton and connected to a central hydraulic system.
13. Hydraulic systems shall be matched with the plow hydraulic system package.

14. A body up indicator light shall be mounted in the cab.
15. The body shall be painted BLACK.
16. All lighting must conform to FCC.
17. The body and hoist shall be warranted against all defects for a period of one-year or longer, if the manufacturer's standard warranty is for a longer time frame.

FRONT PLOW:

1. This equipment to be heavy-duty and of the latest design.
2. Plow is to be a power angle trip edge, front mounted;
3. Eleven [11] foot in length, three section 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 with three quarter [3/4] inch wire
6. Thirty one [31] inch drive centers
7. Integral curb protection shoes
8. Three quarter [3/4] inch cutting edge backer angle with reinforcing gussets
9. Eight [8] full length vertical ribs reinforced and welded to trip edge support
10. AASHO twelve (12) 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. Its is expect that 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.

PATROL WING:

1. This equipment to be heavy-duty and of latest design.
2. Plow is to be a full trip wing
3. Heavy-duty full trip wing braces:
4. Twenty nine [29] inch intake and thirty eight [38] inch discharge:
5. Eleven [11] foot overall length;
6. Ten [10] foot SHP cutting edge;
7. Three quarter [3/4] inch backer angle;
8. Four [4] full length horizontal reinforcements;
9. Eight [8] vertical ribs;

HYDRAULIC SYSTEM:

1. Commercial front pump assembly with heavy-duty Spicer drive line;
2. Commercial A20 series valve with sections for plow lift, plow reverse, front wing, rear wing, dump body and power beyond for salter operations;
3. Cab controls to be cablecraft lo-friction cables with identification on each lever;
4. Frame mounted twenty [20] gallon hydraulic tank with filter, sight glass gauge and shutoff valve with piping necessary for a complete system ;
5. The bidder shall confirm the location of these controls, before mounting inside cab, with City of Portsmouth

PINTLE HOOK / BALL HOOK:

1. A twenty-four [24] ton swivel pintle hook, mounted to three quarter [3/4] inch thick plate and V-Braced shall be welded to the truck frame, and "D" rings welded to plate.
2. Four (4) prong and seven [7] prone trailer plug SAE wired;
3. Air and electrical shall be mount though mounting plate

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 post of the body. 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 five switch rocker panel to function lights and the clutch pump.
11. 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 rapid call 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 CDM1250 VHF (136-174 MHz (, 25-45 watts, 64 channels, with ignition cabling, 138-174 Mosaic Antenna and installation package

MANUALS:

At least one (1) parts manual, one (1) operational manual, and one (1) COMPLETE SET of SHOP MANUALS for both the truck and all the components (I.E.: engine, transmission, rear ends, plows, hydraulic systems, lights, and radios) are required, also wiring manual - (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.

WARRANTY:

Warranty shall be 3 year / 36,000 miles bumper to bumper with an extended 5 year warranty on the drivetrain.

TRADE IN:

1990 International model 4900, with dump body, plow frame and 11 foot plow
Color: Cab light blue with black body and plow frame. Vehicle not in service.
VIN 1HTSDTVR6LH272874

BID PROPOSAL FORM
Page 1 of 2

**2008 – 7600 SBA 6x4 Dump Truck
with Front Plow and Patrol Wing:**

\$ _____	\$ _____
Price in Figures	Price in Words

Trade in Allowance:

\$ _____	\$ _____
Price in Figures	Price in Words

Base Bid:

Dump Truck

minus Trade in Allowance:

\$ _____	\$ _____
Price in Figures	Price in Words

Extended Warranty:

\$ _____	\$ _____
Price in Figures	Price in Words

Total Bid Proposal= Base Bid plus Extended Warranty:

\$ _____	\$ _____
Price in Figures	Price in Words

WARRANTY:

Warranty shall be 3 year / 36,000 miles bumper to bumper with an extended 5 year warranty on the drivetrain.

DELIVERY:

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

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

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.

BID PROPOSAL FORM
Page 2 of 2

Submitted by Authorized Agent:

(Print Name & Title)

Signature: _____

Date: _____

Company: _____

Address: _____

City/State/Zip: _____

Telephone: _____

Fax: _____