



## INVITATION TO BID

**Bid #05-17**

### **SINGLE AXLE DUMP TRUCK EQUIPPED FOR WINTER OPERATIONS**

#### **FINANCE DEPARTMENT**

GREGORY N. L'HEUREUX  
Finance Director

KRISTIE BRADBURY  
Deputy Finance Director

COLLEEN C. SELBERG  
Purchasing Agent

Sealed bid for furnishing a new Single Axle Dump Truck to the City of South Portland Public Works Department as specified below, in the attached specifications and proposal, will be received by the City Purchasing Agent, 25 Cottage Road, South Portland, Maine 04106, until 2:00 p.m., Tuesday, August 16, 2016 at which time, they will be publicly opened and read aloud. Proposals received after the above stated day and time will not be considered.

Bids shall be submitted on the attached bid form in sealed envelopes, plainly marked "Bid #05-17 Single Axle Dump Truck" and shall be addressed to the Purchasing Agent at the above address.

Delivery to be made upon receipt of purchase order and shall be F.O.B., Public Works Department, 42 O'Neil Street, South Portland, Maine.

All equipment offered on this bid shall be brand-new and the latest type available. Bidder will state in his bid the name and model number of the equipment he is offering and will include with his bid a catalog or brochure marked to indicate the standard factory equipment of the model on which he is bidding. Bidder must attach a separate sheet to his bid listing any deviation from the minimum specifications shown. If no attachment is provided, it will be assumed that the item being bid meets the minimum specifications.

If the equipment offered by a bidder under the attached specifications meets the specifications except for minor factors or reasonably small amounts in dimensions, and if it shall be determined by the City that these minor variations from the specifications do not prevent the equipment being bid from performing as satisfactorily or from being as good as equipment fully meeting these specifications, then these minor variations from the specifications may be waived by the City, if it deems it to be to its advantage, and the equipment with the waived variations in specifications will be accepted as fully meeting these specifications.

Since a prompt delivery is required, delivery time, as well as price, may be a factor in determining the award of this bid.

The City of South Portland's Ford Fleet Identification Number is QF391.

Price shall include a 14-day plate and State of Maine Certificate of Title or Certificate of Origin, which shall be made out to the City of South Portland, Maine and mailed to the Purchasing Agent, P.O. Box 9422, and South Portland, Me 04116-9422. A copy of the title application is to be delivered with each vehicle. There shall be, within the Greater Portland area, a repair service which shall maintain a stock of spare parts for any make and model of any vehicle that a bidder offers in the proposal.

It is the custom of the City of South Portland to pay its bills within 20 to 30 days following delivery of and receipt of bills for all items covered by the purchase order. In submitting bids under attached specifications, bidders should take into consideration all discounts, both trade and time, allowed in accordance with the above payment policy. All bidders should quote net prices, therefore, exclusive of all Federal Excise Taxes and Sales Taxes.

The City of South Portland reserves the right to waive all informalities in bids, to accept any bid or any portion thereof, or to reject any or all bids should it be deemed in its best interest to do so. Except as otherwise required by law or as specifically provided to the contrary herein, the City shall govern the award of this bid's purchasing ordinance.

Colleen C. Selberg  
Purchasing Agent

City Of South Portland  
PUBLIC WORKS DEPARTMENT

Solicitation of Bids

SINGLE AXLE DUMP TRUCK EQUIPPED  
FOR WINTER OPERATIONS

This specification is intended to describe a heavy-duty dump truck equipped to plow snow and treat roadways. The truck will be regular production model for which published specifications are available. Modifications of the truck to meet operational requirements of this specification shall be limited to the manufacturers published and optional standards.

Bidders shall list and explain in writing any and all deviations from these specifications. Bidders shall provide sufficient detail and proof needed to assist the city in fully evaluating compliance with detailed specifications. Failure to do so may result in rejection of the bid in its entirety.

GENERAL SPECIFICATION

The truck shall be a new manufacturer's current production model and shall conform to all DOT and EPA regulations in effect at the time of delivery. The unit shall be equipped with all standard equipment and components necessary for operation and normally supplied, even if not identified in specifications. The equipment shall have full manufacturer's preparation and be ready for service when delivered.

GROSS VEHICLE WEIGHT

- 37,000 GVWR

DIMENSION

- Wheelbase: 161", CA: 96", Axle to Frame: 63"
- The truck shall be designed and constructed with an overall height with all components in place not to exceed 11 ft. 7 in.

FRAME

- Frame rails heat-treated alloy steel (120,000 PSI Yield); 10.125" x 3.580" x 0.312".
- Frame reinforcement: Outer "C" channel, heat-treated alloy steel (120,000 PSI Yield); 10.813" x 3.892" x 0.312".
- Front frame extension integral; 20" in front of grill, with "C" channel reinforcement.
- Frame painted with rubberized under coating

## ENGINE

- Diesel –300 HP, 950 lb-ft Torque, @ 1000-1600 RPM
- Electro-hydraulic fuel system.
- Engine block heater 120V/1250 Watt; with socket receptacle type mounted below drivers door.
- Provision in oil pan for a dealer installed 120 volt/150 watt oil pan heater.
- Wet type cylinder sleeves
- Engine shutdown, electric key operated
- Extended life coated oil pan with magnetic oil drain plug
- Fan drive automatic on/off type control, with normally closed temperature control, nylon fan.
- Radiator cross flow, series system; cubrass radiator core; with transmission cooler.
- Anti-freeze; Extended life coolant –40f rating.
- Deaeration system with polypropylene tank.
- PTO & PUMP, Engine mounted Parker/VOAC F1-101, 26 GPM @ 1000 RPM

## TRANSMISSION

- Automatic – Allison 3500- RDS-P Wide ratio, 5-speed with Overdrive; with PTO gear and less retarder.
- Remote speed sensor located at rear of transmission.
- Additional speed sensor for ground speed controls mounted on transmission.
- Transmission oil pan equipped with magnet.

## AXLE – FRONT

- I-Beam Type 18,000-lb capacity;
- Suspension, front multi-leaf spring, 18,000-lb capacity with shock absorbers.
- Extra leaf in the right front springs able to carry the weight of the wing without the truck leaning
- Spring pins rubber bushings, maintenance-free.

## AXLE – REAR

- Meritor RS-26-185 single reduction, standard track, 26,000-lb capacity,
- Driver-controlled main locking differential and “R” wheel ends.
- Gear ratio: 6.14.
- Magnetic drain plug.
- Rear spring suspension, single vari-rate, 31,000-lb capacity with 4500-lb capacity multileaf auxiliary.

## TIRES

- Fronts - 11R22.5 Unisteel G159 (Goodyear), load range H, 16 ply.
- Rears - 11RX22.5 Unisteel G328 (Goodyear), load range G, 14 ply.

## WHEELS

- Wheels; front and rear disc, 22.5" painted steel, 10-stud (285.75MM BC) hub piloted, flanged nut, metric mount, 8.25 DC rim with steel hubs.
- Supply a spare wheel for both front and rear tires in this same configuration mounted with a 11R22.5 load range H, 16-ply tire.

## BRAKES

- Dual air brake system for straight trucks.
- Trailer connections four-wheel, with hand control valve and tractor protection valve, for straight truck.
- Air brake ABS full vehicle wheel control system (4-channel).
- Front brakes, S-cam; 16.5" x 5.0", includes 20 sq. in. MGM long stroke brake chambers.
- Dust shields; front and rear.
- Automatic slack adjusters (Haldex) front and rear.
- Rear brakes, S-cam; 16.5" x 7.0", includes TR3030 long stroke brake chambers and heavy-duty spring actuated parking brake.
- Air compressor 13.2 CFM, heated air dryer, with manual chain pull drain.

## STEERING

- Full power with integral hydraulic
- Tilt steering column.

## EXHAUST

- Exhaust system single, horizontal muffler, vertical tailpipe, aluminized steel; includes tail pipe guard; frame mounted right side under cab, outside rail.

## ELECTRICAL

- Master shut off switch install outside the driver's side cab the shuts off all power to the vehicle.
- Electrical system 12-volt, standard equipment.
- Circuit breakers manual-reset (main panel) SAE type III with trip indicators.
- Alternator Brushless type, 12 volt, 140-amp.
- Three (3) 12-volt 925 CCA Battery system maintenance free Exide batteries

- Starter motor 12-volt with thermal over-crank protection
- Battery box steel with fiberglass cover; mounted right side, under cab.
- Electric horn, single.
- Air horn single trumpet, air operated, mounted behind bumper on the right rail.
- Daytime running lights.
- Data link connector in cab for vehicle programming and diagnostics.
- Windshield wiper switch 2-speed integral with turn signal switch with wash and intermittent feature.
- Wiring, chassis color-coded and continuously numbered.
- Auxiliary harness, 3.0' for auxiliary front headlights and turn signals for plow applications.
- Body builder wiring, back of cab at frame, includes sealed connectors for tail/amber, turn/marker, backup/accessory, power/ground and sealed connector for stop/turn.
- Compatible trailer socket connection; mounted at rear of frame, wired for turn signals combined with stop, and electric brakes, compatible with trailers that use combined stop, tail, turn lamps.
- Plow Light Option
- Auxiliary switch accessory control for wiring in roof, with maximum of 20-amp load with switches in instrument panel.
- Switch body circuits, MID for bodybuilder, with 6 switches in instrument panel, one power module with 6 channel, 20 amp. max. per channel and 80-amp max output, switches control the power through multiplex wiring, mounted in battery box rear of cab.
- Motorola M1225 4 channel mobile radio set up with frequencies used by the department with Antennex B132S antenna. Radio will be installed by City's vendor and billed to the successful bidder.
- Napa 6600A strobes in corner posts and mirror mount, directional and stop lights mounted in corner posts and plow wing.

#### FRONT END (CAB)

- Passenger door to have glass panel in lower front for visibility
- Hood – fiberglass construction with three-piece construction and tilt forward capacity with full width access to accomplish routine service with plow hardware in place.
- Hood hatch (2) one each side for servicing.
- Cab area to be of steel construction.
- Gauge cluster to include the following: odometer display, miles, trip miles, engine hours, trip hours, and fault code readout.
- Warning system: low fuel, low oil pressure, high coolant temp. and low battery voltage.
- Gauge cluster gauges: engine oil pressure, water temperature, fuel, tachometer, voltmeter, Air pressure, Air 1 and Air 2.
- Steps; two per door.
- Glass; all windows tinted.
- Clearance/marker lights five, flush mounted.
- Seat, driver {National} air suspension, high back with integral headrest, cloth, isolated, with 2 position front cushion adjustment, and arm rests

- 6 to 17-degree seat back adjustment, air lumbar support, and arm rest on right side.
- Seat, passenger non-suspension, high back with integral headrest, vinyl, with fixed back.
- Seat belt 3-point, lap and shoulder belt type.
- Mirrors two rectangular, 7.09" x 15.75", brackets breakaway type, with 102" wide spacing, integral convex both sides, all heated heads, thermostatically controlled, with clearance lights LED, powered both sides, flat glass only.
- Integral heat and defrost, air conditioning, with fresh air filter.
- Cab sound insulation, dash and engine cover insulators,
- AM/FM Stereo, with USB port
- Map lights; dome light, courtesy lights under instrument panel; sunvisors, map pockets.
- Cab rear suspension; air bag type.
- Two cup holders
- Windshield to have heater for parked wipers

### FUEL TANK

- 70 US gallon capacity aluminum tank, mounted under cab left side.

### PAINT

- Full frame and body undercoating – including cab, chassis, body
- Black Chasis

### DUMP BODY

- Heavy Duty Construction, Brandon FHD or equivalent
- 10' long, 42" sides, 48" air operated tailgate
- 52" Bulkhead,
- Gravel shield to protect cab
- 3 sand doors cut in the tail gate, sand doors are 12" x 21" The gate doors are framed with 2"x2" tubing and a 1 1/8" formed top rail
- 1/4" floor thickness 3/16" side thickness, 180,000 psi high tensile steel construction with 10 gauge cross members 12" on center.
- Aluminum sideboards with inverted "V" on top of sideboard
- Provide pin type plates to secure tailgate
- Fold down ladder, shovel holder
- Painted to match cab, frame painted black (Stainless body will not be painted)

### TARP/LOAD COVER

- Donovan GE or equivalent sized to fit body made to haul asphalt

## PLOW EQUIPMENT

- Front hitch to candy cane style
- Cheek plates to be 5/8" thick and attached on the outside of the frame rails for greater support.
- Front power-reversing plow to be 11' with an overall height of 39". Plow to include the following:
  - Carbide edge backed with a steel edge; installed.
  - Curb shoes, a self-leveling system connected to the plow on points wide enough to maintain a level position when lifted into the air.
  - The front trip on the plow shall use individual compression springs that can be adjusted for resistance to accommodate usage and conditions. The trip springs shall be able to be changed independently.
  - Front post to include 36" cable over pulley with a minimum 4" float in the front slide.
  - Wing to be an 11' with a 10' cutting edge with a 32" nose height and a 38 1/2" discharge height. Wing to be supplied with two edges installed.
  - The front trip shall be of a design that the wing shall be able to come back and directly up to a minimum of 4" upon sufficient contact. The trip shall be adjustable so that the force necessary to release trip can be set to appropriate usage and conditions. The spring should not have to be changed for a minimum of 5 years.
  - Rear post shall be angled upon installation so that the push arms are perpendicular to both the wing and rear post to maximize pushing strength and minimize bending and twisting of knuckles on attachment points at the rear post. Rear post shall include a 36" hydraulic cylinder for shelving.
  - Plow controls are to be double joy stick controls. One joy stick for the plow controls and one for the wing controls.
  - A separate toggle switch for the dump body controls.
  - Wing light installed so driver can see wing

## SNOW & ICE CONTROL

- Swenson 10x 56 stainless steel hopper sander with flip up rear spinner and hand winch
- Dual hydraulic motor drive
- Sander to be controlled with Rexroth CS 440 or newer model ground speed sander control
- Calcium system with hydraulically driven Peristaltic pump and 90 gallon poly tank mounted on left side of truck
- Stainless steel cab shield, front mounted on hopper sander to clear existing cab shield
- Stainless steel ladder mounted on rear of Hopper Sander to reach top of sander
- Light mounted on rear of truck to shine on sander/spreader unit

## HYDRAULIC SYSTEM

- Load sensing hydraulic piston pump mounted with a minimum of 4 bolts. It shall be constant running with 2000 psi pressure until usage. The pump shall be capable of pumping 42 gallons of hydraulic fluid to enable continuous operation of sanding and liquid application while operating plow, wing and body. The pump shall be, plumbed to the rear of vehicle for connection to a slide in sander unit through stainless steel hydraulic piping.
- The hydraulic tank may be frame mounted or pedestal behind the cab depending on the configuration of the plow truck. It will be a minimum of 40-gallon capacity and have a sight gauge, filter, and be equipped with a low oil sensor in the hydraulic tank with an automatic shutdown valve in case of hose failure. There shall be a switch in the cab to activate the pump for a few seconds to enable the plow and wing to be lifted for travel a maximum of fifteen miles for hose replacement.
- Shut off valve (Ball Valve) zip tied in open position
- Hydraulic valve bank vertically mounted with handles for manual operations

## CABLE and HOSE ASSEMBLIES

- All electrical cables and hose assemblies supplied must come complete with attached watertight “quick“ disconnect, heavy-duty industrial and anti-scuff sheathing.
- All hydraulic ends to be primed and painted

## MISCELLANEOUS

- Full parts and repair manuals in hard copies

## SAFETY EQUIPMENT

- Back camera so the driver can see behind the truck by viewing a monitor in the cab.
- 5 lb. ABC Dry Type, Rechargeable, Mounted in Cab
- Triangle Reflector Kit
- Electric Backup Alarm

## WARRANTY

- Warranty Heavy Duty standard base coverage- 12 months/100,000 miles/3250 hours,
- The city would like a quote for an extended warranty that it has the option of exercising

OPTION 1

- Stainless steel dump body

**Any exceptions to this specification should be noted on a separate sheet of paper and accompany the bid pricing sheet.**

**PROPOSAL**

The UNDERSIGNED hereby proposes to furnish a new Single Axle Dump Truck to the South Portland Public Works Department, in accordance with the attached Invitation to Bid, the attached specifications, and at the following price, warranty, and delivery time:

Price \$ \_\_\_\_\_

Option 1 Add/Delete \$ \_\_\_\_\_

Add/Alt Extended Warranty \$ \_\_\_\_\_

Year Make & Model # \_\_\_\_\_

Color \_\_\_\_\_ Odometer Reading \_\_\_\_\_

Warranty \_\_\_\_\_

\_\_\_\_\_

Delivery Time \_\_\_\_\_

Signed: \_\_\_\_\_  
(Corporation, Firm or Company)

By: \_\_\_\_\_  
(Officer, Authorized Individual or Owner)

Title: \_\_\_\_\_

Mailing  
Address: \_\_\_\_\_

\_\_\_\_\_

Zip Code: \_\_\_\_\_ Date: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Note: Bids must bear the handwritten signature of a duly authorized member or employee of the organization making the bid.