

SSF 2000 Gallon Street Flusher Bidding Specifications

1.0 INTENT

It is the intent of this specification to provide for the purchase of one (1) new and unused STEPP STREET FLUSHER to clean streets, watering operations and ice rink maintenance.

The following specification is based upon a STEPP SSF 2000 The Public Works Department has evaluated different styles of water truck equipment and has determined that this product is best suited for the DPW needs in terms of quality and features. This specification shall not be interpreted as restrictive but rather as a measure of quality and performance against which all other water trucks will be compared.

In comparing proposals, comparison will not be confined to price only. The successful bidder will be one whose product is judged as best serving the interests of the DPW when price, product, quality and delivery are considered. The DPW also reserves the right to reject any or all bids or any part thereof, and to waive any minor technicalities. A contract will be awarded to the bidder submitting the lowest responsible bid meeting the requirements.

2.0 EQUIVALENT PRODUCT

Bids will be accepted for consideration on any make or model that is equal or superior to the water truck specified. Decisions of equivalency will be at the sole interpretation of the DPW. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. An original manufacturer's brochure of the proposed product is to be submitted with proposal.

3.0 INTERPRETATIONS

In order to be fair to all bidders, no oral interpretations will be given to any bidder, as to the meaning of the specification documents or any part thereof. Every request for such a consideration shall be made in writing. Based on such inquiry, the DPW may choose to issue an Addendum in accordance with local state laws.

4.0 GENERAL

The specification herein states the minimum requirements of the DPW. All bids must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The DPW will consider as irregular or non-responsive any and all bids that are not prepared and submitted in accordance with the bid document and specification, or any bid lacking sufficient technical literature to enable the DPW to make a reasonable determination of compliance to the specification. It shall be the bidder's responsibility to carefully examine each item of the specification. Failure to offer a completed bid or failure to respond to each section of the technical specification (COMPLY: YES NO) will cause the proposal to be rejected without review as non-responsive. All variances, exceptions and/or deviations shall be fully described in the appropriate section. Deceit in responding to the specification will be cause for rejection.

5.0 SPECIFICATIONS

**COMPLY
YES NO**

TANK:

To have a capacity of 2,000 gallons. Shall be oval in cross section. _____

Constructed of 304L Stainless Steel. Heads to be flanged and reinforced, constructed of 304L Stainless steel. _____

Tank will be equipped with two (2) 10 gauge steel surge plates with a minimum 12" space between bottom of tank and surge plates, and 6" space between top of tank and surge plates. _____

Tank to be electrically welded inside and out. Tank will be tested for leaks in accordance with N.D.E. (Non-Destructive Examination) procedures. _____

Tank to be equipped with a ladder mounted on the curb side of tank. _____

Tank will be equipped with a 20" full opening, lockable manhole with a 2 1/2" overflow/vent pipe, 2 1/2" anti-siphon hose and a hydrant fill. _____

Tank will be equipped with TAPERED sub frame to assure drainage to rear discharge valve. _____

Tank shall include an anti-cavitation sump to allow pump to function without the suction of air at low water levels. _____

Tank to be mounted to truck with composite spacers and slip mounts to allow for movement between tank and truck frame without damaging tank. _____

HYDRAULICS:

To be powered by a load sensing variable displacement Piston Pump, to provide constant water flow regardless of truck speed, driven off of a transmission mounted PTO. _____

The hydraulic pump shall be a Hydra Leduc TXV-92 piston pump with a 5.6 cubic inch displacement. _____

A constant mesh PTO that is mounted to the Allison MD series transmission shall drive the hydraulic pump. The PTO shall run at a 96% of engine speed. _____

Pump will drive a fixed displacement gear motor that is direct coupled to the water pump. The motor shall incorporate a load bearing double Timken bearing block. The motor shall be controlled by a Force America Add-A-Fold cartridge style load sense valve that will incorporate a proportional control valve, and a pressure relief valve. This will allow for variable speed control for the product pump speed. _____

	YES	NO
To include a Thirty gallon reservoir, all necessary hoses, strainers, filters, overload protection, fittings, low level and over temperature sensor shall be included.	_____	_____

PUMP:

Pump shall be Goulds pump, size 4" x 6" split case with 13" impeller, capacity of 750 gallons per minute at 50 PSI at 1780 RPM.	_____	_____
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Pump shall be direct driven with a hydraulic motor	_____	_____
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Pump shall maintain 50 PSI at a truck engine idle.	_____	_____
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Pump shall be able to circulate water while traveling at road speeds.	_____	_____
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All pump and spraying functions shall be controlled from operators control box.	_____	_____
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PUMP MANIFOLD:

The unit shall include a pump manifold. The manifold will include, one fitting and valve for each spraying function and also will include an equipment fill with manual valve and cam lock fitting.	_____	_____
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Manifold to be full circulating and include a heat stick to prevent freezing in cold weather.	_____	_____
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PIPING:

All plumbing shall be done in 2" steel schedule 40 pipe with short hose Transitions to the pump manifold	_____	_____
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All lines shall be designed to be self-draining. No valves required for winterizing.	_____	_____
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Unit shall be equipped with six (6) duckbill style nozzles, rated at 125 GPM ea. The nozzle shall be a 2 piece construction machined from lightweight aluminum.	_____	_____
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Nozzles will be adjustable for horizontal and vertical movement, two (2) to be located in front of vehicle ahead of steering wheels, and two (2) on the side of tank ahead of drive wheel and two (2) mounted on the rear corners of the bumper.	_____	_____
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All piping shall be supported from the frame of the truck.	_____	_____
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Unit shall also include a 6" air operated dump valve.	_____	_____
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FENDERS

Tank shall have aluminum diamond plate fender with mud flaps and anti-sail brackets.

YES NO

PAINT:

All exterior parts to be primed and painted two (2) coats of 2-part Polyurethane paint.

LIGHTS:

The unit shall be equipped with rubber grommet stop, tail turn lights and clearance lights.

WARRANTY:

One (1) year on parts and workmanship, component parts manufacturers warranty prevails. The tank shall have a five year warranty from leakage due to cracking from normal use.

MANUALS:

Two (2) sets of operators manuals will be issued with each unit.

CONTROLS AND INSTRUMENTS:

Unit will have controls mounted inside cab. The controls will be a can buss IMF color display. The display will include a tank level gauge, water pressure, pump speed settings, and will have a manual or automatic pump control. The automatic pump control shall allow the operator to maintain constant water pressure regardless of spray settings. The control box will also include a can buss bank of 5 switches to operate individual water functions and lighting options.

FLOAT GAUGE:

Tank to include a water level gauge in the Color display and will have an external indicator light near the curbside fill that will inform the operator when the tank is nearing and at full level.

HOSE REEL:

Unit shall include an electric rewind hose reel with 100' of 1" hose with adjustable nozzle located in rear heated cabinet.

LOADING HOSE:

Tank to be equipped with 2½"x 25' diameter loading hose and a 2½" diameter side loading valve located on curb side of tank. Cam lock x NSF threads.

OPTIONAL FEATURES

HEATED STAINLESS STEEL CABINET:

Heated stainless steel cabinet engine/plumbing enclosure to prevent pump freezing. Heat provided from chassis engine.

YES NO

TOOL BOX:

Shall include a 36"x24"x18" diamond plate aluminum tool box mounted on the curb side of unit.

WATER CANON:

An Elkhart Sidewinder water monitor shall be added to the unit as optional equipment. It shall include a joystick controller to operate the cannon in the up/down, and the left /right position. The joy stick also controls the spray pattern of the nozzle from a fog spray to a stream. Cannon shall be bumper mounted with crash guard.

WORK LIGHTS:

Will include four (4) Halogen style flood lamps for filling and spraying under low light conditions. Two mounted forward, two mounted rear ward

STROBE LIGHT:

12 Volt powered controlled from operators safety. Mounted on the top Rear of hopper with controller in the operators control panel

Whelen Super LED Light System:

LED light system with 700 series lights to give you high visibility rear lights. Includes rear amber strobe, stop tail, turn, Backup light and 2 mirror mounted strobes

Garden Hose Adapter

Tank outlet with valve that allows attaching a water hose for Watering purposes

Hook Frame Mount

Tank can be mounted to an A-frame style hook for use with a swap-loader truck.

Duckbill Spray Nozzle

Replacement spray nozzle

Sprinkler Cans

Unit will include 2 sprinkler cans to replace duckbill nozzles for sprinkling operations.
