

TOWN OF TRUMBULL
HIGHWAY DEPARTMENT
TECHNICAL SPECIFICATIONS
FOR
SIX WHEEL SINGLE ENGINE BROOM STREET SWEEPER WITH CLEATED
BELT TYPE CONVEYOR

GENERAL INSTRUCTIONS TO BIDDERS

RFP6073 DUE ; July 22 , 2014 @ 2pm

The Town of Trumbull, Connecticut (hereinafter referred to as Town), through the Office of the Purchasing Agent, will accept sealed bids for one Street sweeper as detailed in the attached specifications for the highway department in accordance with the enclosed specifications.

1. PREPARATION OF PROPOSALS

- a) Bids shall be submitted by using the enclosed BID PROPOSAL FORM that accompanies this request. Submit one (1) ORIGINAL and one (1) EXACT COPY. Bidders should submit bids in a clear, concise and legible manner to permit proper evaluation of responsive bids.
- b) Bidders may also submit, under separate cover with their proposal, any samples of reports and documents that are necessary to meet the requirements (deliverables) of this request should a purchase order be awarded

2. BID SUBMISSION

Bids are to be submitted in DUPLICATE and sealed in a sealed envelope and addressed as follows:

Bid 6073 - Due: July 22, 2014 @ 2 pm
Purchasing Agent - Town of Trumbull
5866 Main Street, Trumbull, CT 06611

Be advised that the person signing the formal proposal must be authorized by you organization to contractually bind your firm with regard to prices and related contractual obligations for the delivery period requested. Bidder must bid on equipment as specified

3. BID TIME AND BID FORMS

- a) Bids shall be received at the office of the Purchasing Agent, Town Hall, prior to the advertised hour of opening, at which time all proposals will be publicly opened and read aloud.
- b) A bidder may withdraw a proposal at any time prior to the above scheduled date and time. **Any bid received after the above scheduled date and time shall not be considered or opened.**
- c) All bid documents contained herein must be completed in their entirety; failure to do so may disqualify a bid submittal.

4. TOWN OPTIONS

- a) The Town of Trumbull reserves the right to reject any and all bids and does not bind itself to accept the lowest bid or any proposal. The Town reserves the right to ask for new bids in whole or in part, or to reject any or all bids, or any part thereof, and to waive any requirements, irregularities, technical defects or service therein when it is deemed to be in the best interest of the Town.
- b) If a bid proposal does not meet or better the required specifications, requirements, and scope of work requested on all points that must be outlined in a letter attached

to the bid proposal otherwise it will be presumed that the bid as proposed is in accordance with the required specifications.

- c) The requirements and specifications of this request call for a specific commodity being purchased and do not permit any substitutions.
- d) If your product does not meet or better the required specifications on all points that must be outlined in a letter otherwise it will be presumed that a proposal is in accordance with the required specifications.
- e) In addition to consideration of a favorable bid, the Purchasing Department may give consideration to the most favorable delivery date and past experience.

5. **TAXES**

All purchases made by the Town, and associated with the award of this requirement shall be tax exempt. Any taxes must not be included in bid prices. A Town Tax Exemption Certificate shall be furnished upon request.

6. **INQUIRIES**

- a) All inquiries regarding this request shall be answered up to the close of business on **July 16, 2014**, after which time no additional questions will be accepted. To ensure consistent interpretation of certain items, answers to questions the Town deems to be in the interest of all bidders will be made available in writing or by Fax as appropriate to all bidders. Inquiries of a technical nature may be directed to **Mr. Joe Mitri, Director of highway department (203.452-5140)**, all others may be directed to Robert Chimini, Purchasing Agent (203.452.5042).
- b) The Town reserves the right to communicate with any or all of the bidders to clarify the provisions of Proposals. The Town further reserves the right to request additional information from any bidder at any time after proposals are opened.
- c) It is the sole responsibility of a bidder to verify any addendums that may have been issued relating to this request prior to submission of a proposal. Any notice of addendum shall be published on the Purchasing Department Website www.trumbull-ct.gov . Failure to submit a response that does not address any changes or addendums may result in a disqualification of a proposal submission.

7. **AWARD AND AUTHORITY**

The Town will issue notification of award in the form of a Purchase Order.

8. **PRICING**

- a) All prices quoted are to be firm for a period of one (1) year following bid opening.
- b) Special Consideration will be given to responses with extended firm price dates. The Town is always interested in any and all cost reduction opportunities.

9. **ASSIGNMENT OF RIGHTS, TITLES, AND INTERESTS**

Any assignment or subcontracting by a bidder, vendor, or contractor for work to be performed, or goods and/or services to be provided, in whole or in part, and any other interest in conjunction with Town procurement shall not be permitted without the express written consent of the Town of Trumbull.

10. **HOLD HARMLESS CLAUSE**

Bidder agrees to indemnify, hold harmless and defend the Town from and against any and all liability for loss, damage or expense which the Town may suffer or for which the Town may be held liable by reason of injury, including death, to any person or damage to any property arising out of or in any manner connected with the operations to be performed under an agreement with the Town, whether or not due in whole or in part of any act, omission or negligence of the Town or any of his representatives or employees.

12. **CONFLICT OF INTEREST**
 No purchase shall be made from nor shall services (other than services as an officer, agent, or employee of the Town) be secured from any officer or employee of the Town, or from any partnership or corporation in which such officer or employee is a partner or officer, or holds a substantial interest, unless such relationship and the fact that such purchase is contemplated shall be made known in writing to the agency making such purchase, and notice thereof posted, for at least five (5) days before such purchase be made, in the office of the agency making such purchase and in a public place in the Trumbull Town Hall.
13. **EQUAL ITEMS**
 Equal items must be approved by the Town, and the Town reserves the right to reject any proposal offering equipment and/or materials, which, in its opinion does not meet the standard of quality established by the attached specifications. Any such decision will be considered final and not subject to further recourse.
15. **DELIVERY AND F.O.B.**
 The quoted price must be F.O.B. Trumbull, Connecticut as designated on the purchase order. All prices shall be quoted as **DELIVERED PRICES**. The terms of the sale must be stated.
- The successful bidder shall advise Joe Mitri of the highway department (203-452-5140) as to the delivery date and time to arrange for acceptance and inspection of vehicles by the Town.

Section A - Chassis

		COMPLY	
<u>1.0 CHASSIS (Freightliner M2 – 2015 Model Year)</u>		<u>Yes</u>	<u>No</u>
1.1	For safety, service, parts availability, etc the chassis shall be of a commercially available conventional cab type configuration (Freightliner M2). A PURPOSE BUILT CHASSIS MANUFACTURED BY THE SWEEPER COMPANY WILL NOT BE ACCEPTABLE.	_____	_____
1.2	The wheelbase shall not exceed 136 inches; cab-to-axle shall be 70 in. Overall length not to exceed 268 inches. Outside width in transport mode not to exceed 8'. Overall height not to exceed 9'	_____	_____
1.3	Gross Vehicle Weight Rating (GVWR) shall be not less than 33,000 pounds.	_____	_____
1.4	For safety, certification of Federal Motor Vehicle Safety Standard (FMVSS) compliance must be submitted with the proposal. Failure to comply will result in proposal being rejected as "non-responsive".	_____	_____
1.5	Chassis shall be capable of safely propelling the sweeper, loaded to the maximum GVWR, under all normal sweeping and transport conditions.	_____	_____

- 1.6 Vehicle shall be rated for carrying an 11,000 lbs. load in the hopper at highway speed of 55 MPH and should not be speed restricted by tire limitations. _____
- 1.7 Speed shall be governed at 55 MPH. _____
- 1.8 Manufacturer shall certify that pass-by noise level at 50 feet (per SAE J 1077) while sweeping, does not exceed 79 dB(A). _____
- 1.9 Front axle shall be an I-beam type, 68" track; with a minimum capacity of 10,000 lbs. Front axle shall have leaf spring suspension and shock absorbers as standard equipment to avoid high stress areas and cracking of the chassis. _____
- 1.10 Rear axle shall have a minimum capacity of 23,000 lbs. _____
- 1.11 Rear suspension shall be provided through a twin air spring suspension system having a minimum capacity of 23,000 pounds. _____
- 1.12 Rear axle shall provide a full width heavy duty, 80" track. _____
- 1.13 Two-speed rear axle shall have a 6.67/9.08:1 ratio. An auxiliary transmission for sweeping is not acceptable. _____
- 1.14 Turning radius shall not exceed 19ft 7in curb to curb. Front axle steering cut shall be 50 degrees minimum. _____
- 1.15 Brakes shall be full air dual circuit type with auto slack adjusters, front and rear. Wabco ABS brakes shall be supplied. Hydraulic brakes shall not be acceptable. _____
- 1.16 Air compressor shall be 18.7 CFM. _____
- 1.17 Parking brake shall be spring applied rear wheel drum and shoe. _____
- 1.18 Air shall be equipped with an Bendix AD-9 air dryer _____
- 1.19 Chassis shall include front tow hooks. Access to frame on both sides of machine for jacking purposes shall be available. _____

2.0 CHASSIS ENGINE

COMPLY
Yes No

- 2.1 Diesel engine shall be an electronic inline 6 cylinder, turbocharged, 507 cubic inch displacement. The engine shall supply power for propulsion and sweeper functions. _____
- 2.2 Horsepower rating shall be 260 HP @ 2200 RPM. Torque rating shall be 660 ft-lbs. @ 1300 RPM. _____
- 2.3 Engine shall be supplied with a low oil pressure and high water temperature warning system integrated in the engine electronic system. _____
- 2.4 Engine shall be equipped with a single stage, dual element dry-type air cleaner, spin-on fuel filter, full flow oil filter, and fuel water separator. _____
- 2.5 Radiator fan shall utilize a clutch type drive. Direct drive fans shall not be acceptable. _____
- 2.6 Anti-freeze/water mixture shall be rated at -34 F degrees. _____

- | | | | |
|-----|--|-------|-------|
| 2.7 | Diesel fuel tank shall have a minimum capacity of 50 U.S. gallons. | _____ | _____ |
| 2.8 | Diesel emissions shall be EPA 2010 and have a minimum capacity of 6 U.S. gallons diesel emissions fluid. | _____ | _____ |

3.0 TRANSMISSION

COMPLY
Yes No

- | | | | |
|-----|--|-------|-------|
| 3.1 | Automatic transmission shall have five forward speeds and one reverse. (Allison 3500RDS or equal). | _____ | _____ |
| 3.2 | Transmission shift pattern shall be illuminated for night operation. Shift operation shall be by push button in lieu of shift lever. | _____ | _____ |
| 3.3 | Transmission shall be equipped with a heavy-duty oil cooler and magnetic drain plugs. | _____ | _____ |
| 3.4 | Synthetic Transmission fluid (TES-295 compliant) shall be provided. | _____ | _____ |

4.0 TIRES AND WHEELS

COMPLY
Yes No

- | | | | |
|-----|--|-------|-------|
| 4.1 | Front and rear tires shall be first line quality tubeless radial tires, 11R X 22.5, 14 ply rating. | _____ | _____ |
| 4.2 | Tires shall be mounted on 10 hub piloted steel disc 22.5/8.25 rims. | _____ | _____ |
| 4.3 | Rear axle shall be equipped with dual tires for load capacity and stability. Rear mud flaps shall be supplied. | _____ | _____ |
| 4.4 | All wheels shall be interchangeable to allow for emergency change at the job site. | _____ | _____ |

5.0 CAB

COMPLY
Yes No

- | | | | |
|-----|--|-------|-------|
| 5.1 | For maximum visibility, the forward line of sight (distance from operating position to view of ground) shall be 16 feet maximum. | _____ | _____ |
| 5.2 | Steering shall be full power with dual operator controls. Dual OEM dash mounted instrumentation, including speedometer, odometer, tachometer, hour meter, water temperature, oil pressure, voltmeter, fuel gauge and transmission temperature gauge. | _____ | _____ |

- 5.3 Dual steering shall include right and left steering wheels, brake and throttle pedals, center mounted single windshield wiper control, dual turn signal controls, and tilt adjustment. _____
- 5.4 Console shall have Left / Right primary driver switch which changes controls for the operator station and instrumentation from left to right and back. For safety driver switch can only be activated with the parking brake applied. _____
- 5.5 Dual Bostrom 905 mid back cloth seats with armrests shall be supplied. _____
- 5.6 Each seat shall have a 3-point seat belt with automatic retractors. _____
- 5.7 Sweeper shall include two (2) outside heated and power adjustable west coast type mirrors with molded in 8-inch convex auxiliary mirrors. _____
- 5.8 Cab shall be full width Aluminum cab with one-piece fiberglass tilting hood. _____
- 5.9 Hydraulic functions shall be controlled by a single rocker switch which activates the hydraulic power which is supplied from the "HOT SHIFT" PTO on the transmission. The hydraulic system must be able to be disengaged in case of a hydraulic oil leak, thus allowing transport capability without draining the hydraulic oil tank. Full time live hydraulics or the use of an auxiliary transmission in the drive train will not be acceptable. _____
- 5.10 For safety during night sweeping, rocker switches shall be illuminated and clearly marked for easy identification. All sweeper controls shall be mounted between the two operator stations for easy reach and visibility. _____
- 5.11 Cab shall be supplied with a radio installation package. _____
- 5.12 Dual electric horns and single air horn shall be supplied. _____
- 5.13 Cab interior environment shall be fully conditioned by fresh air heater / ventilator / defroster / air conditioning with a three speed fan. _____
- 5.14 Cab shall have full flow through ventilation. _____
- 5.15 Windshield wipers shall be two speeds with washer. _____
- 5.16 Wipers shall have an intermittent feature. _____
- 5.17 Interior of cab shall have acoustical insulation, automotive type trim, and center console. _____
- 5.18 Dashboard shall be fully faced with soft molded plastic; two cup holders shall be included. _____
- 5.19 Left and right hand side grab handles shall be supplied to aid in operator entry and exit from the cab. _____
- 5.20 Sweeper shall have an automatic electronic back-up alarm. _____
- 5.21 Each operator station shall have an adjustable sun visor. _____
- 5.22 Doors and ignition shall be key locked alike. _____
- 5.23 All glass shall be tinted safety glass. _____

- 5.24 Side windows shall have a defogger. _____
- 5.25 Door windows shall be roll down type. Sliding windows are not acceptable. _____
- 5.26 Manufacturer must certify that cab noise level while operating does not exceed 82 dB(A) (per J919 testing). _____

AM/FM radio with speakers shall be supplied

Left hand fender mounted mirror shall be supplied

12" Convex mirrors i.l.o standard 8" mirrors shall be supplied

6.0 ELECTRICAL

COMPLY
Yes No

- 6.1 Chassis alternator shall not be less than 160 amp. _____
- 6.2 Shall be a 12-volt negative ground system. _____
- 6.3 Dual batteries shall be maintenance free, 12 volt, and 1850 CCA total. _____
- 6.4 For safety, all electrical circuits must be protected by blade type fuses. _____

- 6.5 All lighting shall be DOT approved including LED combination stop and tail lights, backup lights, sealed multiple beam headlights, high beam - low beam switch, adjustable side broom and main broom spotlights, clearance and running lights, front parking and signal lights, four way flashers, dome light, illuminated gauges and instrument panel, illuminated rocker switches, self canceling directional signals, and hazard switch. _____
- 6.7 Warning lights shall indicate glow plug, air brakes, stop and tail light failure, charging system, park brake, engine oil system, hydraulic oil filter restriction and low spray water. _____

7.0 LIGHTING

COMPLY
Yes No

- 7.1 All lighting shall meet DOT safety requirements. _____
- 7.2 Front and rear shall have clearance lights. _____
- 7.3 Left and right sides shall each contain two clearance lights. _____
- 7.4 Front and rear directional lights with emergency flasher shall be provided. _____
- 7.5 LED Work lights for each gutter broom and the rear broom shall be provided. _____
- 7.6 Dash, all console switches and all gauges shall be illuminated. _____
- 7.7 An automatic back-up light and electric alarm shall be activated when transmission is placed into reverse. _____
- 7.8 License plate holder shall be illuminated. _____

7.9 Vehicle shall have two rear side combination light/reflectors. _____

Dual upper amber LED strobe lights mounted in rear doors shall be supplied

Dual lower amber LED strobe lights mounted in rear doors shall be supplied

Dual LED strobe lights mounted in chassis grill shall be supplied

Section B - Sweeper Module

COMPLY
Yes No

1.0 INTENT

It is the intent of this specification to provide for the purchase or lease purchase of one (1) new and unused street sweeper having a six wheel configuration, single engine for propulsion and sweeping, 4.5 cubic yard right side variable high dumping hopper, automatic transmission, dual steering and operator controls, cleated belt type conveyor, left side and right side broom with variable down pressure controlled from cab.

The following specification is based upon an Elgin Sweeper BROOM BEAR (4M) street sweeper mounted on a Freightliner M2 chassis. The Town's Public Works Department has evaluated different types of street sweepers and has determined that this product is best suited for the town's needs in safety, quality, performance, and standardization. This specification is not to be interpreted as restrictive, but rather as a measure of the safety, quality and performance against which all sweepers bid will be compared.

In comparing proposals, consideration will not be confined to price only. Contract will be awarded for the product which best serves the interests of the town when cost, product, safety, quality and delivery are considered. The Town of Trumbull 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.

EXACT MODEL BEING PROPOSED MUST BE A STANDARD UNIT THAT HAS BEEN IN PRODUCTION FOR A MINIMUM OF THREE (3) YEARS. NO EXCEPTIONS

COMPLY
Yes No

2.0 EQUIVALENT PRODUCT

Bids will be accepted for consideration on any make or model that is equal or superior to the sweeper specified. Decisions of equivalency will be at the sole interpretation of the Town of Trumbull's Department of Public Works. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. Original

manufacturer's brochures of the proposed unit are to be submitted with the proposal. All modifications made to the standard production unit described in the manufacturer's brochures must be certified by the manufacturer and submitted with the bid, or the bid will be deemed "non-responsive" and rejected without further review. Bidder must be prepared to demonstrate a unit similar to the one proposed, if requested.

COMPLY
Yes No

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 to the Town Purchasing Agent. Based upon such inquiry, the town may choose to issue an Addendum.

COMPLY
Yes No

4.0 GENERAL

The specification herein states the minimum requirements of the town. All bids must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The Town of Trumbull will consider as "irregular" or "non-responsive" any bid not prepared and submitted in accordance with the bid document and specification, or any bid lacking sufficient technical literature to enable the town 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.

Autolube shall be provided for both chassis and sweeper module

5.0 SIDE BROOMS

COMPLY
Yes No

- 5.1 Brooms shall be driven by a hydraulic motor directly mounted to broom disc plate. They shall be the vertical digger type, trailing arm design, mounted on right and left side.
- 5.2 To hold broom pattern, regardless of up and down motion, arm suspension design shall be the parallelogram type.

- 5.3 Broom rotation speed shall be constant governed by load sensing hydraulic system, regardless of engine RPM or sweeper ground speed. _____
- 5.4 Broom down pressure shall be adjustable by operator from the cab while moving. _____
- 5.5 Broom shall be five (5) plastic segments, filled with 26" long tempered wire. Discs shall be cross-drilled for 5 or 4 segment usage. _____
- 5.6 Broom diameter shall not be less than 44", protruding not less than 13" beyond outside of tire while sweeping. _____
- 5.7 Broom location shall be positioned to provide best sweep path in relation to the main broom. _____
- 5.8 Each broom shall have a spotlight for night operation. _____
- 5.9 Side brooms must be capable of extending from 110" (2794 mm) to 144" (3657 mm) with both side brooms activated. _____

Right and left hand gutter broom tilts with in cab control shall be supplied

6.0 MAIN BROOM

COMPLY
Yes No

- 6.1 Broom shall be direct drive by a hydraulic motor. _____
- 6.2 Broom shall be not less than 34" diameter and not less than 60" long. _____
- 6.3 Broom rotation speed shall be constant, governed by load sensing hydraulic system, regardless of engine RPM or ground speed. _____
- 6.4 Broom shall be full floating with self-aligning bearings. _____
- 6.5 Broom shall be of a disposable type, filled with 26" long polypropylene. _____
- 6.6 Broom side plates shall be equipped with carbide drag shoes. _____
- 6.7 Sweeping path shall be not less than 7-1/2 feet wide with one side broom activated, and not less than 10 feet wide with both side brooms activated. _____
- 6.8 Main broom shall be shielded by a rubber flap. Plastic hoods shall not be acceptable due to cracking. _____
- 6.09 Main broom and conveyor shall have a work light. _____
- 6.10 Broom shall be hydraulically raised/lowered and be capable of movement independent of the conveyor assembly to effectively sweep varying debris. This independent movement also avoids damage to the main broom or the conveyor assembly during sweeping. _____

7.0 CLEATED BELT CONVEYOR

COMPLY
Yes No

- | | | | |
|-----|--|-------|-------|
| 7.1 | Conveyor shall be able to load hopper to 100% of rated useable capacity. | _____ | _____ |
| 7.2 | To maintain Heavy loads of material the conveyor shall be high strength belt type with molded full width cleats to carry material to the hopper. Squeegee type flight system that drag material will not be acceptable | _____ | _____ |
| 7.3 | An audible conveyor stall alarm is to be provided as a warning to the operator. | _____ | _____ |
| 7.4 | Conveyor shall be reversible in direction. The main broom shall stop rotation while conveyor is reversed. | _____ | _____ |
| 7.5 | Conveyor shall be capable of effectively sweeping debris of varying sizes without the need to make any manual adjustments to the conveyor system. An in cab conveyor height adjustment, independent of the main broom shall be supplied. | _____ | _____ |
| 7.6 | To provide proper clearance during variable sweeping conditions, the minimum conveyer height shall be settable, independent of main broom height. | _____ | _____ |
| 7.7 | Conveyor to be a full 54" width. An auger system for feeding the conveyor is not acceptable. | _____ | _____ |

A lower roller cleanout shall be provided

8.0 HOPPER

COMPLY
Yes **No**

- | | | | |
|-----|--|-------|-------|
| 8.1 | For safety, the hopper shall be right side dumping, allowing an operator to observe the dump target and surrounding area at all times from the cab, without the use of mirrors. All dump controls to be cab mounted. | _____ | _____ |
| 8.2 | Volumetric capacity shall be not less than 4.5 cubic yards, useable capacity not less than 3.3 yards. A hopper inspection door shall be supplied. | _____ | _____ |
| 8.3 | Hopper shall dump at varying heights ranging from 38 inches through a height of 10 feet. Dump angle to be 50 degrees minimum. Fixed height dump systems are not allowed. | _____ | _____ |
| 8.4 | Lift mechanism shall be double stage, scissors lift system. Hopper lift cylinders to be 3.5" x 33.5" stroke minimum, hopper dump cylinders to be 3.5" x 19.8" stroke minimum. | _____ | _____ |
| 8.5 | Hopper to offer not less than 11" side shift of load for maximum dumping efficiency and for extra clearance between sweeper and dump truck. Minimum clearance between sweeper and truck shall be 28". | _____ | _____ |
| 8.6 | Hopper load shall be visible at all times from the cab through a glass window and skylight. | _____ | _____ |

- | | | | |
|------|--|-------|-------|
| 8.7 | Maximum time for dump cycle shall not exceed 70 seconds. | _____ | _____ |
| 8.8 | Lift capacity shall be not less than 11,000 lbs. | _____ | _____ |
| 8.9 | Hopper to be constructed of 7 gauge abrasion resistant steel floor and 11 gauge door, top, and sides. | _____ | _____ |
| 8.10 | Units that require use of jack stands and/or outriggers to stabilize chassis during dumping procedure shall not be acceptable. | _____ | _____ |

COMPLY
Yes No

9.0 WATER SYSTEM

- | | | | |
|-----|--|-------|-------|
| 9.1 | Tank capacity shall be not less than 360 U.S. gallons. | _____ | _____ |
| 9.2 | Tank shall be constructed of a non-metallic, non-rusting polyethylene material. Removable manhole cover for tank access shall be supplied. | _____ | _____ |
| 9.3 | Water pump shall be diaphragm type capable of running dry without damage. | _____ | _____ |
| 9.4 | A water level gauge indicator shall be located within the cab. | _____ | _____ |
| 9.5 | Shall be equipped with 10 brass spray nozzles for dust suppression. 3 spray nozzles shall be over each side broom, 3 spray nozzles shall be located at the main broom. | _____ | _____ |
| 9.6 | Water fill hose shall be not less than 15' in length, equipped with 2-1/2" NST hydrant coupler. | _____ | _____ |
| 9.7 | Water to each area, side broom left or right, and broom spray bar shall be cab controlled with adjustable valves, which control water flow. | _____ | _____ |
| 9.8 | An in-line water filter with shut off valve shall be in water system to prevent contaminants from entering the water system | _____ | _____ |
| 9.9 | To prevent the contamination of the water supply, tank shall be equipped with an anti-siphon device. | _____ | _____ |

A lower roller cleanout shall be provided

A front mount spray bar shall be supplied

COMPLY
Yes No

10.0 HYDRAULIC SYSTEM

- | | | | |
|------|---|-------|-------|
| 10.1 | Reservoir shall have a capacity of 23 gallons with outside level and temperature indicator. | _____ | _____ |
| 10.2 | Twin pumps that shall be a variable displacement piston type that are directly driven, by a hot shift PTO, with load sensing to adjust flow based upon hydraulic oil demand in the sweeping gear to maximize efficiency and reduce heat for longevity of all the hydraulic systems. | _____ | _____ |
| 10.3 | To prevent contamination of the reservoir during the dump cycle, the reservoir vent shall be equipped with 40 micron, breather filter. | _____ | _____ |
| 10.4 | To prevent the possibility of contamination and the resulting damage to the | _____ | _____ |

hydraulic system, return lines to have 10 micron filter with cab mounted restriction indicator.

10.5 To minimize environmental damage caused by leaking fittings, all pressure hydraulic fittings must be ORFS type. All solenoids to be located in a single easily accessible location. _____

10.6 For ease and accuracy of testing, all circuits shall have quick-disconnect check ports. _____

COMPLY
Yes No

11.0 PNEUMATIC SYSTEM

11.1 There shall be a PR4 type pressure protector for the chassis air system to protect the chassis air system. _____

11.2 All pneumatic cylinders shall be interchangeable. _____

11.3 All pneumatic cylinders must be rated to 150 PSI and have a separate rod seal and wiper to prevent contamination entering the cylinder. _____

COMPLY
Yes No

12.0 ELECTRICAL SYSTEM

12.1 Sweeper electrical system shall be integral to the chassis electrical system. _____

12.2 Sweeper shall have an electronic back-up alarm for additional warning and safety when chassis is in reverse. _____

12.3 Sweeper lighting shall include rear identification lights, side broom and rear clearance lights. _____

12.4 Sweeper wiring harnesses shall be color-coded and hot stamped with circuit name. _____

12.5 For safety, all electrical circuits must be protected by circuit breakers or fuses. _____

COMPLY
Yes No

13.0 CONTROLS

13.1 All sweeper controls shall be mounted on an adjustable central console located between the left and right operator's position and access. _____

13.2 The controls shall include all sweep, hopper, elevator, and lighting functions and shall all be located on the adjustable operator control console. _____

13.3 The controls for sweep, spray water, and lighting functions shall be conventional rocker switches. _____

COMPLY
Yes No

14.0 SWEEPER INSTRUMENTS

14.1 Sweeper instruments shall include right and left side broom down pressure, hydraulic filter restriction indicator, hydraulic oil temperature, spray water level indicator. _____

COMPLY
Yes No

15.0 PAINT

- 15.1 All visible exterior metallic surfaces shall be coated prior to assembly with polyester powder coat. The paint must be a minimum of 2 mils thick. The uses of acrylic enamels and/or polyurethane's are not acceptable. _____
- 15.2 Color shall be the Town of Trumbull's color of "White". _____
- 15.3 Vehicle shall have an accent color of Grey on the lower portions of the unit. _____

COMPLY
Yes No

16.0 MANUALS

- 16.1 A parts manual shall be provided for both chassis and sweeper module. _____
- 16.2 An operation and maintenance manual for chassis and sweeper shall be provided. _____
- 16.3 An engine manual shall be provided. _____
- 16.4 All manuals shall be originals; photocopies shall not be acceptable. _____

COMPLY
Yes No

17.0 WARRANTY

- 17.1 Manufacturer's warranty shall be not less than five (5) years on entire sweeper module, including all parts and labor. Supply warranty statement. _____

Five (5) year/100K miles Cummins engine warranty (plan#1) including ATD components

Five (5) year/unlimited miles Allison transmission warranty

- 17.2 Bidders submitting literature stating warranties which do not fully comply with warranty requirements of this specification must submit a letter from the manufacturer certifying warranty compliance as an integral part of their proposal. Failure to comply may cause the proposal to be deemed "non-responsive" and rejected without further review. _____

COMPLY
Yes No

18.0 SERVICE AND TRAINING

- 18.1 Vendors shall have a full parts and service facility within a reasonable distance from _____

the Town Garage. State location and distance. _____

18.2 A factory trained qualified technician shall provide complete training to town personnel at the Town Garage. Training shall include safety, operation, maintenance and service. Training will be unlimited at NO CHARGE to town until the towns is fully satisfied with operator and maintenance training. Additional operator training will be supplied at NO CHARGE upon request. _____

19.0 DELIVERY

19.1 Sweeper shall be delivered F.O.B. Town of Trumbull in full operating condition. _____

19.2 Acceptance shall be subject to the inspection and approval of the Town. _____

19.3 Bidder shall state delivery time after receipt of order:

20.0 QUALITY

Sweeper shall be manufactured by a company with a registered quality standard no less than ISO 9001. _____

21.0 EXCEPTIONS AND DEVIATIONS

Bidder shall fully describe every variance, exception and/or deviation on a separate 8-1/2" x 11" sheet of paper. Failure to do so will be just cause for rejection of bid.

22.0 UNITS IN OPERATION

The bidder shall include a list of a minimum of five (5) Connecticut customers with names and contact information who currently operate the exact model being proposed. Failure to do so will be just cause for rejection of bid.

THE UNDERSIGNED AFFIRMS AND DECLARES that this Bid is executed with full knowledge and acceptance of the specifications, requirements, terms and conditions contained herein and with complete understanding and full compliance of system requirements and hereby submits this Bid for the request noted above and certifies that this Bid meets all the specifications and conditions requested herein. Any substitutions to the specifications requested are clearly and completely noted. Any alternate Bids are presented in a similar format to those requested and are attached herein. It is understood that the Town reserves the right to reject any or all Bids or waive any formalities in this request.

Above Price Shall Remain Firm to _____, July 2015

Detailed specifications and literature accompanies this response are attached.

One (1) **STREET SWEEPER** as detailed in the attached specifications

Year Make & Model: _____

TOTAL PRICE \$ _____

(Written TOTAL amount)

Warranty:

The undersigned, as bidder, declares that no person, or persons, other than those named herein, are interested in this Proposal; that this Proposal is made without collusion with any person, firm or corporation; that no person or persons acting in any official capacity for the Town is directly or indirectly interested therein or in any portion of the profit.

Company Name

By (Signature)

Address

Print Name

Address

Title

Date

Telephone/Fax

Email

Website