## Three Wheel High Dump Street Sweeper Specifications – Item #3

<u>General</u> - The intent of this specification is to secure the latest model and design "Three Wheel" high maneuverable, high dump, front or rear-loading mechanical street sweeper capable of removing litter, debris, etc. from street surface. All items appearing in Manufacturer's published literature and specifications as standard are assumed to be included in bidder's proposal.

<u>Cab</u> - All weather steel pressurized fully enclosed with full doors, windshield, (all glass to be shatter proof), two-speed dual electric intermittent windshield wipers, in-cab air conditioning (shall not protrude above, heater, ventilator and defroster with 6 adjustable vents; hydraulic suspension upholstered full foam padded adjustable seat(s) and backrest(s), remote and heated LH and RH West Coast outside rearview mirrors, and inside cab rearview mirror, tilt and telescoping steering wheel(s) and sliding side windows.

A limb guard shall protect both the left and right side of the cab.

<u>Lights and Signals</u> - Two sealed beam headlights with Hi-Lo Beam, one LED spotlight for each gutter broom, LED clearance lights, two LED stop and tail lights, self-canceling directional signals, 4-Way hazard warning flasher, instrument lights, cab dome light, and horn.

A Whelan LED strobe light shall be provided with wiring and mounting provisions for one strobe light above cab level mounted at rear edge of cab.

<u>Instruments – Inside Cab Mounted</u> - Speedometer, odometer, fuel gauge, ammeter, water temperature gauge, oil pressure gauge, key ignition switch and hand throttle. A electric hour meter will be installed. Main broom hour meter, right and left side broom inclination gauges to be included.

<u>Controls</u> - Drive and sweeping controls for all functions shall be in-cab mounted, easily accessible to operator. Sweeper shall have dual driving or single (center) and easy to access mounted sweeping controls to allow operator to be positioned for maximum visibility of sweeping components for safety.

**Electrical System** - Complete 12 volt electrical system with a minimum of 120 amps. alternator and 925 CCA battery.

**Engine** – Diesel (meeting all emission standards) with full flow oil filter and dry type air cleaner. For greater heat dissipation and lower cost of maintenance, engine shall have individually replaceable wet sleeve cylinder liners.

An engine shutdown shall be included which protects against damage when either low oil pressure or high coolant temperature conditions occur. A low hydraulic oil, high temperature automatic engine shutdown system shall also be provided to protect the hydraulic system from failure.

**<u>Brakes</u>** - Service, full power hydraulic and parking brake. Both disk and drum type brake systems acceptable.

<u>Drive Axle</u> – Hydrostatic front or rear wheel drive

**Steering Axle** - Reinforced steel strut with spring wheel guide assembly.

<u>Hydrostatic and Final Drives</u> - Hydrostatic transmission and hydraulic motor on each drive wheel, single foot pedal providing forward/reverse control.

**Steering** - HD full power

Tires and Wheels, (2 Front and 2 Rear) - Wheels - Disc Front and Rear

Tires, Drive - Minimum 11R22.5 Steel Belted Radials, Tires, Rear Steer - Minimum 10R17.5 Steel Belted Radials, Front and Rear Spare Wheels.

To reduce chassis fatigue, sweeper shall be equipped with full rear sprung guide wheel strut utilizing two large heavy duty springs or Chalmers Torque Rod Type concentrically mounted around two smaller springs.

**Hopper** - Minimum capacity 3.5 - cubic yards front/rear loading hopper. Capable of dumping at any height up to 9'6". A hopper safety prop shall be included. Operator shall be able to fully see the hopper from the cab.

<u>Hydraulic System</u> - Complete with all pumps and motors for driving elevator, pickup broom, gutter brooms, and for operation of lift functions and steering.

<u>Pickup Broom(Main Broom)</u> - Full floating hydraulically raised and lowered, speeds variable. The core shall be quick-change steel. The filler shall be synthetic fiber. Main broom suspension shall be hydraulic, allowing the operator to regulate the positive down pressure exerted on the broom from the cab while moving. Self-adjusting pick up broom is acceptable. System shall include side broom position indicator located within the cab if available.

<u>Gutter Brooms (LH and RH)</u> - Free floating hydraulic suspension, hydraulic lift control, automatic retract and variable speeds. Tilting of both side brooms shall be variable from the cab. An electrically controlled linear actuator shall allow the operator to tilt the side broom inward and outward from the cab, while sweeping. The segments shall be disposable and quick replaceable type flat steel wire.

<u>Water System</u>- Complete with a minimum of 220 gallon capacity industrial grade polyethylene, plastic or stainless steel tank, filler hose, pump, spray bars over each gutter broom and pickup broom, flusher system and in-cab controls. Flusher system shall include elevator/belt wash out as well as hopper washout.

<u>Automatic Lubrication System</u> - Complete with individually calibrated injector pumps and lines for each grease point. An electronic controller will allow for adjustment of lubrication cycles. A manual override button will provide for testing.

## Accessories

A conveyor lower roller cleanout shall be provided.

A light protector shall be provided for strobe light.

Dual deluxe air ride suspension seats shall be provided for operator stations.

An AM/FM radio shall be provided.

A shutdown shall be supplied which stops the engine when the hydraulic oil in the reservoir falls below the acceptable level required or the temperature exceeds the maximum allowable.

<u>Safety Systems</u> - Backup alarm when transmission is placed in reverse, I f required due to inherit design of Sweeper, sweep gear shall automatically raise in reverse and then redeploy to last position when operation is redirected to forward. Must comply with FMVSS for school bus forward visibility. A color camera system with 7" LCD screen in cab shall be installed to prevent damage to the unit when backing up.

<u>Paint</u> - Color to be "Highway Yellow" #13432 or manufacturer's standard safety or industrial yellow over a prime coat. (IF YOU HAVE ANY QUESTIONS REGARDING COLOR PLEASE CONTACT THIS OFFICE.)