



## **Tender Advertisement**

**RFT-06-2025**

Corporation of the Municipality of Highlands East

### **Tender for 1 Tandem Axle Truck with Spreader/Dump Body and Snow Plow Equipment**

Tenders on the prescribed Tender Form and **sealed in an envelope clearly marked** as such shall be received by the Road Superintendent at the following address:

Municipality of Highlands East  
2249 Loop Road, Box 295  
Wilberforce, ON K0L 3C0

#### **Deadline for Tender Submission:**

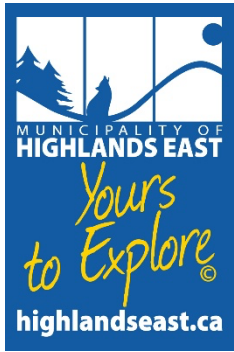
**September 26th, 2025., at 1:00 P.M. (Local Time)**

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Tender Forms will be opened on **Thursday September 26th, 2025 at 1:05 PM**

For further information please contact: Perry Kelly CRS-S Public Works Manager  
Phone: 705-448-1595 or cell 613-334-1300

**The lowest bid or any tender not necessarily accepted.**



## Tender RFT-06-2025

### 1 Tandem Axle Truck with Spreader/Dump Body and Snow Plow Equipment

To: Municipality of Highlands East

For: **1 Tandem Axle Truck with Spreader/Dump Body and Snow Plow Equipment**

By: \_\_\_\_\_  
Name of Firm or Individual Tendering/Request for Proposal

\_\_\_\_\_  
Address of Firm or Individual Tendering/Request for Proposal

\_\_\_\_\_  
Phone Number of Firm or Individual Tendering/Request for Proposal

\_\_\_\_\_  
Name and Position of Person Authorized to Sign

I/We, the undersigned, having carefully examined the Tender/Request for Proposal Specifications, and having read, understood, and accepted the General Conditions, Specifications and Drawings (if applicable) supplied, each and all of which form part of this tender, hereby offer and agree to supply all goods and services required to complete the work in strict accordance with the General Conditions, Specification, Drawings and this Tender/Request for Proposal Form for the sum of:

\_\_\_\_\_ Dollars  
(in words)

\$ \_\_\_\_\_  
(in figures)

**Tender for 1 Tandem Axle Truck with Spreader/Dump Body and Snow Plow Equipment**

Tandem axle truck with spreader/dump body and snow plow equip. \$ \_\_\_\_\_

HST \$ \_\_\_\_\_

TOTAL (must equal lump sum of bid above) \$ \_\_\_\_\_

The completion/delivery date shall be on or before \_\_\_\_\_

## Corporation of the Municipality of Highlands East

### Tender RFT-06-2025

#### Specifications

The following specifications are prepared with the intention of providing a basis for securing competitive bids.

All bids on equipment, not fully meeting the specifications, shall be accompanied by a statement outlining any departures from the specifications and fully describing the equipment offered. Bidders must also complete the column indicated "Specify" after each specification statement.

Only the major details of a unit are listed. It is the supplier's responsibility to deliver a fully equipped unit with compatible components to provide dependable efficient service. Where minimums are given, the unit must meet or exceed the capacity, size or performance specified.

#### General:

- The vehicle shall be supplied with all standard equipment. Plus all other equipment outlined in this specification, if not standard.
- The vehicle shall meet or surpass requirements of the "Canadian: Motor Vehicle Safety Regulations" (S.O.R. 79-487), as amended. All specifications are minimum.
- Unit described shall be new, current year, cab and chassis. That is the Manufacturer's latest design and production. Complete, serviced, ready for work, and includes all standard equipment.
- The bidder shall be a licensed Motor Vehicle dealer in the Province of Ontario.  
**A copy of the dealer's license shall be attached to the Tender.**
- From time to time the successful Bidder may be required to transport the vehicle to and from a Municipality of Highlands East facility for service and repair. As such, **please enclose proof of valid Motor Vehicle Liability Insurance of not less than two million dollars, (\$2,000,000.00.)**

# **Tender for 1 Tandem Axle Truck with Spreader/Dump Body and Snow Plow Equipment**

## **Specification and Confirmation**

### **G.V.W.R. – 30,000 KG (66,000 lbs.), C.A. 3200 MM (126”)**

This specification covers a 66,000 lbs, GVWR diesel truck, tandem axle, intended for installation of snow plow and dump body/material spreader body.

Requisition should state alternate C.A. dimension for frame if required for body installation.

Following are the approved makes and models, which comply with this specification. Other makes and models, which meet or exceed this specification, must have approval, prior to tendering, of the Municipality of Highlands East Public Works Manager

<u>Make</u>	<u>Model</u>
Mack	Granite
International	HV613 6x4
Volvo	VHD64B
Peterbilt	378
Freightliner	FLD 11264 ST
Western Star	4842
Kenworth	T-450

Notwithstanding the above makes, models and approved engines, the make and model and engine tendered is to comply with the following specifications. Where specific components are specified, alternative components may be considered if, in the opinion of the Municipality of Highlands East, it is considered to be suitable for the intended application and generally conform to performance requirements however they must be approved by the Municipality of Highlands Public Works Manager, a minimum of five calendar days prior to tender closing.

## Tandem Axle Truck – Specifications

<b>1.</b>	<b>Make And Model:</b>			
	Specify make and model of unit being tendered	Specify:  Model: _____  Make: _____		
<b>2.</b>	<b>CMVSA:</b>			
	Vehicles shall meet or surpass the mandatory requirements of the Canada Motor Vehicle Safety Act and its Regulations in effect on the date of manufacture and the vehicle must bear the National Safety Mark.	Yes:	No:	Specify:
<b>3.</b>	<b>Gross Weight Ratings:</b>			
	G.V.W.R. – 30,000 kg (66,000 lbs) minimum	Specify:		
	G.A.W.R. – 9,090 kg. (20,000 lbs) minimum	Specify:		
	G.A.W.R. – 20,909 kg (46,000 lbs) minimum	Specify:		
	The allowable G.V.W.R. as supplied shall be shown on a metal or mylar tag.	Yes:	No:	Specify:
	Total chassis weight	Yes:	No:	Specify:
	Vehicle width shall be 2590 mm (102")	Yes:	No:	Specify:
<b>4.</b>	<b>Axles:</b>			
	Power assisted steering	Yes:	No:	Specify:
	Meritor FL944, 20,000 lb. Capacity or equivalent with front shocks.	Yes:	No:	Specify:
	Front axle shall have oil lubricated wheel bearings and shall be synthetic. Grease lubricated not acceptable.	Yes:	No:	Specify Oil Type:
	Front axle wheel-hub cover shall be Stemco series or equivalent.	Yes:	No:	Specify:

	Set BACK Front Axle with max turning radius of 34 feet	Yes:	No:	Specify:
	Roller Bushings for rear shackles of front axle	Yes:	No:	Specify:
	Rear tandem axle – 20,900 kg (46,000 lbs) capacity.	Yes:	No:	Specify:
	Shall be equipped with a driver-controlled inter-axle and individual to lock one differential or both if required.	Yes:	No:	Specify:
	C.A. shall be 3,200 mm (132")	Yes:	No:	Specify:
	Rear tandem axle shall be single speed with 1,524mm (60") spread.	Yes:	No:	Specify:
	The rear differentials shall be supplied with 100% synthetic lubricating oil.	Yes:	No:	Specify:
	Rear axle shall be a Rockwell-Meritor, Model #RT-46-164	Specify: Model: _____ Make: _____		
	Road speed in top gear at governed r.p.m. shall be 100-105 km/h (62-66 mph)	Specify: Geared Top Speed		
5.	<b>Brakes</b>			
	Brake control system shall be a 4 channel Anti-lock braking system.	Yes:	No:	Specify: Manufacturer
	Service brakes – full air brakes, "S" cam drum type, Q+ design	Yes:	No:	Specify:
	Brake drums shall be outboard mounted	Yes:	No:	Specify:
	Front brakes size – 16.5 X 6 minimum	Yes:	No:	Specify:
	Cast iron front brake drum, outboard mounted.	Yes:	No:	Specify:
	Rear brakes size – 16.5 7 minimum	Yes:	No:	Specify:
	Trailer brake connections shall be mounted at the end of the chassis frame	Yes:	No:	Specify:
	Electrical receptacle shall be mounted at the end of chassis frame for trailer wiring.	Yes:	No:	Specify:

	Full pressure trailer brake hand control shall be installed with tractor protection valve.	Yes:	No:	Specify:
	Cast iron rear brake drums, outboard mounted.	Yes:	No:	Specify:
	Dust shields front and rear	Yes:	No:	Specify:
	Low air pressure indicator	Yes:	No:	Specify:
	Berg pull-cord drain valves on all tanks	Yes:	No:	Specify:
	Air dryer – Merritor Wabco System Saver 1200 dryer with heater.	Yes:	No:	Specify:
	Air Compressor – 15.9 cfm minimum	Yes:	No:	Specify:
	Asbestos-free brake lining	Yes:	No:	Specify:
	Automatic slack adjusters – Eaton Haldex	Yes:	No:	Specify:
<b>6.</b>	<b>Frame:</b>			
	Straight through constant height frame rails	Yes:	No:	Specify:
	Intermediate cross-member shall be made of steel.	Yes:	No:	Specify:
	Forward, rear suspension material shall be made of steel	Yes:	No:	Specify:
	Steel, one (1) piece bumper to be supplied.	Yes:	No:	Specify:
	8" front frame extension if required for Body Builder Mounting of equipment	Yes:	No:	Specify:
	Section modulus shall be 30.0 in (cubed) minimum	Yes:	No:	Specify:
	Frame yield strength shall be 120,000-psi minimum	Yes:	No:	Specify:
	Specify Frame Dimensions (Depth x Width x Thickness)	Yes:	No:	Specify:
	Specify dimensions of reinforcement if equipped	Yes:	No:	Specify:
	The after frame (AF) dimension shall be a minimum of 66"	Yes:	No:	Specify:
	Mounting of snow plow cheek plates shall be possible	Yes:	No:	Specify:
	Provision shall be made to prevent diamond shaping of the frame. The frame shall be bridged, or a cross-member shall be supplied within ten inches of the rear of the cab in order to transfer snow plow wing push to each frame rail. This cross-	Yes:	No:	Specify:



	member shall have gussets fore and aft, and shall conform generally to attached drawings "A-7-491" and "A-7-492".			
<b>7.</b>	<b>Suspension:</b>			
	Multi-leaf suspension with R.H. Spring Stiffer and Timbren Rubber Block to assist suspension to carry snow plow wing.	Yes:	No:	Specify:
	Rear suspension shall be 46K HENDRICKSON HMX-460-60 spacing with shocks.	Yes:	No:	Specify:
<b>8.</b>	<b>Wheels &amp; Tires</b>			
	Dual rear wheels	Yes:	No:	Specify:
	Steel drive axle hubs front/rear	Yes:	No:	Specify:
	Two-(2) front, first line steel belted radial tubeless type tires. 425/65R22.5 PILOT XZY3 MICHELIN 468 Rev	Specify Size: _____ Load Range: _____		
	Wheels Front Disc: Painted Steel 10 stud (285.75MM BC) Hub Piloted, 5 Hand Holes, Flange Nut, Metric Mount, 12.5 DC Rims with Steel Hubs			
	Eight- (8) first line steel belted radial tubeless type tires 11R22.5, load range "H" MICHELIN XDS2	Specify Size: _____ Load Range: _____		
	Wheels Rear Dual Disc; 22.5" Painted Steel, 5 Hand Holes, 10-Stud (285.75 MM) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims, With 0.472" Thick increased capacity disc and steel hubs.			
<b>9.</b>	<b>Engine:</b>			
	Engine controlled, Diesel, water cooled, in-line, four (4) stroke, six (6) cylinder, sleeved engine, governed for vocational use.	Specify: Model: _____ Make: _____		
	Engine displacement 13L minimum	Specify:		
	Engine Net Power 400 HP minimum within governed R.P.M. range – (SAE J 1349)	Specify:		

	Minimum net torque shall be 1450-ft lb.	Specify:		
	The STARTER MOTOR shall be a Delco Remy, 12 Volt, 42MT starter	Yes:	No:	Specify: Starter Manufacturer Type:
	Exhaust piping shall be of stainless steel construction where possible, aluminized being the alternative, but all flex pipe must be stainless. Exhaust shall include horizontal muffler, vertical stack and turn back tail pipe.	Yes:	No:	Specify:
	Shall have an engine brake installed (COMPRESSION OR EXHAUST TYPE) capable of 350 horsepower braking capability.	Yes:	No:	Specify: Type: _____  Horsepower _____
	Engine oil pan shall be protected from corrosion by a rust proof epoxy coating or be aluminum die cast.	Yes:	No:	Specify:
10.	<b>Transmission:</b>			
	Eaton Fuller FT-14210B 10 speed	Yes:	No:	Specify: Tran. Model #
	Transmission lubricant shall be synthetic with transmission oil cooler and pump.	Yes:	No:	Specify: Lube Type: _____  Quantity In (Litres) _____
	Driveline shall be calculated to torque requirements.	Yes:	No:	Specify: Driveline Series
	Axle Ratio 3.73	Yes:	No:	Specify: Ratio:
11.	<b>Clutch:</b>			
	Clutch shall be Eaton Fuller 15.5" two-plate dampened ceram-metallic easy pedal.	Yes:	No:	Specify: Clutch Model
	Clutch housing shall be aluminum in construction	Yes:	No:	Specify:
	Clutch shall have an extended lube line (for grease able release bearing)	Yes:	No:	Specify:
12.	<b>Engine Equipment:</b>			
	Key on, Key off engine control	Yes:	No:	Specify:
	Alternator shall be a Delco Remy 12 Volt 135 amp, 33 SI Heavy Duty Alternator or equivalent.	Yes:	No:	Specify: Model: _____ Voltage: _____ Amperage Output: _____

	The alternator capacity at engine idle shall be 50 amperes, minimum	Yes:	No:	Specify: Voltage: _____ Amp Output: _____
	Three (3) maintenance free, 12 Volt 1950 CCA batteries minimum.	Yes:	No:	Specify: Model: _____ Manufacturer: _____ Cca: _____
	If the batteries are mounted behind the cab, they shall be on the right-hand side. Batteries shall be easily accessible for service.	Yes:	No:	Specify: Location: _____
	An automatic, temperature controlled on/off fan clutch, two speed.	Yes:	No:	Specify: Fan Manufacturer _____
	High temperature and low oil pressure engine protection light and audible warning device shall be installed. (AUTOMATIC ENGINE SHUT DOWN NOT ACCEPTABLE)	Yes:	No:	Specify:
	Air Cleaner – dry type, Dual element	Yes:	No:	Specify:
	Air cleaner shall have provision for switching between outside air intake and under-hood air intake or have a similar means to avoid impacting of snow in the air induction system under severe conditions.	Yes:	No:	Specify:
	Graduated Air Restriction Indicator on Air Filter with graphic display in dash.	Yes:	No:	Specify:
	Oil filter – full flow type	Yes:	No:	Specify: Filter# _____
	Shall have Petroleum based engine lubricant installed	Yes:	No:	Specify: Grade: _____ Quantity: _____ Manufacturer: _____
	A heavy-duty fuel water separator with heater and sight glass shall be supplied wired to same receptacle as engine block heater.	Yes:	No:	Specify:  Element # _____
	Engine block heater shall be 120 Volts, 1500 watts minimum; receptacle mounted left side	Yes:	No:	Specify:  Heater Output: _____

	under driver's door and must have a covering flap.			
	Engine anti-freeze protection to – 40 degree's Celsius and shall be (long-life) type manufactured by Fleetguard preferred.	Yes:	No:	Specify: Protection Level: _____ Coolant Manufacturer: _____
	Corrosion resistor (spin on water filter) for engine coolant.	Yes:	No:	Specify: Filter #: _____
	Engine hood shall be forward tilting type, with adequate hatches to provide easy engine access. Shall have integral fenders with a splash and spray control system with some form of fender liner.	Yes:	No:	Specify:  Hatch Locations: _____
	The radiator shall be mounted high enough to allow the installation of a front mounted pump and drive shaft. If this is not possible, then an alternative engine power take off must be provided.	Yes:	No:	Specify: Power Take Off Location: _____
	Crankshaft shall be provided with an adapter for PTO drives.	Yes:	No:	Specify:
	The radiator shall be supplied with gravel (Bug Screen) guard to cover the front radiator opening.	Yes:	No:	Specify: Covering: _____
	Silicone radiator and heater hoses.	Yes:	No:	Specify: Hose Type: _____
13.	<b>Cab:</b>			
	Conventional Cab	Yes:	No:	Specify:
	Air Suspension	Yes:	No:	Specify:
	Seats – Driver, shall be a NATIONAL air suspension high back. Best Available	Yes:	No:	Specify:
	Seats – Passenger, shall be a NATIONAL stationary tool box high back.	Yes:	No:	Specify:
	Seat Upholstery shall be cloth	Yes:	No:	Specify:
	Inboard drivers seat armrest	Yes:	No:	Specify:
	Shall have two (2) 3 point seat belts with retractors.	Yes:	No:	Specify:

	Sun visors – dual	Yes:	No:	Specify:
	Front, overhead driver's storage	Yes:	No:	Specify:
	Stationary front grille	Yes:	No:	Specify:
	Steering wheel shall be 18" and shall have a tilt and telescoping column for driver comfort.	Yes:	No:	Specify:
	8", right and left, fender mounted convex mirrors.	Yes:	No:	Specify:
	Convex wide-angle mirror on drivers and passenger sides.	Yes:	No:	Specify:
	Dow view mirror over passenger side mirror	Yes:	No:	Specify:
	Windshield wipers – Dual, speed controlled and forced to lowest intermittent speed when PKG break is set. Electric washer pump	Yes:	No:	Specify:
	Integral Air Conditioning/Heater with manual controls.	Yes:	No:	Specify:
	Tachometer	Yes:	No:	Specify:
	Hour-meter	Yes:	No:	Specify:
	Rains gutters and drip moldings	Yes:	No:	Specify:
	Power point – (Cigar Lighter)	Yes:	No:	Specify:
	Floor covering shall be rubber/vinyl	Yes:	No:	Specify:
	Mirrors shall be heated, power axis mirrors mounted on both sides minimum. Bright finish with "LED Lights".	Yes:	No:	Specify:
	Grab bars on each side to assist entry and exit	Yes:	No:	Specify:
	Lower and intermediate footsteps, both sides	Yes:	No:	Specify:
	Air horn, with snow shield if not mounted under the hood	Yes:	No:	Specify: Location: _____
	Factory installed manufactures standard AM/FM radio and CD player with speakers mounted in dashboard and doors.	Yes:	No:	Specify:
	Manual or electronic hand throttle control.	Yes:	No:	Specify:
	Electrical panel should be equipped with auto reset breakers	Yes:	No:	Specify:

	Power operated driver and passenger side windows with a switch(s) accessible by the driver and passenger.	Yes:	No:	Specify:
	Power door locks shall be supplied.	Yes:	No:	Specify:
	Heated windshield shall be supplied	Yes:	No:	Specify:
	2-Way radio wiring shall be included with 20-amp fuse protection	Yes:	No:	Specify:
	The fuse box shall incorporate circuit breakers	Yes:	No:	Specify:
	The turn signal flasher shall be electronic, heavy-duty.	Yes:	No:	Specify: Type: _____
	Body Builder Wiring inside the cab to include sealed connectors for tail/amber, turn, marker, backup, accessory, power/ground, stop/turn.	Yes:	No:	Specify:
	Body Builder Circuits mounted inside the cab, with 6 switches in the instrument panel. One power module with 6 channel, 20 amp max. per channel and 80 amp max. out put, switches control the power module through multiplex wiring	Yes:	No:	Specify:
	Auxiliary Harness, 3 feet long for auxiliary front head lights and turn signals for front plow applications.	Yes:	No:	
	5 Pound (ABC DRY TYPE), rechargeable fire extinguisher mounted in cab	Yes:	No:	Specify:
	Parking Brake Alarm. Horn to sound when ignition is off and brake is not set.	Yes:	No:	
	Installed Safety Equipment shall include a Triangle Reflector Kit.	Yes:	No:	Specify:
	Pre-trip inspection feature that cycles all exterior lights.	Yes:	No:	Specify:
	Self-cancelling turn signal switch	Yes:	No:	Specify:
14	<b>Fuel Tank:</b>			
	Single, 80 gallon, left hand mounted, 26" diameter unpainted aluminum tank with unpainted stainless steel tank straps	Yes:	No:	Specify: Tank Style: _____  Capacity: _____

	Shall have a non-locking type fuel cap.	Yes:	No:	Specify:
	Nylon type fuel lines with quick disconnect fittings installed	Yes:	No:	Specify:
	Fuel gauge	Yes:	No:	Specify:
15.	<b>Lights:</b>			
	Two front fender mounted, double faced, directional lights, 100-mm (4") diameter amber.	Yes:	No:	Specify:
	Stop Lights shall be LED sealed unit.	Yes:	No:	Specify:
	Five cab identification lights, LED type mounted in overhead fibreglass Sun-visor.	Yes:	No:	Specify:
	Four-way flasher.	Yes:	No:	Specify:
	Back up lights.	Yes:	No:	Specify:
	Halogen head lights	Yes:	No:	Specify:
	Back up Alarm 102 d.b.a. minimum	Yes:	No:	Specify:
16.	<b>Paint:</b>			
	Frame: Dupont Black (P3036)	Yes:	No:	Specify: Fan Manufacturer _____
	Cab: Manufactures Yellow	Yes:	No:	Specify: Fan Manufacturer _____
	All Plow/Wing and Harness: Dupont Black (P3036)	Yes:	No:	Specify: Fan Manufacturer _____
	Dump Body: Yellow to match cab	Yes:	No:	Specify: Fan Manufacturer _____
17.	<b>Warranty:</b>			
	The truck shall be covered by the standard manufacturer's warranty a description of which shall be included with the tender documents.	Yes:	No:	Specify:
18.	<b>Additional:</b>			
	Dealer markings or transfer are not to be applied to this vehicle.	Yes:	No:	Specify:
	Vehicle shall be supplied with a valid Periodic Mandatory	Yes:	No:	Specify:

	Commercial Vehicle Inspection (PMCVI) sticker.			
19.	<b>Automatic LUBECORE Lubrication System</b>			
	Automatic LUBECORE Lubrication System	Yes:	No:	Specify: Manufacturer: _____ Model: _____
	Owner/Operator's manual, 1 spare manual provided.	Yes:	No:	Specify:
	One (1) complete service manual covering all aspects of the delivered equipment	Yes:	No:	Specify:
	One (1) complete parts manual covering all aspects of the delivered equipment.			
20.	<b>Extended Warranty</b>			
	7 year, 240,000 kms on engine, including engine electronics, turbo, water pump and injectors warranty	Yes:	No:	Specify:
	5 year towing warranty	Yes:	No:	Specify:
	7 year, 240,000 kms after treatment system coverage	Yes:	No:	Specify:

**This truck is to be supplied with Viking Cives spreader/dump body and snow plow equipment with the attached specifications.**



## **Chassis Requirements and Recommendation for Equipment Installation For** **Chassis Supplier**

- 1) Front axle, tandem axle chassis 20,000 lbs
- 2) Mount snow plow harness; frame extensions may be required on some models. Chassis must be suitable for installation of front.
- 3) Front mount pump installations require chassis provisions, including crankshaft adapter and clearance for drive shaft.
- 4) Transmission mount pump installations require automatic transmission with P/T.O. opening and sufficient physical space to accommodate selected pump and PTO.
- 5) Horizontal muffler with vertical exhaust stock routed to avoid interference with wing harness installation.
- 6) Fuel tank protrusion behind cab must avoid interference with sander spinner and wing harness if applicable.
- 7) Frame section modulus and yield strength must be sufficient for equipment selected.
- 8) Wing installations require a cross member complying with MTO specifications or an equivalent O.E.M. cross member.
- 9) Wing installations requires a front right side rubber or air helper spring.
- 10) Recommended batteries box location under cab, if other must avoid interference with sander spinner and wing harness.
- 11) Air dryer, air tanks etc, must be located in a position so as to avoid interference with sander spinner and or wing harness.
- 12) Stationary grill recommended with power tilt front harness.
- 13) Butterfly hood optional with power tilt front harness, recommended with standard fixed harness.
- 14) Interior cab space and seat configuration must provide sufficient space for pedestal mounted controls and additional selected options.
- 15) If required air glad hands can be located on pintle plate only if air supply is provided to rear of chassis.
- 16) Cab to axle dimension must be suitable for equipment specified, consult to insure.
- 17) Air powered options require chassis air supply.
- 18) Other requirements and recommendations may be applicable to equipment specified; a review of specifications with a qualified factory representative prior to tendering or placing of order is suggested.

**All Season Combination**  
**Dump Body / Spreader**

**General**

These specifications describe an All Season Combination Dump Body and Sand/Salt Spreader. The dump box shall remain stationary on the chassis frame while spreading. Rear discharge shall be front hoist tilt action as per-conventional dump bodies. The unit will be oval shaped and **smooth sided** to permit gravity flow unloading. **Brake-formed side are not** acceptable.

The main conveyor will be centred and recessed along the length of the box. The cross conveyor will be chassis frame mounted with spreader discharge on the front, left side (driver's) of dump box.

Viking Model Proline VCL1415HWII or equivalent approved by the **Municipality of**

**Highlands East** prior to the closing of this tender.

**Yes: \_\_ No: \_\_**

**Specification**

Body shall be oval shaped, permitting materials to unload by gravity flow into spreading position.

**Yes: \_\_ No: \_\_**

Water level capacity will be 14 cu.yd. minimum.

**Yes: \_\_ No: \_\_**

Water level capacity with 10" sideboards will be 17 cu.yd. minimum.

**Yes: \_\_ No: \_\_**

Outside length 15' minimum.

**Yes: \_\_ No: \_\_**

Inside length 14' minimum.

**Yes: \_\_ No: \_\_**

Overall width 8' maximum.

**Yes: \_\_ No: \_\_**

Height of sides @ 53".

**Yes: \_\_ No: \_\_**

Height of tailgate @ 62".

**Yes: \_\_ No: \_\_**

Height of front panel @ 60".

**Yes: \_\_ No: \_\_**

Top rail of body will be 6" x 4" x 3/8" rectangular tubing.+/-

**Yes: \_\_ No: \_\_**

All body welds will be 100% continuous inside and outside.

**Yes: \_\_ No: \_\_**

Body floor, sides, front panel and tailgate will be constructed of 3/16"

**"Hardox 450" hi-tensile** corrosion resistant steel.

**Yes: \_\_ No: \_\_**

Dump box access ladder shall be 16" wide and recessed to be flush with dump body rail and fender, located on drivers side at front of box, sloping inward from bottom to top.

**Yes: \_\_ No: \_\_**

## Hoist

Hoist shall be a front mounted, three (3) stage telescopic with 5.5" bore.

Yes: \_\_ No: \_\_

Hoist class shall be 80/30 ton.

Yes: \_\_ No: \_\_

Cylinder stroke shall be 330 cm (130") minimum.

Yes: \_\_ No: \_\_

Dump box tipping angle shall be 50 degrees.

Yes: \_\_ No: \_\_

Hinge Dia. Shall be 2.5".

Yes: \_\_ No: \_\_

Hoist control valve shall be air operated.

Yes: \_\_ No: \_\_

## Tailgate

Tailgate height shall be 62".

Yes: \_\_ No: \_\_

Construction shall be of 3/16" "**Hardox 450**" **hi-tensile steel** with 3/16" formed cross bracing with NO inspection door in the tailgate

Yes: \_\_ No: \_\_

Latch mechanism for the tailgate shall be air trip and latch using two air pot boosters.

Yes: \_\_ No: \_\_

Spreader chains and brackets shall be supplied on tailgate and rear post.

Chains shall be grade 70 coil proof 5/16" minimum.

Yes: \_\_ No: \_\_

## Conveyor

The main conveyor shall be recessed along the length of dump box floor.

Yes: \_\_ No: \_\_

The conveyor chain shall be a minimum of 30,000 lbs., tensile strength self-cleaning pintle chain with 1/4" x 1 1/4" crosses welded to every 4<sup>th</sup> link (approx. 9").

Yes: \_\_ No: \_\_

The main conveyor shall be hydraulic direct drive providing a minimum of 38,000 lbs., torque capacity or equivalent.

Yes: \_\_ No: \_\_

The flow control gate between main and cross conveyor shall be screw adjustable by hand crank from drivers side of dump body.

Yes: \_\_ No: \_\_

The cross conveyor shall be hydraulic direct drive.

Yes: \_\_ No: \_\_

The cross conveyor chain shall be a pintle chain with 3/16" x 1" crossers every 4" with a minimum tensile strength of 17,000 lbs. **Yes: \_\_ No: \_\_**

A hi-tensile steel conveyor cover shall be installed. **Yes: \_\_ No: \_\_**

A poly lined hinged **salt extension chute** shall be installed. **Yes: \_\_ No: \_\_**

### **Spinner**

A polyurethane spinner shall be installed on the left hand side (Driver side) to spread ahead of wheels. **Yes: \_\_ No: \_\_**

Spinner disc will be hydraulic direct drive and to include a clean - off \ Anti coning device. **Yes: \_\_ No: \_\_**

Spinner height shall be adjusted to accommodate various chassis heights and capable of a discharge rate from 199 lbs./lane mile to 2,500lbs./lanemile. **Yes: \_\_ No: \_\_**

### **Sander Controls**

Spreader controls shall be Spread Smart Rx 7" with CPS 3 section spreader block with PW port plugged. **Yes: \_\_ No: \_\_**

An MP Filtri high pressure filter with 10 micron absolute filter shall be supplied **Yes: \_\_ No: \_\_**

### **Fenders and Flaps**

Mud flaps shall be provided fore and aft of rear wheels frame mounted via full width steel flat bar. **Yes: \_\_ No: \_\_**

Red/White 2" reflective tape to be installed along body fenders and across bottom of tailgate. **Yes: \_\_ No: \_\_**

### **Paint**

The dump body shall be shot blasted and epoxy primed with 3 mils of Dupont DTM primer. **Yes: \_\_ No: \_\_**

Finish paint shall be Dupont Imron "5000" polyurethane enamel and colour matched Yellow with the truck cab. **Yes: \_\_ No: \_\_**

Specify Paint Manufacturer: \_\_\_\_\_.

Specify Paint Type: \_\_\_\_\_.

Finish Paint to be "**Baked On**" and colour matched to truck cab. **Yes: \_\_ No: \_\_**

## Load Cover

An air tarp shall be supplied with fabricated tarp arms dimensions of 1 ½" x 2 ½" steel tubing, 1/8" mesh tarp. Powered by twin air cylinders operated from inside the cab.

Yes: \_\_ No: \_\_

## Lights and Wiring

Two Star 200A Strobe lights with blue & amber lens, pedestal mounted behind the cab, shall be installed providing 360 degree visibility. Separate control switches to be mounted inside the cab.

Yes: \_\_ No: \_\_

All box lights to be light emitting diode (LED).

Yes: \_\_ No: \_\_

Grote "Ultra Blue Seal" wiring harness for body lights & electrical shall be supplied (no substitutes).

Yes: \_\_ No: \_\_

Auxiliary lighting will plug directly into OEM supplied connections.

**Cutting, splicing, soldering or shrink tubing of connections is not acceptable.**

YES: \_\_ NO: \_\_

Box lighting kit to include stop lights, tail lights, turn signals, emergency flashers and back-up lights, and shall be mounted on rear side posts.

Yes: \_\_ No: \_\_

Grote blue and amber **LED** strobe lights to be high mounted in upper rear corner posts for maximum visibility.

Yes: \_\_ No: \_\_

Spinner light shall be supplied.

Yes: \_\_ No: \_\_

## Hydraulics

The body operation shall be powered by the existing hydraulics of the snow plow truck harness.

Yes: \_\_ No: \_\_

All fittings, valves hoses and drive shaft shall be supplied and installed.

All hoses shall be equipped with swivels on both ends.

Yes: \_\_ No: \_\_

The hydraulic reservoir shall be of sufficient capacity to supply necessary oil supply. Reservoir must not interfere with the box installation.

Yes: \_\_ No: \_\_

A sight gauge to allow easy checking of the hydraulic oil level in the reservoir shall be supplied.

Yes: \_\_ No: \_\_

Prototype units will not be acceptable. The bidder must be able to demonstrate a solid history of use of the combination U-body/spreader offered in this tender by Ontario

Municipalities, for a minimum period of one year, and references must be supplied as specified below. **Yes: \_\_ No: \_\_**

### **Pintle Hook**

A Holland Model PH210 pintle hook rigid mount with 2 " tow eyes and MTGW of 90,000 lbs. to be installed at a height of 27". **Yes: \_\_ No: \_\_**

A pintle hook mounting structure shall be installed at the rear of truck frame, and shall be of sufficient strength to support the rated capacity of the pintle hitch. **Yes: \_\_ No: \_\_**

Two safety chain brackets shall be welded to the pintle support. Structure as close to the frame width as possible. These brackets must be equal to or greater than the pintle hook maximum gross trailer weight rating. **Yes: \_\_ No: \_\_**

Tectran "Traction Tec" swing away glad hands shall be supplied. **Yes: \_\_ No: \_\_**

### **CMVSA:**

Installation of this equipment shall meet or surpass the mandatory requirements of the Canada Motor Vehicle Safety Act and its regulations in effect on the date of manufacture and **must** bear the **National Safety Mark**. **Yes: \_\_ No: \_\_**

**Specify National Safety Mark Number:** \_\_\_\_\_.

## **Full Cable Snowplow and Wing Tower**

Viking model VCL350SCL or equivalent approved by the **Township Of Highlands East.**

**Yes: \_\_ No: \_\_**

**Make: \_\_\_\_\_ Model: \_\_\_\_\_**

The harness assembly shall be of heavy construction to sustain snow plowing operations under severe conditions.

**Yes: \_\_ No: \_\_**

A reservoir of adequate capacity shall be supplied but must not interfere with the operation of the box. Valves shall be installed on outlet lines at the reservoir.

**Yes: \_\_ No: \_\_**

Bottom of wing tower shall be protected by shoe, and shall have a ground clearance of 14" minimum, truck empty.

**Yes: \_\_ No: \_\_**

The spacing of the holes in the slides for connecting the wing braces shall be approximately 17".

**Yes: \_\_ No: \_\_**

Approved size of ram controlling the front end of wing shall be 3" dia. x 30" stroke approx. with a cable and sheave assembly.

**Yes: \_\_ No: \_\_**

Approved size of ram controlling the rear end of wing shall be 3" dia. x 30" stroke approx. cylinder, with a cable and sheave assembly.

**Yes: \_\_ No: \_\_**

Approved size of ram controlling wing brace slide shall be 3" dia. x 36" stroke approx. and shall be double acting.

**Yes: \_\_ No: \_\_**

Sealed beam wing light shall be provided.

**Yes: \_\_ No: \_\_**

Wing tower shall be painted black.

**Yes: \_\_ No: \_\_**

The wing tower shall be of a heavy construction and bolted to the right side of the truck chassis.

**Yes: \_\_ No: \_\_**

Wing tower shall be of 10" channel construction with a 25 degree offset and its mountings shall be sufficient to sustain snow plowing operations under severe conditions. **Yes: \_\_ No: \_\_**

One pipe brace 2 3/4" diameter shall connect the bottom of the wing tower and the truck chassis near the forward mount of the right rear springs to reduce the shock of the truck frame. **Yes: \_\_ No: \_\_**

The rear wing tower shall be heavily braced and gusseted to the frame cheekplate. **Yes: \_\_ No: \_\_**

For maximum strength two channels shall be used to form a triangular support integral with the rear post. **Yes: \_\_ No: \_\_**

The first channel shall be 4" x 66 1/2" 13.8 lb/ft slopping diagonal brace. **Yes: \_\_ No: \_\_**

The second channel shall be 4" x 40" 13.8 lb/ft horizontal brace bolted to the chassis rails and welded to the brace box. **Yes: \_\_ No: \_\_**

Two triangular stiffeners shall be incorporated into the assembly. **Yes: \_\_ No: \_\_**

To provide additional support the oil reservoir shall act as an auxiliary support post. **Yes: \_\_ No: \_\_**

The oil reservoir shall be connected at the top to the rear post through two 4 x 4 x 3/8" angles, and be mounted in a vertical position directly along the side of the rear post. **Yes: \_\_ No: \_\_**

The bottom of the oil reservoir shall also incorporate two 4 x 3 x 3/8" angles one welded to the oil reservoir and the other welded to the brace box. **Yes: \_\_ No: \_\_**

Hydraulic hoses shall connect the rams of the tower with the valves in the control box. Hoses shall be two ply braided steel, SAE100R2 with swivels on both ends. **Yes: \_\_ No: \_\_**

All sheave pins shall be provided with oil impregnated bronze bearings and grease fitting. **Yes: \_\_ No: \_\_**

A safety chain shall be provided for securing wing when not in use. **Yes: \_\_ No: \_\_**

Guide bars to contain the rear wing slide shall be welded 100% from the bottom up 2 feet. **Yes: \_\_ No: \_\_**



Dual, pedestal mounted, **Grote “Quad Flash”** strobe lights with blue and amber lens and dual switches.

Yes: \_\_ No: \_\_

### **Hydraulic Controls**

Hydraulic Control Valves will be stackable sectional type HCD-6 with HCD6-L20 air shift.

Yes: \_\_ No: \_\_

To prevent corrosion the air shifters will have a bronze sleeve.

Yes: \_\_ No: \_\_

The control valve will include the following sections:

1 D.A. Plow Lift      1 D.A. Wing Braces  
1 D.A. Tilt Harness   1 D.A. Tilt Moldboard  
1 D.A. Front of Wing      1 S.A. Body Hoist  
1 D.A. Rear Wing Slide

Yes: \_\_ No: \_\_

The hydraulic control valves will be operated by proportional, featherable in cab air controls.

Yes: \_\_ No: \_\_

The control panel assembly shall be of a remote design pedestal mounted and adjustable.

Yes: \_\_ No: \_\_

An oil reservoir of adequate capacity shall be supplied complete with oil filter oil level sight gauge, breather type filler cap, drain plug and oil shut off valve.

Yes: \_\_ No: \_\_

The complete valve stack assembly will be mounted vertically on a ¼” mounting plate, integral with the rear wing tower assembly.

Yes: \_\_ No: \_\_

The valve mounting plate will be welded to the horizontal channel and sloping diagonal brace.

Yes: \_\_ No: \_\_

The valve assembly will be completely open and easily accessible from the drivers side of the chassis for washing and maintenance.

Yes: \_\_ No: \_\_

### **Front Wing Post and Crossmember**

The design and construction of the wing post shall be in compliance with the MTO Standard # ES-403. It shall be independent and self-supporting hydraulically operated.

Yes: \_\_ No: \_\_

Brace “A” in ES403 shall be replaced by a second sturdy crossmember. Yes: \_\_ No: \_\_

This crossmember shall be bolted to both cheekplates **Yes: \_\_ No: \_\_**

Alternate Braces must be approved. **Yes: \_\_ No: \_\_**

The wing post shall be made of 8" , "I" –Beam 18.4 lb./ft. min. **Yes: \_\_ No: \_\_**

Crossmember shall be of heavy construction to sustain snow plowing operations in severe conditions. **Yes: \_\_ No: \_\_**

The wing post, when mounted, shall not be higher than the wing tower. **Yes: \_\_ No: \_\_**

The sheave pin shall be provided with a grease fitting or iolite bushing. **Yes: \_\_ No: \_\_**

A safety stop, limited slide travel shall be supplied. **Yes: \_\_ No: \_\_**

The lifting cable shall not be mounted to the hinge pin **Yes: \_\_ No: \_\_**

A 5/8" grab link shall be located halfway between upper and lower position of bolt "D" as shown on ES403. **Yes: \_\_ No: \_\_**

The front wing slide shall be provided with a combination tip-over arrangement, including spring to return to the normal position after it has tripped and a locking device to lock out the trip action for high wing operations. Tripping slide shall be 7 ½" wide. **Yes: \_\_ No: \_\_**

Bottom of the wing shall be 11" from the ground, truck empty, and shall be protected by a shoe. **Yes: \_\_ No: \_\_**

Crossmember must be bolted to the wing post. **Yes: \_\_ No: \_\_**

A 6" overhang shall be left on crossmembers to allow lateral movement for mounting the wing post on future trucks. **Yes: \_\_ No: \_\_**

Dimension "F" shown on ES403 shall be as specified for the particular size of the truck. **Yes: \_\_ No: \_\_**

Guide bars for the slide shall be square and welded 100% for the bottom 18". Safety chains shall be supplied. **Yes: \_\_ No: \_\_**

The wing post and crossmember shall be painted black. **Yes: \_\_ No: \_\_**

A 12" convex mirror shall be mounted on top rear of the front post. **Yes: \_\_ No: \_\_**

## Hydraulic Power Tilt Snow Plow Truck Harness

VIKING VCL500T or equivalent approved by the **Municipality of Highlands East.**

**Specify Make:** \_\_\_\_\_ **Model:** \_\_\_\_\_

The design and construction of the truck harness shall be in compliance with M.T.O. standard ES-401, or be of equivalent design approved by M.T.O. **Yes: \_\_ No: \_\_**

The harness shall be mounted at the front end of the frame, and shall be bolted to the cheekplate. **Yes: \_\_ No: \_\_**

The lifting frame shall be bolted to the push plate and shall be braced to conform with M.T.O. standards. **Yes: \_\_ No: \_\_**

Lifting Ram Diameter – 4” D.A. minimum **Specify:** \_\_\_\_\_

Lifting Ram Stroke – shall be 10” min. **Specify:** \_\_\_\_\_

The cylinder rod shall be fully chrome plated. **Yes: \_\_ No: \_\_**

Lift of grab link for nose chain shall be 18” minimum. **Yes: \_\_ No: \_\_**

Drive ears shall be 30 ½” centre to centre. **Yes: \_\_ No: \_\_**

Height to lower drive connection shall be 19” when mounted, truck empty. **Yes: \_\_ No: \_\_**

Cheekplates to match truck frame shall be supplied and shall be compatible for plow. **Yes: \_\_ No: \_\_**

Three grab links shall be supplied. **Yes: \_\_ No: \_\_**

Two sealed beams Halogen type headlamps, with high and low beam shall be supplied. **Yes: \_\_ No: \_\_**

Spacing and height of headlamps shall be in compliance with ES-401. **Yes: \_\_ No: \_\_**

Right front Aeon helper spring shall be provided. The helper spring provided shall be easily removable. **Yes: \_\_ No: \_\_**

Two new turn signals shall be installed in the location shown in ES-401 and the wires from the truck turn signal shall be connected to these lights. These wires shall be well protected in looms. **Yes: \_\_ No: \_\_**

The plow lights and signals shall be equipped with “Quick-Tack” ends. **Yes: \_\_ No: \_\_**

All hydraulic hoses and wiring shall be adequately supported to ensure that wear and sag is completely eliminated. **Yes: \_\_ No: \_\_**

The front plow harness shall tilt forward to allow the hood to tilt over centre of its pivots and stay open without the need of any additional supports. **Yes: \_\_ No: \_\_**

The harness will be supplied with two double acting hydraulic cylinders, one cylinder to perform the plow lift function and a second separate cylinder used to perform the tilt function exclusively. **Yes: \_\_ No: \_\_**

The tilt cylinder will be 2 ½" with a 6" stroke and the cylinder rod shall be fully chromed. **Yes: \_\_ No: \_\_**

Hydraulic power tilt function to be controlled by in cab featherable joystick air control. **Yes: \_\_ No: \_\_**

Front plate to be complete with **quick-tack hitch** pockets & pins. **Yes: \_\_ No: \_\_**

Parker Partek (Kevlar) hose wrap shall be installed on hydraulic hoses where excessive wear can cause premature failure and to extend the life of these hoses. **Yes: \_\_ No: \_\_**

The truck harness shall be painted industrial black. **Yes: \_\_ No: \_\_**

A parts manual shall be supplied with each unit. **Yes: \_\_ No: \_\_**

OEM front bumper to be cut and reinstalled on chassis. **Yes: \_\_ No: \_\_**

## Pump Dowty Tandem

The hydraulic pump supplied shall be a **Dowty** Model **2PL158/220** front mount tandem "Dry Mode" pump with in cab air shift. **Yes: \_\_ No: \_\_**

The first stage shall produce 13 US G.P.M. at 1,000 R.P.M. **Yes: \_\_ No: \_\_**  
23 US G.P.M. at 1,800 R.P.M.

The second stage shall produce 18 US G.P.M. at 1,000 R.P.M. **Yes: \_\_ No: \_\_**  
32 US G.P.M. at 1,800 R.P.M.

Pump mounting plate and splined drive shaft shall be supplied. **Yes: \_\_ No: \_\_**

The pump shall be driven from the crankshaft. **Yes: \_\_ No: \_\_**

The pump shall have a manufacturer's R.P.M. rating equivalent or higher than that of the truck engine at governed speed. **Yes: \_\_ No: \_\_**

Hydraulic hoses to connect pump shall be supplied. Their size shall be adequate for quick operation of all hydraulic operations and shall be 2 ply braided steel SAE100RS, with swivels on both ends. **Yes: \_\_ No: \_\_**

Protective hose wrap shall be installed on all hydraulic hoses where excessive wear can cause premature failure and to extend the life of these hoses. **Yes: \_\_ No: \_\_**

The drive shaft shall be supplied with spline long enough to allow telescopic retraction of the shaft in order to change fan belt without removing the pump. **Yes: \_\_ No: \_\_**

The hydraulic system must be set up so all other hydraulic functions do not "rob" the sander equipment. **Yes: \_\_ No: \_\_**

A parts manual shall be supplied with each unit. **Yes: \_\_ No: \_\_**

A low hydraulic oil alarm system with a dash mounted light and audible buzzer will be supplied and installed. **Yes: \_\_ No: \_\_**

## Snowplow Equipment 12' 2 Way Hydraulic Tilt Snow Plow

### Specification

### Confirmation

Viking model VCL 36-12-45C or equivalent in compliance with the following specification and approved by the Township of Highlands East. **Yes: \_\_ No: \_\_**

**Specify Make:** \_\_\_\_\_ **Model:** \_\_\_\_\_

This two way snow plow shall confirm with the provisions of M.T.O. standards ES-414, except that the dimensions of this specification shall prevail when the two contradict. **Yes: \_\_ No: \_\_**

The plow shall operate effectively and without modification with the M.T.O. snow plow truck harness ES-401. **Yes: \_\_ No: \_\_**

The weight of the plow shall range from 1,850 to 2,150 lbs and shall be constructed to prevent the accumulation of water in any area. **Yes: \_\_ No: \_\_**

The plow shall have a hood extending 18" past the vertical centre line, in normal operating positions. **Yes: \_\_ No: \_\_**

All ribs shall be of one piece construction 100% welded both sides to the moldboard. The top edge of the moldboard shall be welded 100% to the ribs. The top rail of the moldboard shall be manufactured of 2 ½" X 2 ½" angle iron and welded securely to the ribs and moldboard with a continuous bead. All other welds must also be 100%. **Yes: \_\_ No: \_\_**

The thickness of the moldboard and hood shall be of 10 U.S.S. ga. (.1345). **Yes: \_\_ No: \_\_**

The moldboard shall be pivoted to allow tilting in different positions. **Yes: \_\_ No: \_\_**

The moldboard brace rod shall be adjustable for plow angles of 45 degree, 50 degree and 55 degree. **Yes: \_\_ No: \_\_**

Brace rod adjustment shall be hydraulically controlled from inside the chassis cab via featherable joystick air control, dedicated specifically to this function. **Yes: \_\_ No: \_\_**

An additional double acting valve section will be incorporated in the main valve stack to provide hydraulic power for the moldboard tilt function. **Yes: \_\_ No: \_\_**

The moldboard brace rod will be fitted with a double acting hydraulic cylinder.

**Yes:** ☐ **No:** ☐

An indicator shall be installed so that the operator can visibly check and adjust the moldboard angle without leaving the chassis cab.

**Yes:** ☐ **No:** ☐

Male end of adjusting brace assembly to be solid steel.

**Yes:** ☐ **No:** ☐

Both male and female ends shall have 5/8" mounting pins.

**Yes:** ☐ **No:** ☐

The female end shall be at the top to prevent the accumulation of water.

**Yes:** ☐ **No:** ☐

Holes in drive bars for push frame shall be 1 1/4" diameter.

**Yes:** ☐ **No:** ☐

The distance from the centre line of the holes to the end of the drive bar shall be 1 1/2".

**Yes:** ☐ **No:** ☐

The height of the moldboard at the top of curve shall be as follows:

Front End: 26" Specify: \_\_\_\_\_

Rear End: 54" Specify: \_\_\_\_\_

The overall length shall be 13' 10" Specify: \_\_\_\_\_

The plow shall be fitted with two shoes as per M.T.O. ES-508.

**Yes:** ☐ **No:** ☐

There shall be eight vertical ribs, 3 1/2" high by 3/8" thick. Minimum weld between the moldboard and rib shall be 100% weld each side.

**Yes:** ☐ **No:** ☐

The bottom rail on the moldboard shall be 5" X 3" X 1/2" angle below with a 3" X 2" X 3/8" gussets shall be welded between the two legs of the bottom angle, between each

bolthole, except for the two sets of endholes and between two holes in the middle of the moldboard. The moldboard shall be continuously welded to the bottom rails.

Yes: ☐ No: ☐

The moldboard shall be designed for use with M.T.O. cutting edge and nosepiece. The cutting edge shall be a 7/8x6x132" carbide (3 piece) and shall be installed on the moldboard.

Yes: ☐ No: ☐

Moldboard shall have a total bearing area (pin dia. times web thickness times number of webs involved) or 4 1/2" square inches minimum at the point where the drive links attach.

Yes: ☐ No: ☐

Trip link safety mechanism shall be incorporated the blade mechanism must return to the normal plowing position automatically. Trip springs must be secured with lock nuts.

Yes: ☐ No: ☐

Two separate lift chains shall be used and these shall pick up on the drive frame at points approximately 48" apart.

Yes: ☐ No: ☐

The height of the shoes shall be adjustable as shown on M.T.O. ES-521.  
Height adjustable one way snow plow shoe holder.

Yes: ☐ No: ☐

The shoes shall oscillate.

Yes: ☐ No: ☐

The moldboard shall be formed in the shape of a smooth curve.

Yes: ☐ No: ☐

The horizontal distance from the discharge end of the plow blade to the discharge end of the moldboard shall be 24" minimum.

Yes: ☐ No: ☐

A sturdy eye 1/2" thickness shall be provided at the centre of gravity for handling of the moldboard.

Yes: ☐ No: ☐

A full length rubber deflector strip shall be installed.

Yes: ☐ No: ☐

A quick tack swivel shall be included.

Yes: ☐ No: ☐

Two fluorescent markers shall be supplied and installed.

Yes: ☐ No: ☐

The design and quality shall meet M.T.O. requirements.

Yes: ☐ No: ☐

The entire snow plow shall be painted Dupont Imron black paint.

Yes: ☐ No: ☐



**Specification for Snow Plow Equipment  
12' Snow Leveling Wing**

**Specification**

**Confirmation**

**Viking VCL 144 WHD or equivalent approved by the Municipality of Highlands East.**

Make: \_\_\_\_\_

Model: \_\_\_\_\_

The inside height of the wing shall be 29" minimum.

**Specify:** \_\_\_\_\_

The outside height of the wing shall be 39" minimum.

**Specify:** \_\_\_\_\_

Overall length of the wing shall be 12 feet.

**Specify:** \_\_\_\_\_

The thickness of the moldboard shall be 10 U.S.S. Ga. (.1345), minimum.

**Specify:** \_\_\_\_\_

Two drive ribs for connecting the wing brace shall be provided.

**Yes: \_\_ No: \_\_**

The drive ribs shall be located approximately 8'6" and 10'10" from the nose end of the wing.

**Yes: \_\_ No: \_\_**

The plate for mounting the wing to the wing post shall be 1" thick. The mounting hole shall be far enough from the edge of the plate to avoid failure in this area.

**Specify:** \_\_\_\_\_

Lower wing angle shall be 6" X 4" X  $\frac{3}{4}$ ".

**Yes: \_\_ No: \_\_**

The mounting of the nose end of the wing to the wing post shall be by means of a hinge and rectangle spring, to allow tipping over the wing.

**Yes: \_\_ No: \_\_**

Two adjustable wing braces shall be supplied.

**Yes: \_\_ No: \_\_**

The upper brace shall be of a stock release type, including a spring retraction. The spring shall provide adequate stability of the wing in normal operating conditions, and shall retract the wing from tip-over position.

**Yes: \_\_ No: \_\_**

The distance between the center of the mounting holes of the wing Braces shall be as follows.

Upper brace – Extended 90" C.C.

**Specify:** \_\_\_\_\_

Collapsed 60" C.C.

**Specify:** \_\_\_\_\_

Extended distances shall be measured with spring fully retracted.

**Specify:** \_\_\_\_\_

Lower brace – Extended 90” C.C.

**Specify:** \_\_\_\_\_

Collapsed 60” C.C.

**Specify:** \_\_\_\_\_

One spare pin for adjusting the wing braces shall be supplied with each Brace.

**Yes:** \_\_ **No:** \_\_

The top edge of the wing shall be boxed in and welded 100% to the ribs and moldboard so as to avoid all pockets.

**Yes:** \_\_ **No:** \_\_

The wing shall be fitted with the following:

Install ½”x 8”x 132” steel “backer blade”.

**Yes:** \_\_ **No:** \_\_

Install ¾”x 6”x 132” **carbide** cutting edge.

**Yes:** \_\_ **No:** \_\_

Install (2) steel moldboard shoes.

**Yes:** \_\_ **No:** \_\_

One 36” fluorescent marker.

**Yes:** \_\_ **No:** \_\_

Wing shall be painted **Black Imron** paint.

**Yes:** \_\_ **No:** \_\_