### Township of Edwardsburgh Cardinal

### **Public Works Department**



### Request for Tenders; Tandem Diesel Truck Cab & Chassis Plus, related Snow Plow and Sanding Equipment

Tender No. EC-PW-24-07

Closing Date: July 2<sup>nd</sup>, 2024 Closing Time: 4:00 pm Local Time

> Township of Edwardsburgh/Cardinal 18 Centre Street, P.O. Box 129 Spencerville ON K0E 1X0 Tel No. (613) 658-3055 Fax No. (613) 658-3445

### Township of Edwardsburgh Cardinal

#### **Tender Announcement**

Sealed Tenders on forms supplied by the Township will be received in envelopes clearly marked as to contents by the Township Clerk at her office in the Township Hall (18 Centre Street, Spencerville, Ontario) until 4:00 pm local time on Tuesday July 2nd, 2024 for:

The supply of One (1), Tandem Diesel Truck Cab, Chassis, Snow Plow and Sanding Equipment. The truck cab, chassis, snow plowing and sanding equipment to be supplied shall be as detailed in the Tender Specifications.

Tender Documents may be obtained from the Clerk's Office at the Township Hall from Monday to Friday between the hours of 8:30 a.m. and 4:30 p.m.

The lowest or any tender will not necessarily be accepted.

#### **Important Dates/Schedule**

Deadline for Questions: June 21st, 2024

Tender Closing: 4:00pm local time on Tuesday July 2nd, 2024

Anticipated Tender Award: Tuesday July 23rd 2024

**Project Completion:** 45 weeks from issuance of award letter or as agreed to by both

parties.

Irrevocability Period: 60 days.

#### **Tender Submission Documentation**

- Received in a sealed envelope clearly marked Tandem Diesel Truck Cab & Chassis
   related Snow Plow and Sanding Equipment: EC-PW-24-07
- Completed Form of Tender
- Unofficial Tender results shall be posted to the Township of Edwardsburgh Cardinal Website – Bids and Tenders 48 hours from tender closing.

#### **INFORMATION TO BIDDERS**

#### 1. Tender Closing

**SEALED TENDERS clearly** marked as to contents, will be received by the undersigned or his designated representative until **4:00 p.m. on Tuesday, July**, **2nd, 2024** at the Township of Edwardsburgh Cardinal's Administration Office. Bids received after closing time will not be considered.

Tenders shall be addressed to:

The Township of Edwardsburgh Cardinal Township's Administration Offices, 18 Centre Street, Spencerville, ON K0E 1X0

Tender No. EC-PW-23-01

Tenders will be opened in public at the Township's Administration Offices 4:05 p.m., on **Tuesday**, **July**, **2nd**, **2024**.

#### 2. Tender Inquiries

All questions pertaining to this contract shall be submitted in writing and addressed to:

Mr. Chris LeBlanc, EC Public Works Manager Phone: 613-658-3055 x 203 E-mail: cleblanc@twpec.ca

#### 3. Tender Submission

One copy of the **completed tender, including all addendums** shall be submitted on the forms provided, in a sealed envelope, clearly marked with the contract number.

All information shall be shown in the spaces provided including the signature of the Bidder with his/her address, telephone number and email.

Tender Forms must be properly signed and witnessed, or signed and sealed if the bidder is a corporation. Any Tender offer sent by fax will be disqualified.

The Tender must be legible, written in ink or typewritten, where stipulated, with the unit price for every item clearly shown.

Tenders which are incomplete, conditional or obscure, or which contain erasures or alterations not properly initialled, or irregularities of any kind, may be rejected.

Submissions must not be restricted by a statement added to the Township form or by a covering letter, or by alterations to the form supplied, unless otherwise provided in the Special Provisions.

The contract documents shall consist of all pages of the Tender documents issued by the Township, the Contractor's submission and all addenda.

Do not remove any pages from the Township form(s).

#### 4. Clarification of Documents

Any clarification of the Townships documents required by the Bidder prior to submission shall be requested in writing through the Township of Edwardsburgh Cardinal.

Any such clarifications so given shall not in any way alter the Townships documents and the Contractor and Township agree that in no case shall verbal arrangements be considered.

No officer, agent or employee of the Township is authorized to alter verbally any portion of these documents.

During the period prior to submissions, alterations will be issued to Bidders as written

addenda. In the submission, the Bidder shall enclose all addenda that were considered when the submission was prepared.

#### 5. Right to Accept or Reject Tenders

The Owner reserves the right to reject or cancel any or all tenders or to accept any tender should it be deemed to be in their best interest to do so. No liability shall accrue to the Township for its decision in this regard.

Tenders which are incomplete, conditional or obscure, or which contain additions not called for, erasures, alterations, or irregularities of any kind, may be rejected as informal.

### The acceptance of any Submission is subject to the approval of the Council of the Township of Edwardsburgh Cardinal.

The placing in the mail or delivery of a notice of award to the Company address given in the Submission, shall constitute notice of acceptance of the contract.

#### 6. Unacceptable Tenders

Each item in the Tender Form shall be a reasonable price for such item. Under no circumstances will an unbalanced Tender be considered. The Owner will be the sole judges of such matters, and should any Tender appear to be unbalanced, then it will be rejected by the Owner.

#### 7. Discrepancies

All mathematical calculations shall be reviewed by the Owner for verification of the total tender sum, and corrections, if and where needed, shall be made by the Owner to arrive at the correct total tender sum.

Where any numerical discrepancies have been made in the transferring of an amount from one part of the tender to another, the amount shown before transfer shall be used as the correct amount and the total sum shall be corrected accordingly.

Where the tender item price does not agree with the extension of the tender quantity and the tender unit price, the unit price shall be used, the tender item price and total tender sum adjusted accordingly.

#### 8. Tender Results

The names of the Bidders and total bid prices will be made available at the Public Opening. After the Public Opening, requests may be submitted to the Township for the results, and only the names of the Bidders and total bid prices as read out at the Public Opening will be given in reply. Bid results will be forwarded in written format to all Contractors who submitted a tender.

#### 9. Execute Contracts

Unless otherwise specified in these documents, this tender constitutes an irrevocable offer to provide the goods and/or service described herein for a period of 60 days from the closing date of the receipt of tender. After this time, the Tender may only be accepted with the consent of the successful bidder.

#### 10. Ability and Experience of Bidder

The Owner reserves the right to reject the Tender of any bidder who does not furnish satisfactory evidence of sufficient capital, plant and experience to successfully prosecute and complete the work in the specified time.

#### 11. Definition of Owner and Contract Administrator

Wherever the word "Corporation", "Authority" or "Owner" appears in this Contract, it shall be interpreted as meaning the "Corporation of the Township of Edwardsburgh Cardinal".

Wherever the word "Contract Administrator" appears in this Contract, it shall be deemed to mean the "Director of Operations of the Township of Edwardsburgh Cardinal, or his designate".

#### 12. Bids Irrevocable after Submission Deadline

All bids shall be irrevocable for a period of 60 calendar days from the closing date for this tender.

Bidders Information	tion	
Name of Firm (Th	e Contractor)	
Address		
Telephone Numb	er Fax Numbe	er
Email		
Name and Positio	n of Person S	igning for Contractor
TENDER FOR:		OF ONE TANDEM DIESEL TRUCK CAB, CHASSIS OW, WING & SANDING EQUIPMENT
TENDER CLOSIN	IG DATE: 4:0	0 p.m. on Tuesday, July, 2nd, 2024
Tenders Received	d by:	
		The Township of Edwardsburgh Cardinal Township's Administration Offices, 18 Centre Street, Spencerville, ON K0E 1X0
		Tender No. EC-PW-23-01

#### **ITEMIZED BID SHEET**

The undersigned has carefully examined the attached Information to Bidders and specifications and is fully informed as to the Township' requirements:

We hereby offer to supply the enceified truck attachments, modifications and

equipment for the for	supply the specified truck ollowing price:	, attacnment	s, modifications and
Supply and installated GVWR,	tion of one (1) tandem axl	e diesel cab	and chassis 60,000 lbs.
Unit F	Price	=	\$
Supply and installated VCL120HSE9 or approximately	` ,	ow plow (9')	and harness, Viking model
Unit F	Price	=	\$
Supply and installated 144 WHD or equiva	` ,	ng wing (12'	) tower, Viking model VCL
Unit F	Price	=	\$
Supply and installar PL1415HW II or eq	tion of one (1) heavy weig uivalent,	ht sander du	ımp box, Viking model
Unit F	Price	=	\$
	tion of one (1) automated ed spreader controller,	spreader co	ntrols with automated closed
Unit F	Price	=	\$
H.S.T		=	\$
TOTA	AL TENDERED PRICE:	=	\$
Delivery of all con	nponents of tender:# of	weeks from	awardwks
Dated at		this	day of
20	n22		

Witness or Seal	Signature: Position: Company: Address:		
Telephone:	F	-	
Email:			
SIGNEI	D STATEME	NT BY BIDD	ER
Members of the Council of the To	ownship of E	dwardsburgh	Cardinal:
The Bidder has carefully examine described herein, as part of the w		•	
The Bidder understands and accordance and, for the prices set materials, except as otherwise spatrict accordance with the said Property of the prices and accordance with the said Property of the prices and accordance with the said Property of the prices and accordance with the said Property of the prices are property of the prices and accordance with the prices are prices.	forth in this pecified in the	Tender, here e Contract, a	by offers to furnish all nd to complete the work in
Part or whole of this Contract i Corporation Township of Edwa that the Owner reserves the rig quantity that are deemed to ex-	ardsburgh C jht to delete	Cardinal and from the co	the bidder understands intract the item(s) or
Dated at	this o	day of	, 2022
Signature			

#### SPECIFICATIONS - GENERAL

- 1. The Total Tendered Bid Price shall be for the supply of One (1), Tandem Diesel Truck Cab, Chassis, Snow Plow and Sanding Equipment. The truck cab, chassis, snow plowing and sanding equipment to be supplied shall be as detailed in the attached specifications. Modifications or use of equivalents contrary to the stipulated specifications must be approved by the Corporation.
  - The Total Tendered Price shall include delivery to the Townships' Pittston Garage located at 4145 CR #22 within 45 weeks of receipt of purchase order or as otherwise arranged, and shall include HST, freight, license, service and all preparatory charges.
- 2. The unit shall have a C.A. of 120" approximately.
- Arrangements will be made for Township staff to inspect the vehicle prior to acceptance. The Unit supplied shall be complete and operational at the time of delivery.
  - The successful tender shall supply any equipment not specifically mentioned herein necessary for the successful operation of the equipment.
- 4. The successful tenderer shall **not** deliver the said vehicle to an alternate vendor for installation of plow equipment without prior approval from the Contract Administrator.
- **5.** Prices bid shall remain firm and open to acceptance for 60 days after the closing date unless otherwise stated.
- 6. The successful tenderer shall supply fully executed manufacturer's warranties on the vehicle and equipment as well as one copy of a shop manual for service and parts c.o.
- 7. Warranty one-year parts and labour on all components minimum.
- 8. The truck shall be new 2024 or 2025 model.
- **9.** Payment in full will be made within thirty (30) days of receipt and acceptance of the fully equipped vehicle specified herein.
- 10. Lowest or any tender not necessarily accepted. In particular, consideration will be given to local availability of spare parts, warranty service and normal service in addition to the price. The Corporation reserves the right to choose the tender which in its sole opinion provides the best value. All contracts are conditional on approval of the 2024 Public Works Budget.
- 11. Tender Information:

Chris Leblanc EC Public Works Manager (613) 658-3055 x 203 cleblanc@twpec.ca

### SPECIFICATION AND CONFIRMATION DIESEL TRUCK – CHASSIS AND CAB SPECIFICATIONS

#### 1. GENERAL

This specification covers a diesel truck cab and chassis to be used for heavy duty snow plowing, sanding and removal. Vehicle must be supplied with suitable components to comply with the following specifications in all aspects.

The vehicle shall meet or surpass the mandatory requirements of the Canada Motor Vehicle Safety Act and its regulations, which are in effect on date of manufacturing. The vehicle must also bear the National Safety Mark.

SPECIFICATION	CONFIRMATION
Current Model Year Required MAKE: MODEL: ENGINE MODEL:	YES:NO:
2. VEHICLE WEIGHT RATINGS	SPECIFY:
G.V.W. (Gross Vehicle Weight Rating) 30,844kg (68,000 lbs.) minimum	YES:NO:
GAWR (Gross Axle Weight Rating) <b>f</b> ront 10,000kg (22,000 lbs) minimum	YES:NO:
GAWR (Gross Axle Weight Rating) rear 18,144kg (40,000 lbs)	YES:NO:
The allowable G.V.W. as supplied will be shown on a metal tag.	YES:NO:
3. ENGINE	
Engine gross H.P. – 325 H.P. minimum, diesel, within governed RPM (SAR J 1349)	YES:NO:
Approved Engines: Paccar PX-9, Cummins L-9 and Detroit DD8	YES:NO:
Minimum net Torque shall be 1050 lbs minimum	YES:NO:
Engine to be set at 105 (Ministry Speed)	YES:NO:

Note: Required engine ratings must be set at time of engine manufacture. Engines with locally altered ratings are not acceptable.

#### 4. ENGINE EQUIPMENT

Splashguards shall be supplied to protect engine compartment from road spray	YES:NO:
compartment nom road spray	1L0NO
Engine hood shall be forward tilting with adequate side access panels for easy engine access.	YES:NO:
Heavy duty, two stage dry type air cleaner with dash mounted restriction indicator cooled preferred shall be supplied.	YES:NO:
A heavy duty, fuel, oil/water separator with heater and sight glass, mounted outside the left frame rail, behind the cab, shall be supplied. Fuel Pro 382 Danco with electric heater.	YES:NO:
Corrosion resistor (spin on water filter) for engine coolant shall be supplied	YES:NO:
Fuel filter to be supplied	YES:NO:
Alternator shall be 160-amp capacity, minimum SPEC with built-in diode rectifiers, and shielded slip rings and brushes or be brushless.	IFY MAKE: EL:
least 25 amp.	L CAPACITY:
ID	LE CAPACITY:
Maintenance free batteries shall be provided. SPEC	IFY CCA:
The SAE rating shall be combined 12 Volt, 3 batteries minimum	YES:NO:
Fully sealed and enclosed battery disconnect on the negative leads, within 1,200mm (48-inch) of the battery box.	YES:NO:
Heavy duty batteries and battery box shall be frame mounted on the right side of unit outside	YES:NO:

of cab and easily accessible for service and not interfere with dump box or sander installation. YES: \_\_\_\_NO: \_\_\_ Radiator shall be provided with a gravel guard to cover front radiator opening YES: \_\_\_\_NO: \_\_\_\_ Block heater to be supplied YES: \_\_\_\_NO: \_\_\_\_ Governor – engine governor, built-in type YES: NO: Engine fuel heater shall be supplied YES: NO: A crank shaft will be located low enough to allow the front-mounted pump to operate with sufficient clearance below the radiator. High temperature and low oil pressure engine protection YES: \_\_\_\_NO: \_\_\_\_ alarm bell or buzzer device shall be installed. Automatic engine shut down is not acceptable. The muffler shall be horizontal and located beneath the YES: NO: cab. It shall have 500mm (15-inch) ground clearance and the exhaust pipe shall be vertical. The whole installation shall not interfere with the mounting of a snow plow wing, or underbody scraper. 5. TRANSMISSION The transmission shall be an Allison 3000 RDS YES: NO: Automatic transmission, or equivalent automated Transmission, with a 4th Generation Electronic SPECIFY: Lever shifter. All transmission computer components shall be located in the cab. Pull Tee handle shifter (if not available, bidder to SHIFTER TYPE: State shifter location and type i.e., push button) SHIFTER LOCATION:

The transmission shall be supplied with

100% Synthetic lubrication oil.

Backup alarm shall be supplied.

YES: NO:

YES: \_\_\_\_NO: \_\_\_\_

#### 6. FRAME

Single Frame Requested. (Dual frame rails will be accepted)	YES:NO:
	SPECIFY:
Resisting bending moment (section modulus x yield strength) shall be 3,000,000 lbs./in. minimum	SPECIFY: FRAME SIZE:
Frame yield strength shall be 120,000 psi minimum	YES:NO:
Section modulus shall be 25 cubic inches minimum	REINFORCING SIZE:
Specify frame dimensions (depth x width x thickness)	SPECIFY:
The After Frame (AF) dimension shall be a minimum 0f 1,905 mm (75 inch)	SPECIFY:
A clear and useable CA of 120" maximum is required	SPECIFY:
Specify dimensions of reinforcement if equipped	SPECIFY:
Mounting of snowplow cheek plates shall be possible	YES:NO:
Provision shall be supplied to prevent diamond shaping of the frame. The frame shall be bridged or a cross-member shall be supplied within 10" of the cab in order to transfer snowplow wing push to each frame rail. This cross-member shall be gusseted fore and aft.	SPECIFY:
Mounting of pintle hook shall be 24 inches from the Ground (Holland PH410RA or approved equivalent) including 25mm (1 inch) thick pintle plate and hardware.	YES:NO:
Frame shall be supplied as per outlined requirements.	YES:NO:
Battery box mounted to frame on right hand side 60 inches from the cab	YES:NO:
Frame and under carriage components shall be epoxy primed prior to application of finish paint	YES: NO:

primer and paint.	YES: NO:
7. AXLES	
Front axles shall be 10,000 kg (22,00 lbs) minimum capacity	SPECIFY:
Type of front axle – set back	YES:NO:
Rear tandem axles shall be 18,144 kg (40,00lbs) Minimum capacity, dual drive with interaxle differential and driver controlled interaxle differential lockout.	SPECIFY:
Rear axle ratio: 4.89 or equivalent	SPECIFY:
Bidder to state type of axles supplied:	YES:NO:
	SPECIFY:
Stemco/CR front wheel seals shall be supplied or equivalent	YES:NO: SPECIFY:
Road speed at rated rpm in top gear, shall be 60 mph approximately	, SPECIFY:
A three (3) wheel lock-up system operated from the cab shall be supplied	YES:NO:
Full limited slip-type silent air lock-up differential shall be supplied with the control to engage and disengage mounted on dash	<b>YES:</b> NO: axle
8. <u>CAB</u>	
Conventional cab shall be supplied.	YES:NO:
Supplementary cab insulation to suppress engine noise shall be supplied	YES:NO:

The instrument cluster shall be upgraded to a "wrap" around design to put controls closer to the operator, and allows for an ergonomic design.	YES:NO:	
Seats – separate driver's and passenger's seats shall be supplied. Driver's seats to be a Bostrom "T" series premium style seat, with high back design, four position cushion tilt, dual air lumbar support. Double arm rest, and 9-inch slide adjustment and shall be cloth.	YES:NO:	
Passenger seat shall be fixed (single seat) or equivalent	YES:NO:	_
or oquitation.	SPECIFY:	
Both seats shall be fully padded and of heavy-duty construction.	YES:NO:	_
Heated Windshield shall be supplied.	YES:NO:	_
Air Conditioning shall be supplied.	YES:NO:	_
Tilt Steering shall be supplied	YES:NO:	
Power operated windows on right & left sides with a switch accessible by the driver and passenger shall be supplied.	YES:NO:	
Rubber floor mat to be supplied.	YES:NO:	
Seat belts – dual, to be supplied.	YES:NO:	
Outside sun visor package shall be supplied, painted same colour as truck.	YES:NO:	
Arm rests shall be supplied	YES:NO:	
Sun visors – dual, to be supplied.	YES:NO:	
Safety glass throughout with tinted windshield and side windows to be supplied.	YES:NO:	
Heavy duty arms and arctic wiper blades to be supplied.	YES:NO:	
Two jet-type windshield washers to be supplied.	YES:NO:	
Mirrors – two outside 177mm x 406mm	YES:NO:	

(7-inch x 16 inch) West Coast type mirrors, complete with built in heaters and clearance lights, shall be supplied. Mirrors electrically adjusted from the driver's position	YES:NO:
Conventional fender mounted mirror assembly Grote number 121172, with 11-inch right side mirror or equivalent	YES:NO:
High output fresh air deluxe heater and defroster to be supplied.	YES:NO:
In cab, dash displayed, outside temperature gauge, to be supplied	YES:NO:
Air gauges – mounted on dash, to be supplied.	YES:NO:
Tachometer – mechanical type shall be supplied.	YES:NO:
PTO Hour meter – with anti-vibration mount Hobbs-type (M3888 dampener) or approved equivalent to be supplied.	YES:NO:
Single air horn with snow shields/caps to be supplied.	YES:NO:
Heavy-duty custom-built AM/FM radio to be supplied. c/w hands free Bluetooth, USB connection for cell phones	YES:NO:
Windshield wipers – dual two-speed electric, complete with intermittent cycle with heavy duty motor and arms.	YES:NO:
Externally mounted grab bars on each side, to assist entry and exit to the cab shall be supplied	YES:NO:
Lower & intermediate foot steps both sides shall be supplied. Three-point entry and egress	YES:NO:
A terminal panel shall be incorporated into the wiring system to access the following wiring circuits, to add additional lighting for the body installation:	YES:NO:
<ul><li>Left and right turn lights</li><li>Parking lights</li><li>Back-up lights</li><li>Independent brake light</li></ul>	
The terminal panel shall be located inside the cab,	YES:NO:

preferably on the rear cab panel.

Provide wiring for two-way radio in ceiling, direct to fuse panel.	YES:NO:
Electronic throttle control shall be supplied.	YES:NO:
Engine hood shall be fibreglass forward-tilting and accessible without removing the plow harness	YES:NO:
9. <u>LIGHTS</u>	
Two, 2-way combination fender-mounted,100 mm (4-inch) amber directional lights, facing front shall be supplied	YES:NO:
Halogen head lights shall be supplied	YES:NO:
Three-way combination rear directional lights shall be supplied.	YES:NO:
Combination stop and tail light shall be supplied.	YES:NO:
Heavy duty 4-way flasher to be supplied.	YES:NO:
A separate backup light shall be supplied with guard- mounted in a safe, convenient place with separate switch and fuse.	YES:NO:
Parking lights to be supplied.	YES:NO:
Five (5) cab identification clearance lights shall be supplied.	YES:NO:
All clearance lights, signal lights and stop lights shall be LED type. MTO approved.	YES:NO:
10. BRAKES	
Service Brakes - Full air brakes. "S" cam drum type shall be supplied.	YES:NO:
Brake indicators shall be installed on all wheels	YES:NO:
Positive, rear wheel spring-loaded parking brake,	YES:NO:

Gunite air reservoir and instrument panel control	YES: NO:
switch to be supplied on each rear wheel.	
Means shall be provided to release the brakes with no air pressure in the main reservoir.	YES:NO:
all pressure in the main reservoir.	
Low pressure indicator to be supplied.	YES:NO:
Front wheel limiting valve to be supplied.	YES:NO:
Automatic drain valves shall be supplied to drain moisture from the air tank. Tank to have manual	YES:NO:
drain included.	CIFY MODEL:
Air tanks to have quick couplers to attach a	YES:NO:
auxiliary air hose. To be supplied c/w pull cords.	
Front brakes size - 406 mm x 152 mm (16-inch x 6-inch minimum or 419mm x 127mm (16.5-inch x 5-inch)	n) YES:NO:
drum type minimum, shall be supplied	
Rear brakes size – 419 mm x 177 mm (16.5-inch x 7-inch) minimum, shall be supplied.	YES:NO:
Front and rear dust shields front and rear to be supplied.	YES:NO:
	VEC. NO.
Protection boot for air chamber push rod shall be supplied.	YES:NO:
Air compressor – 6.23 l/s (13.2 cfm) minimum capacity complete with all necessary tanks,	YES:NO:
gauges and safety valves (Cummins or BW-750 or approved equivalent) shall be supplied.	SPECIFY:
, , , , , , , , , , , , , , , , , ,	
Air dryer with heater (Bendix AD-9) or equivalent shall be supplied	YES:NO:
	SPECIFY:
Automatic slack adjusters shall be supplied for front and rear axles.	YES:NO:

#### 11. WHEELS AND TIRES

Wheels to be all disk type.	YES:NO:
Dual rear wheels shall be supplied.	YES:NO:
Hub pilot bud wheels and wheel nut torque indicators, shall be supplied	YES:NO:
Special spacers, clips and studs to be supplied, if necessary.	YES:NO:
The rims must have a load capacity and pressure rating equal to or exceeding the ratings of the tires	YES:NO:
Spare rim shall be supplied with spare tire (tubeless) equivalent to the rear tires.	YES:NO:
Two (2) front, first-line steel belted radial, tubeless tires – 425/65R-22.5 load range "L" shall be supplied.	YES:NO:
Eight (8) rear, first line, steel belted radial tubeless tires 11R-22.5 load range "H", shall be supplied	YES:NO:
Tread design: Front – 425/65R 22.5	YES:NO:
Acceptable tires – Michelin XZY3 Rear – traction tread 11R 22.5 Acceptable tires – Michelin XDS2	YES:NO:
Two (2) Alcoa LVL One 82462X 22.5X12.25 or Accuride #29374 10-Hub Pilot 4.68 inset 10-Hand Aluminum Disc Front Wheels	YES:NO:
Eight (8) Alcoa LVL One 82462X 22.5X 8.25 or Accuride #43644 10-Hub Pilot Aluminum Disc Rear Wheels	YES:NO:
12. ATTACHMENTS	
Back up sound alarm that meets SAE standards shall be supplied	YES:NO:
Radiator – heavy duty type to be supplied.	YES:NO:

Magnetic drain plugs on all oil and grease	YES:	_NO:
compartments to be supplied.		
Front bumper shall be supplied.	YES:	_NO:
Anti-freeze shall be supplied to -30°F.	YES:	_NO:
Grab bars shall be supplied on each side of cab to assist entry to the cab.	YES:	_NO:
A roadside emergency kit with a fire extinguisher to be supplied.	YES:	_NO:
A first aid kit shall be supplied	YES:	_NO:
Shock absorbers to be heavy duty double acting on front only to be supplied.	YES:	_NO:
Pintle hook – Holland model PH410RA rigid type complete with air cushion and in-cab switch, rated at 100,000 MGTW be attached to rear end of truck frame. Cross-member to be modified and braced to accommodate Strength of Pintle Hook PH410RA.	YES:	_NO:
Seven prong trailer outlet to be supplied and wired in and be done in a corrosion-proof manner at rear of truck.	YES:	_NO:
Cab and chassis to be undercoated by Krown Rust Control.	YES:	_NO:
Front and Rear wheel mud flaps shall be supplied and mounted.	YES:	_NO:
13. <u>FUEL TANK</u>		
Single, 300 Litre aluminum full-step tank to be supplied on left-hand side (driver's side) of truck - minimum.	YES:	_NO:
Fuel Tank shall not extend beyond the cab more than 15cm (6-inch) or interfere with the installation of Salting/sanding equipment.	YES:	_NO:
Fuel gauges shall be supplied.	YES:	_NO:

14. <u>STEERING</u>		
Power steering shall be supplied.	YES: _	NO:
Steering shall be no more than 5 complete turns from lock to lock.	YES: _	NO:
15. <u>PAINT</u>		
Vehicle shall be painted Highway Yellow or a approved equivalent. Frame, under carriage, and steps are to be painted black with polyurethane primer and paint.	YES:	NO:
Inside paint shall be non-glare type.	YES:	NO:
16. <u>WARRANTY</u>		
The truck shall be covered by the standard manufacturers warranty with a signed copy and a description of which _ shall be included with the tender documents	YES:	NO:
The supplier shall provide warranty service, including service calls and towing for the warranty period.	YES: _	NO:
SPE	CIFY:	
17. <u>BOOKS</u>		
Operator's Manual and line ticket shall be supplied	YES: _	NO:
Maintenance and Electrical Service Manuals shall	YES: _	NO:
be supplied in hardcopy and electronic format		
18. PREVENTION MAINTENANCE COMPULSORY VEHIC INSPECTION (PMCVI) STICKER	LE	

The vehicle shall be supplied with a valid PMCVI sticker YES: \_\_\_\_NO: \_\_\_\_

#### **SPECIFICATION CONFIRMATION**

#### ALL SEASON COMBINATION DUMPBODY/SPREADER - TANDEM AXLE TRUCK

#### 1. **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 to permit gravity flow unloading. The main conveyor will be centered and recessed along the length of the box. The cross conveyor will be chassis frame mounted with

spreader discharge on the front, left, side (drivers) of dump box.

	YES:NO:
Viking model PL1213HW II or approved equivalent	SPECIFY:
	MAKE:
	MODEL:
2. <u>DIMENSIONS</u>	
To provide optimum combination of legal payload below are maximum/minimum and will be <b>Exactly</b>	
Body shall be oval shaped, permitting materials to uniflow into spreading position.	load by gravity YES:NO:
Total weight of the complete body assembly in ready tarp, tailgate, cross conveyor, main conveyor, and all	
exceed 5,600 lbs.	YES:NO:
	SPECIFY LBS:
Water level capacity - 10.5 cubic yards minimum	SPECIFY:
Water level capacity with 10" sideboards will be 13.1 cubic yards minimum Outside length – 13 ft. maximum	YES:NO: SPECIFY:

Inside Length – 12 ft. maximum	SPECIFY:	
Overall width - 102"	SPECIFY:	
All body welds will be 100% continuous inside and outside.	YES:NO:	
Dump box access ladder shall be 15" wide located on driver's side & at front of box.	YES:NO:	
3. HOIST		
Hoist shall be front mounted; three (3) stage telescopi	c YES:NO:	
Hoist to be top lift.	YES:NO:	
Hoist class shall be 80/30 ton.	YES:NO:	
Cylinder stroke shall be 330 CM (130") minimum.	YES:NO:	
Dump box tipping angel shall be 50 degrees.	YES:NO:	
The front head of the body will be completely clean an clear of any type of recess or protrusions into the bod including hoist dog houses, bulkheads, etc.		
Hinge dia. shall be 2.5"	YES:NO:	
Hoist control valve shall be air operated.	YES:NO:	
4. <u>TAILGATE</u>		
Tailgate shall be double acting.	YES:NO:	
Tailgate height shall be 55" from conveyor floor.	YES:NO:	
Tailgate shall be rectangle shaped to allow use of asp or stone chip spreaders.	halt <b>YES</b> :NO:	
Latch mechanism for the tailgate shall be air trip using two air pot boosters – air pot boosters to be protected by bolt-on steel covers.		
Spreader chains and brackets shall be supplied on tailgate and rear apron. Chains shall be grade 70-coil proof 5/16" minimum.	YES:NO:	

Coal gate 34" x 17" shall be supplied.	YES:	NO:
5. MAIN 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.	YES:	NO:
Main conveyor drive shall be a single 25:1 high efficiency Planetary gearbox with high torque low speed motor.	YES:	NO:
This drive shall deliver 50000 IN/LB torque intermittent with 34000 IN/LB constant.	YES: _	NO:
Planetary gearbox close coupled to main conveyor shaft.	YES: _	NO:
The flow control gate between main and cross conveyor shall be screw adjustable by hand crank from driver's side of dump body.	YES: _	NO:
The main conveyor flow control gate, will be flush and even with the front of the body, without any type of recess.		NO:
The cross conveyor shall be hydraulic direct drive.	YES:	NO:
The main conveyor will be a minimum of 32" in width measured from the outside to the outside of the conveyor chain links.	YES:	NO:
The unit must be capable of spreading and discharging "A" gravel via the main conveyor, cross conveyor and spinner chute, without clogging, jamming or other such problems and the manufacturer will warranty the unit as suitable for this operation and application.	YES: _	NO:
The main conveyor chain links will be permanently covered and protected in all operating modes by 3/8" and poly respectively.	YES: _	NO:
The main conveyor cover will be Hardox 450 hi-tensile Steel Type	YES: _	NO:
The main conveyor cover will self-feed into place to allow fast and simple installation.	YES: _	NO:

the conveyor floor will be 1/4" Hardox 450 hi-tensile steel plate.	YES:NO:
6. BI-DIRECTIONAL RUBBER BELT CROSS-CONVEYOR	
The cross conveyor shall be hydraulic direct drive via a single reversible 11.9 cu. in. hydraulic motor controlled by a 12V solenoid valve with in cab toggle switch.	YES:NO:
The cross-conveyor assembly shall be used to discharge material from main conveyor to the either the left or right side of chassis.	YES:NO:
An external electric solenoid complete with in-cab switch to be provided to control the direction of the rubber belt cross conveyor.	YES:NO:
Cross-conveyor assembly to mount on chassis frame independent from and in front of main combination spreader unit.	YES:NO:
Cross-conveyor unit shall be removable design to reduce added weight in non-spreading applications.	YES:NO:
Cross-conveyor weldment shall be fabricated from a minimum 3/16" thick Cor-Ten A corrosion resistant material.	YES:NO:
Cross-conveyor belt to be fabricated from 3/8" thick, 2 ply, 12" wide by 121" long molded, seamless conveyor belting.	YES:NO:
Belt shall be positive drive to eliminate slippage.	YES:NO:
The cross-conveyor belt shall be high temperature, asphalt rated	YES:NO:
Cross-conveyor assembly to include replaceable steel guards to prevent material from entering under belt or spilling off conveyor.	YES:NO:
Cross conveyor assembly to include 4 poly runners to maintain an even belt surface, preventing material from getting under belt.	YES:NO:

Cross-conveyor assembly shall have snub rollers constructed with high temperature, low stick, 2.5" diameter by 2.0" poly rollers, to reduce material build up under conveyor.	YES:	_NO:
Cross-conveyor assembly shall come with external, quick coupler washout connection.	YES:	NO:
Cross-conveyor assembly shall include 5 external, greaseable flange bearings and 2 external, greaseable take up bearings.	YES:	_NO:
Cross-conveyor assembly shall include 8 external grease fittings for application of grease to all bearings.	YES:	_NO:
Cross-conveyor assembly to provide provisions for mounting of material sand/salt chutes and spinner units.	YES:	_NO:
7. <u>SINGLE SPINNER</u>		
A polyurethane spinner shall be installed on left hand side (driver side) to spread ahead of rear wheels.	YES:	_NO:
Spinner disc will be hydraulic direct drive.	YES:	_NO:
Spinner height shall be adjusted to accommodate various chassis heights and capable of discharge rate from 100 lbs./lane mile to 2500 lbs./lane mile.	YES:	_NO:
8. SANDER CONTROLS		
Trackmatics – Smart Spread RX system or equivalent shall be installed with valves, external-mounted.	YES:	_NO:
9. <u>FENDERS</u>		
ntegral steel fenders shall be supplied.	YES:	NO:

#### 10. <u>PAINT</u>

The dump body shall be shot blasted and epoxy primed prior

To application of finish paint	YES:	_ NO:
Finish paint to be Dupont Imron 5000 Elite polyurethane with Baked-on finish – coloured to match cab	YES:	_ NO:
11. LOAD COVER		
An air tarp shall be standard equipment with fabricated aluminum tarp arms dimensions of 1 ½" X 2 ½" tubing, 1/8" mesh tarp and 14" stroke air cylinder mounted under right hand side of body. Body mounting brackets for tarp arms to be manufactured from Stainless steel	YES:	_ NO:
12. <u>LIGHTS AND WIRING</u>		
Grote Ultra Blue Seal LED rear stop, tail, directional and back-up lights and wiring shall be completely sealed with corrosion and vapor proof lamps and junction box.	YES:	_NO:
For improved rear visibility rear lamps, stops, tails and directional to be rectangular mounted in rear corner posts within 3" of the outside of the tailgate.	YES:	_NO:
All lights and wiring shall be supplied, including 4.5" heated spinner light.	YES:	_NO:
Raised rear LED reds, readily de-mountable shall be supplied, and mounted on lightweight aluminum pedestal stands	YES:	_NO:
13. <u>HYDRAULICS</u>		
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 <b>NOT</b> 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:

	nd PH410RA Pintle Hook with air cushion and Plate shall oplied, complete with 7-Pin trailer plug wired to cab.	YES:	_NO:
tailgat	l/asphalt gate shall be located at the bottom centre of e with dimensions 34" wide x 17" high with lever type ng device.	YES:	_NO:
•	draulic hoses to be completely protected with ane hose wrap.	YES:	_NO:
14. <u>OF</u>	PTIONAL		
	aised detachable light bar will include stop, tails and direction and sealed junction box.	onal, blue	flasher,
		YES:	_ NO:
LXIII	SPECIFICATION CONFIRMATION		
	PUMP – TYRONE TANDEM – DRY MODI	<u>=</u>	
	<u> </u>	=	
1.	The hydraulic pump supplied shall be a Tyrone Model VDVT 1150180AFJ Tandem Dry Mode with air shaft. or equivalent	YES:	_NO:
2.	The first stage shall produce 24.5 GPM at 1,500 RPM and 2,000 PSI.	YES:	_NO:
3.	The second stage shall produce 29.2 GPM at 1,500 RPM and 2,000 PSI.	YES:_	_NO:
4.	Pump mounting plate and splined drive shaft shall be supplied.	YES:_	_NO:
5.	The pump shall be driven from the crankshaft.	YES:_	NO:
6.	The pump shall have a manufacturer's RPM rating equivalent or higher than that of the truck engine at governed speed.	YES:_	NO:
7.	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:
8.	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:
9.	The hydraulic system must be set up so all other hydraulic functions do not "rob" the sander equipment.	YES:_	NO:
10.	A parts manual shall be supplied with each unit.	YES:	NO:
	SPECIFICATION CONFIRMATION		
	SNOW PLOW EQUIPMENT		
	<u>11' STEEL FULL TRIP</u> <u>REVERSIBLE SNOW PLOW</u>		
1.	Viking Model VCL 36-11-45C steel full trip reversible snow plow or equivalent in compliance with the following specification and approved by the municipality.	YES:	_ NO:
		AKE: ODEL:	
2.	The overall width shall be 11' Minimum weight of 2250lbs	YES:	_NO:
3.	The moldboard height shall be 40" maximum SPECIFY:	YES:	_ NO:
4.	The path cleared in the bulldozing position shall be 11'. at a 35-degree angle, the path cleared shall be 9'.	YES:	_ NO:
5.	A hydraulically adjustable moldboard tilt brace system is to be provided.	YES:	_ NO:
	SPECIFY:		

6.	Hydraulic moldboard tilt braces shall connect the back of the moldboard to the plow drive-frame.	YES:	_NO:
7.	The plow shall be equipped with a hydraulically adjustable cutting edge adjustment brace assembly, complete with in-cab control. The operator shall be able to hydraulically adjust the plow cutting edge attack angle from 45 to 60 degrees through a proportional air joystick control installed inside the cab. Standard manual cutting edge adjustment braces will not be acceptable.		_NO:
8.	Set at a 50-deg. attack angle, the overhang from the cutting edge to the front of the moldboard shall be 20" minimum – no exceptions.	YES:	NO:
	SPECIFY:		
9.	Set at a 60-deg. attack angle, the overhang from the cutting edge to the front of the moldboard shall be 25" minimum – no exceptions.	YES:	NO:
	SPECIFY:		
10.	Set at a 50-deg. attack angle, the height from the ground to the front of the moldboard shall be 28" maximum – no exceptions.	YES:	NO:
	SPECIFY:		
11.	Set at a <b>60-deg.</b> attack angle, the height from the ground to the front of the moldboard shall be 24" maximum – no exceptions.	YES:	NO:
	SPECIFY:		
12.	The moldboard shall be fabricated from 10 ga. steel.	YES:	NO:
13.	There shall be a minimum of 10 x 3/8" thick reinforcing ribs 100% welded to the moldboard.	YES:	_NO:
	SPECIFY # OF RIBS AND THICKNESS		

15.	The safety trip mechanism shall consist of two compressions springs incorporated into the drive frame. Upon encountering a road obstruction, the moldboard will raise vertically through the 2 compression springs. Note that reversible plows whereby the moldboard tilts forward through extension springs, will not be accepted by the Township.	
	SPECIFY:	
16.	The two compression trip springs will be 5/8" wire, 5 1/4" O.D., 14" free length with a total of 8 active coils.	YES: NO:
	SPECIFY:	
17.	Height adjustable " <b>Mushroom style</b> " skid shoes shall be fitted on the drive frame.	YES: NO:
18.	These shoes shall carry the weight of the plow when the moldboard trips.	YES: NO:
19.	The bottom of the moldboard is to be reinforced with a $\frac{1}{2}$ " x 6" x 4" backer angle.	YES: NO:
	SPECIFY:	
20.	A second angle 3/8" x 3" x 2" shall be welded above for added strength and rigidity.	YES: NO:
	SPECIFY:	
21.	The drive frame shall be of A frame and sector design.	YES: NO:
22,	The A frame will be constructed of 3 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x $\frac{1}{4}$ " square tubing with two $\frac{3}{4}$ " thick pivot plates.	YES: NO:
	SPECIFY:	
23	Sector frame constructed of 4" x 4" x 3/8" square tube.	YES: NO:
	SPECIFY:	

24	The sector angle shall provide a 30° radius and be constructed of $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " steel.	YES:	NO:
	SPECIFY:		
25	To prevent wear, the sector will glide between two low friction replaceable polymer bearings bolted on the A frame.	YES:	_ NO:
26	There shall be two 3" diameter x 14" stroke double acting hydraulic cylinders to reverse the plow to a maximum of 35 right or left.  Cylinder rods must be hard chrome plated.	YES:	NO:
	SPECIFY DIAMETER:		
	SPECIFY STROKE:		
27	Moldboard shall be fitted with 2 moldboard shoes and scuff shoes shall be supplied on each end.	YES:	NO:
28	A standard steel cutting edge shall be supplied and bolted to the moldboard backer angle.	YES:	NO:
29	Three 3/8" lift chains shall be provided to lift the plow to the carrying position.	YES:	NO:
30	These chains must be as wise spread as possible in order to make the plow stable, and the plow must remain level when carried.	YES:	NO:
31	It will be possible to perform the power angle function with the plow in both the lowered working position and the raised carrying position.	YES:	NO:
32	Four hinge points are to be provided to connect the moldboard to the push frame, spanning a minimum distance of 80".	YES:	NO:
33	To prevent damage to the reversing cylinders a cross-over relief valve shall be supplied.	YES:	NO:
34	Drive frame shall be completed with height adjustable parking stand.	YES:	NO:

35	All steel shall be epoxy primed prior to application of finish paint	YES:	_ NO:
36	All paint finishes shall be top quality, rust resistant black.	YES:	_ NO:
37.	Quick tack oscillating beam shall be supplied.	YES:	NO:
38.	Standard steel cutting edge shall be provided.	YES:	_ NO:
39	Fluorescent markers to be fitted on each end of the plow moldboard.	YES:	NO:
40	3/8" x 12' rubber deflector shall be provided.	YES:	_ NO:
41	Plow shall be equipped with a safety cable connecting the plow to the front harness – cable to be provided with urethane cover wrap.	YES:	_ NO:
42	A spare parts manual shall be supplied.	YES:	_ NO:
43.	A signed manufacturers warranty shall be supplied.	YES:	NO:
	SPECIFICATION CONFIRMATION		
	<u>HYDRAULIC POWER TILT</u>		
	SNOW PLOW TRUCK HARNESS		
Vikin		PECIFY AKE: ODEL:	
1.	The design and construction of the truck harness shall be in compliance with MTO Standard ES-401, or be of equivalent design approved by MTO.	YES:	_ NO:
2.	The harness shall be mounted at the front end of the frame and shall be bolted to the cheek plate.	YES:	_ NO:
3.	The lifting frame shall be bolted to the push plate and shall be braced to conform with MTO Standards	YFS:	NO:

4.	Lifting ram dia. – 4" DA minimum.	YES:	NO:
5.	Lifting ram stroke – 10" minimum.	YES:	_ NO:
6.	The cylinder rod shall be fully chrome-plated.	YES:	_ NO:
7.	Lift of grab link for nose chain shall be 18" minimum.	YES:	_ NO:
8.	Drive ears shall be 30 ½" centre to centre.	YES:	_ NO:
9.	Height to lower drive connection shall be 19" when mounted, truck empty.	YES:	_ NO:
10.	Quick Tach pockets and pins shall be supplied.	YES:	_ NO:
11.	Cheek plates to match truck frame shall be supplied and shall be compatible for plow.	YES:	_ NO:
12.	Three grab links shall be supplied.	YES:	_ NO:
13.	Two Grote heated LED headlamps and directionals, With high and low beam shall be supplied.	YES:	_ NO:
14.	Spacing and height of headlamps shall be in compliance with ES-401.	YES:	_ NO:
15.	Right front helper spring shall be provided, 16,000 lb. capacity Aeon rubber (2 spools) shall be used and shall be easily removable.	YES:	_ NO:
16.	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:
17.	The plow lights and signals shall be equipped with "Quick-Tack" ends.	YES:	
18.	All hydraulic hoses and wiring shall be adequately supported to ensure that wear and sag is completely eliminated.	YES:	_ NO:
19.	The front plow harness shall tilt forward to allow the hood to tilt over centre of its pivots and stay open without the need for any additional supports.	YES:	NO:

20.	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:
21.	The tilt cylinder will be 2 ½" with a 6" stroke and the cylinder rod shall be fully chromed.	YES:	_NO:
22.	Hydraulic power tilt function to be controlled by in-cab feature joystick air control.	YES:	_NO:
23.	Front plate to be complete with Quick Tach hitch pockets.	YES:	_NO:
24.	The truck harness shall be painted Industrial Black.	YES:	NO:
25.	A parts manual shall be supplied with each unit.	YES:	_ NO:
	SPECIFICATION CONFIRMATION		
	SNOW PLOW EQUIPMENT		
	12' SNOW LEVELLING WING		
12`sr	now levelling wing Viking VCL144WHD or Equivalent	YES:	_NO:
1.	The snow leveling wing shall comply with the provisions of MTO ES-406, except for the length which is designated by the specification.	MAKE: MODEL:	
2.	The inside height of the wing shall be 29" minimum.	SPECIFY:	
3.	The outside height of the wing shall be 39" minimum.	SPECIFY:	
4.	Overall length of the wing shall be 12'0".	SPECIFY:	
5.	The thickness of the moldboard shall be 10 USS Ga (.1345) minimum.	SPECIFY:	
6.	Two drive ribs for connecting the wing braces shall be provided.	YES:	NO:

7.	The drive ribs shall be located approximately 8'6" and 10'10" from the nose end of the wing.	YES:	NO:
8.	The plate for mounting the wing to the post shall be 1" thick. The mounting hole shall be far enough from the edge of the plate to avoid failure in this area	a. SPECIFY:	
9.	The mounting of the nose end of the wing to the wing post shall be by means of a hinge and retractable spring, to allow tipping over the wing.		NO:
10. 11.	Two adjustable wing braces shall be supplied. The upper brace shall be of a shock 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:
12.	The distance between the centre of the mounting holes of the wing braces shall be as follows:		
	Upper brace - Extended 90" C.C Collapsed 60" C.C.	SPECIFY: SPECIFY:	
	Extended distance shall be measured with Spring fully retracted.		
	Lower brace - Extended 88" C.C Collapsed 58" C.C.	SPECIFY: SPECIFY:	
13.	One spare pin for adjusting the wing braces shall be supplied with each brace.	SPECIFY:	
14.	The wing shall be fitted with the following:		
	One snowplow blade MTO ES-504 One wing shoe MTO ES-509	YES: YES:	NO: NO:
15.	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:
16,	The wing shall be painted black.	YES:	NO:
17.	The wing braces shall be painted black.	YES:	NO:

18. A parts manual shall be supplied with each unit. YES:\_\_\_\_ NO:\_\_\_\_

#### **SPECIFICATION CONFIRMATION**

	FULL HYDRAULIC SNOW PLOW		
	WING TOWER		
Model	- Viking VCL350SCL or equivalent	YES:	_ NO:
		PECIFY NAKE: NODEL:	
1.	The harness assembly shall be of heavy construction to sustain snow plowing operations under severe condition		NO:
2.	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:
3.	Bottom of wing tower shall be protected by shoe, and have a ground clearance of 14" minimum, truck empty.	YES:	NO:
4.	The spacing of the holes in the slides for connecting the wing braces shall be approximately 17".	YES:	_ NO:
5.	Approved size of ram controlling the front end of wing shall be 3" dia. x 30" stroke approximately with a cable and sheave assembly.	YES:	NO:
6.	Approved size of ram controlling the rear end of wing shall be 3" dia. x 30" stroke approximately with a cable and sheave assembly.	YES:	NO:
7.	Approved size of ram controlling wing brace shall be 3" dia. x 36" stroke approximately and shall be double acting.	YES:	_ NO:
8.	4.5" heated LED front and rear post wing lights shall be provided.	YES:	_NO:
9.	Wing tower shall be painted black.	YES:	_NO:

10.	The wing tower shall be of a heavy construction and bolted to the right side of the truck chassis.	YES:	NO:
11.	Wing tower shall be of 10" channel construction with a 25° offset and its mountings shall be sufficient to sustain snow plowing operations under severe conditions	. YES:	NO:
12.	One pipe brace 2 ¾" dia. 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:
13.	The rear wing tower shall be heavily braced and gusseted to the frame cheek plate.	YES:	NO:
14.	For maximum strength, two channels shall be used to form a triangular support integral with the rear post.	YES:	NO:
15.	The first channel shall be 4" x 66 $\frac{1}{2}$ ", 13.8 lb./ft sloping diagonal brace.	YES:	NO:
16.	The second channel shall be 4" x 40", 13.8 lbs./ft. horizontal brace bolted to the chassis rails and welded to the brace box.	YES:	NO:
17.	Two triangular stiffeners shall be incorporated into the assembly.	YES:	NO:
18.	To provide additional support the oil reservoir shall act as an auxiliary support post.	YES:	NO:
19.	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:
20.	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:
21.	Hydraulic hoses shall connect the rams of the tower with the valves in the control box. Hoses shall be two-ply braded steel, SAE100R2 with swivels on both ends.	YES:	NO:

22.	All sheave pins shall be provided with oil impregnated bronze bearings and grease fitting.	YES:	NO:
23.	A safety chain shall be provided for securing wing when not in use.	YES:	NO:
24.	Guide bars to contain the rear wing slide shall be welded 100% from the bottom, up 2'.	YES:	NO:
25.	Parts manual shall be supplied with each unit.	YES:	NO:
26.	One blue and one amber strobe, Star Model 200A cab shield-mounted.	YES:	NO:
27.	Right front rubber helper spring shall be supplied.	YES:	NO:
28.	MTO Cross-member shall be supplied, 10" behind back of cab.	YES:	NO:
	RAULIC CONTROLS		
29.	Hydraulic control valves will be stackable, sectional Type – Walvoil model SDS-180 with air shift.	YES:	NO:
30.	To prevent corrosion, the air shifters will have a bronze sleeve.	YES:	NO:
31.	The control valve will include the following sections:  1 DA Plow Lift DA Wing Brace 1 DA Tilt Harness SA Body Hoist 1 DA Front of Wing 1 DA Rear Wing Slide		
	DA hydraulic moldboard tilt	YES:	NO:
32.	The hydraulic control valves will be operated by proportional featherable in-cab air controls.	YES:	NO:
33.	The control panel assembly shall be of a remote design, pedestal-mounted and adjustable.	YES:	NO:
34.	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:

35.	A high pressure filter, as well as an in-line filter at the	YES:	NO:	
	Oil reservoir, shall be provided.			
36.	The complete valve stack assembly will be mounted vertically on a ¼" mounting plate, integral with the			
	rear wing tower assembly.	YES:	NO:	
37.	The valve mounting plate will be manufactured from stainless steel, and welded to the horizontal channel and sloping diagonal brace.	YES:	NO:	
38.	The valve assembly will be completely open and			
	easily accessible from the driver's side of the chassis for washing and maintenance.	YES:	NO:	

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.

List five (5) Ontario Municipalities who have been using the combination U-body/spreader offered in this tender for a minimum period of one (1) year.

Name of Municipality	Contact Name	Position	Phone #