



*Naturally Spirited*

## **KILLALOE-HAGARTY-RICHARDS**

THE CORPORATION OF THE  
TOWNSHIP OF KILLALOE, HAGARTY AND RICHARDS

ONE ONLY DIESEL POWERED 6 TON TANDEM AXLE TRUCK WITH COMBINATION  
DUMP BODY/SPREADER,  
SNOW PLOW AND WING

REQUEST FOR PROPOSAL (RFP)  
RFP 2018- 03

The Municipality of the Township of Killaloe, Hagarty and Richards is committed to integrating accessibility considerations into our procurement processes. We ask potential suppliers to tell us about the accessible options they offer. We include accessibility considerations in our evaluation.

The Request for Proposal (RFP) process within the Township of Killaloe, Hagarty and Richards is established to promote the exchange of new ideas between potential service providers and the Township. RFP's allow for more flexibility in delivering services and products to the Township of Killaloe, Hagarty and Richards than would the tendering process. RFP's utilize descriptive objectives and technical specifications as a guideline to suppliers rather than a direct agreement of detail. This affords the Township of Killaloe, Hagarty and Richards's access to technologically advanced products, innovative thinking, and new approaches to solving problems, utilizing the combined knowledge and experience of the Suppliers and Contractors. Suppliers and Contractors benefit through an open forum to exchange ideas, promote new products and demonstrate their capabilities without commonly present restraints.

**PART A      INFORMATION AND INSTRUCTIONS TO POTENTIAL SUPPLIERS AND SUPPLIERS**

**1. REQUEST FOR PROPOSAL**

The Township of Killaloe, Hagarty and Richards is looking to lease to own a Diesel Powered 6 Ton Tandem Axle Truck with Combination Dump Body/Spreader, Snow Plow and Wing.

This RFP package consists of the following components:

- I. Part A - Information and Instructions to Potential Suppliers and Suppliers
- II. Part B – Specifications
- III. Part C – Request for Proposal Form
- IV. Part D – Township Contacts and Administration
- V. Part E – Request for Proposal Closing
- VI. Part F – Signature Page

Potential suppliers may participate in the procurement process by submitting a RFP in accordance with the instructions herein.

**2. ELIGIBILITY AND REQUEST FOR PROPOSAL INFORMATION**

**Omissions, Discrepancies and Interpretations**

Should a potential supplier find omissions from or discrepancies in any of the RFP documents or be in doubt as to the meaning of any part of such documents, the potential supplier is required to contact the Township of Killaloe, Hagarty and Richards, no later than five (5) days before the closing date. If the Township of Killaloe, Hagarty and Richards considers that a correction, explanation or interpretation is necessary or desirable, it will issue an addendum to all that have taken out RFP documents.

**Delivery of the Vehicle**

The successful supplier, if any, will be required to deliver the vehicle to the Township of Killaloe, Hagarty and Richard Roads Yard no later than Thursday November 1<sup>st</sup>, 2018;

16370 Highway 60  
Wilno ON K0J 2N0

### Permits

The successful supplier shall apply for, obtain and pay for all necessary permits required to deliver the vehicle to the Township of Killaloe, Hagarty and Richards Roads Yard. Potential suppliers shall include the costs of any such permits in their RFP prices.

### Notices, Laws and Rules

The successful supplier shall give all necessary notices and pay all fees required by law and comply with all laws, ordinances, rules and regulations relating to the supply of the vehicle. The successful supplier shall be responsible for the safety of the vehicle and the successful supplier's personnel in accordance with all applicable safety legislation passed by Federal, Provincial and Local authorities governing safety. Potential suppliers shall include all such fees and costs in their RFP prices.

### Vehicle must be New

The vehicle to be supplied is required to be new, 2018, and delivered complete and fully operational.

## 3. REQUEST FOR PROPOSAL PROCEDURES

### The Township of Killaloe, Hagarty and Richards's RFP Form is Required

Prices are required to be submitted on the RFP Form included in Part C of this RFP package, together with any further forms or attachments that the potential supplier is instructed elsewhere herein, or in any addendum hereto, to include with his/her RFP.

### Delivery of Request for Proposal

RFP's must be submitted in sealed envelopes and shall be clearly marked with the Supplier's Company name and address, the RFP Title and the RFP Number, to the Township of Killaloe, Hagarty and Richards on or before **4:30 PM, Local Time on Tuesday May 8<sup>th</sup>, 2018** (Part E – "b"). The use of the mails and couriers for delivery of this RFP will be at the risk of the potential supplier.

### Standard Terms and Conditions

Participants in this procurement process are advised that in order for the Township of Killaloe, Hagarty and Richards to properly evaluate the Request for Proposals, all vehicle requirements/specifications included in Part B of this package, must be filled with as much detail as possible. The successful supplier, if any, will be required to supply the vehicle on the terms and conditions therein.

### Request for Proposal Prices

RFP prices are to be quoted in Canadian Funds and to include any cartage or unloading charges, preparation, excise taxes based on F.O.B. Killaloe with duty, if any, to be included in the price.

It is understood that in submitting a bid, each bidder agrees that his bid may be subject to acceptance up to 60 calendar days after the closing date for the RFP.

RFP prices are to be exclusive of HST. Applicable HST is to be shown separately, as applicable, on the RFP Form.

The RFP price shall be firm on delivery and any price escalation clause shall render the RFP unacceptable.

## 4. COMPLETION OF REQUEST FOR PROPOSAL FORM

### Legibility and Unauthorized Revisions or Additions to Forms

All entries in the RFP Forms shall be made in ink or typewritten. Entries or changes made in pencil shall, unless otherwise be decided by the Township of Killaloe, Hagarty and Richards, be invalid. RFP's which are incomplete, illegible or obscure, or that contain additions not called for, erasures, alterations or irregularities of any kind, may be rejected.

### Vehicle Supplier Proposes to Supply

In Part C, potential suppliers are required to fully describe the vehicle they propose to supply. The Township of Killaloe, Hagarty and Richards' specifications (Part B) are the minimum requirements.

### Warranties

Potential suppliers are required to attach to their RFP, copies of any and all standard warranties as well as appropriate manufacturers literature.

It is the Township of Killaloe, Hagarty and Richards's preference that all maintenance and repair work be available at any authorized dealer of the manufacturer of the vehicle. Potential suppliers are required to specify in Part C, Part 2 (Request for Proposal Form) where warranty work will be available.

Regular maintenance, not included in the warranty will be performed by our Licenced Municipal Mechanic who is on site at the Township garage. All regular maintenance will be performed in accordance with the specifications provided for the proposed vehicle (e.g. changing of all fluids, filters and grease).

### Copy of Dealer's Vehicle Purchase Agreement

The potential supplier must supply a sample copy of the Dealer's Vehicle Purchase Agreement to ensure all terms and conditions of the agreement meet with the Township of Killaloe, Hagarty and Richards' approval.

### Assignment of Agreement

The Agreement contemplated by this RFP is between the Township of Killaloe, Hagarty and Richards and the successful supplier. Where the potential supplier proposes to assign the agreement to a financing company, manufacturer or anyone else, the potential supplier shall include with their RFP, details of the proposed assignment. Any such assignee shall be bound by the terms and conditions of this RFP.

## 5. OPENING AND EVALUATIONS

### Disqualifications

Under no circumstances will RFP's be considered which:

- I. are received **after 4:30 pm, Local Time on Tuesday May 8<sup>th</sup>, 2018;**
- II. include RFP qualifications or other conditions not authorized by the Township of Killaloe, Hagarty and Richards; or
- III. are in the determination of the Township of Killaloe, Hagarty and Richards, incomplete.
- IV. the product on which the price is submitted does not meet all the requirements of the specification.
- V. The bidder does not confirm compliance with all items of the specification by marking the "YES" in the confirmation column for all the required items and providing the required information where "SPECIFY" is noted.

### Right to Accept or Reject

The Request for Proposal which includes the lowest submitted cost will not necessarily be accepted. The Township of Killaloe, Hagarty and Richards has the right to reject any and all RFP's for any reason whatsoever. The Township of Killaloe, Hagarty and Richards shall not be responsible for and potential suppliers shall not be entitled to, reimbursement for any liability costs, expenses, loss, economic loss, damages or consequential damages incurred, sustained or suffered, including loss of profit, by any potential supplier/supplier prior or subsequent to, or by reason of the acceptance or the non-acceptance by the Township of Killaloe, Hagarty and Richards of any RFP or by reason of any delay

in the acceptance of a RFP. Request for Proposals are subject to formal acceptance by the Township of Killaloe, Hagarty and Richards and a formal contract being prepared and signed.

POTENTIAL SUPPLIERS ARE ADVISED THAT ACCEPTANCE OF ANY RFP WILL BE DONE BY RESOLUTION OF THE TOWNSHIP OF KILLALOE, HAGARTY AND RICHARDS COUNCIL.

### Evaluation Process

- I. The Township of Killaloe, Hagarty and Richards will, as part of the evaluation of RFP's, compare the vehicle proposed against the specifications. In the event that the Township of Killaloe, Hagarty and Richards, in its sole discretion, requires additional information to evaluate a RFP, the potential supplier shall provide the Township of Killaloe, Hagarty and Richards with such additional information. If a potential supplier fails to provide the requested information within the timeline specified by the Township, the Township of Killaloe, Hagarty and Richards may reject the RFP.
- II. The cost component of the RFP will be evaluated on the basis of the offered price (Part "C", Part 1) plus warranty charges (Part "C", Part 1), if applicable.
- III. RFP's that contain prices which appear to be so unbalanced as likely to affect adversely the interests of the Township of Killaloe, Hagarty and Richards, may be rejected.
- IV. The Township of Killaloe, Hagarty and Richards reserves the right to waive formalities at its discretion.

## 6. ACCEPTANCE

### Award of RFP

The lowest or any RFP will not necessarily be accepted. The Township of Killaloe, Hagarty and Richards may, in its sole discretion:

- I. award a contract to the potential supplier that the Township of Killaloe, Hagarty and Richards, in its sole discretion, determines is the best qualified and compliant RFP; or
- II. determines that the potential supplier meets the best possible vehicle efficiencies; or
- III. not award any contract at all.

The determination of the best qualified and compliant RFP shall be in the sole discretion of the Township of Killaloe, Hagarty and Richards, which decision shall be final and not challengeable.

Post-RFP Documentation

Notice of Acceptance

Notice of acceptance shall be made by fax or email to the successful supplier at the fax number or email address given by the potential supplier and will be deemed to be received on the date it is faxed or emailed.

**PART B      SPECIFICATIONS**

**VEHICLE REQUIREMENTS**

The following are the approved makes and models that comply with this specification:

<u>Make:</u>	<u>Model:</u>
International	H.V
Western Star	4700 S.F.A.
Freight Liner	114 S.F.A.

Approved Engine: Cummins or Detroit Minimum 400 HP

Vehicle Supplied must include the following features and meet or exceed the following standards;

	<b>THE TOWNSHIP OF KILLALOE, HAGARTY AND RICHARDS' MINIMUM REQUIREMENTS</b>	<b>SUPPLIER PROPOSAL</b>
1	<p>MAKE AND MODEL:</p> <ul style="list-style-type: none"> <li>- Specify make and model of unit.</li>   <li>- A 2018 model year, if available.</li> </ul>	<p>Specify:</p> <p>Make: _____</p> <p>Model: _____</p> <p>Year: _____</p> <p>Yes: _____      No: _____</p>

2	<p>CMVSA</p> <ul style="list-style-type: none"> <li>- Vehicles shall meet or surpass the mandatory requirements of the Canada Motor Vehicle Safety Act and the vehicles must bare the national Safety Mark.</li> </ul>	<p>Yes: _____ No: _____</p>
3	<p>GROSS WEIGHT RATINGS:</p> <ul style="list-style-type: none"> <li>- G.V.W.R. 28, 144 kg. (62,000 lbs) minimum.</li> <li>- G.A.W.R. – Front – 10,000 kg. (22,000 lbs) minimum.</li> <li>- G.A.W.R. – Rear – 20,000 kg. (46,000 LBS) minimum.</li> <li>- The allowable G.V.W.R. as supplied shall be shown on a metal or mylar tag.</li> </ul>	<p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>YES: _____ NO: _____</p>
4	<p>AXLES:</p> <ul style="list-style-type: none"> <li>- Front axle shall be 10,000 kg. (22,000 lbs) capacity minimum. Front axle bearings shall be in 100% synthetic oil.</li> <li>- Front bumper to centre line of front axle distance shall be 38"</li> <li>- Rear tandem axle shall be 20,000 kg. (46,000lbs) capacity minimum, dual drive with interaxle differential and four-way lockup on rear differential in cab, driver controlled interaxle differential lockouts. Differential shall be 100% synthetic oil</li> <li>- Rear tandem axle shall be single speed with 1,538 mm (60") spread.</li> <li>- Following the approved axle: Rockwell 4.56 18 – 10 Drive Line – Half Round U-Joints/Yokes.</li> </ul>	<p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>SPECIFY MODLE: _____</p> <p>CAPACITY: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY MAKE: _____</p> <p>MODEL: _____</p>



	<ul style="list-style-type: none"> <li>- Road speed in low gear at maximum torque RPM shall not exceed 8 km/h. Road speed in top gear at governed RPM shall be 105 km/h.</li> <li>- Power steering shall be supplied with dual steering boxes.</li> <li>- An all wheel lock-up system operated from the cab shall be supplied.</li> </ul>	<p>SPECIFY TOP GEAR SPEED_____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
5	<p><b>BRAKES:</b></p> <ul style="list-style-type: none"> <li>- A full tractor package shall be supplied with air and electrical plumb to the end of the frame including glad hands and covers and 7 wire electrical plug.</li> <li>- Service Brakes – full air brakes “S” Cam drum type shall be supplied.</li> <li>- Front brakes size 406 mm x 152 mm (15” x 6”) or 419 mm x 127 mm (16.5” x 5”) drum type, minimum shall be supplied.</li> <li>- Rear brakes size 419 mm x 177 mm (16 ½” x 7”) minimum shall be supplied</li> <li>- Dust shields front and rear shall be supplied.</li> <li>- Positive rear wheel spring loaded parking brake on all four wheels, air reservoir and instrument panel control switch, shall be supplied.</li> <li>- Means shall be provided to release the parking brakes from the cab with no pressure in the main air reservoir, but with air pressure remaining in either secondary reservoir.</li> <li>- Low air pressure indicator shall be supplied.</li> <li>- Automatic drain valve shall be supplied with heater to drain moisture from the main air tank mounted in a safe manner (BW – DV – 2 valve or approved equivalent).</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY</p>

	<p><b>SPECIFICATION:</b></p> <ul style="list-style-type: none"> <li>- Air dryer – Bendix AD – 9 with heater or equivalent shall be supplied.</li> <li>- Berg pull – cord drain valves shall be supplied.</li> <li>- 4 - wheel rear maxi chambers shall be provided.</li> <li>- Asbestos – free brake lining shall be supplied.</li> <li>- Automatic slack adjusters shall be supplied.</li> <li>- Brake adjuster indicators shall be supplied.</li> <li>- Air compressor – 6.23 1/s (13.2 cfm) minimum (Cummins or BW – 550) shall be supplied.</li> </ul>	<p>MAKE: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY</p> <p>CFM: _____</p>
6	<p><b>FRAME:</b></p> <ul style="list-style-type: none"> <li>- Section modulus shall be 19.8 in minimum</li> <li>- Frame yield strength shall be 120,000 psi minimum</li> <li>- RBM shall be 2,500,000 lbs. in. minimum.</li> <li>- Specify frame dimensions. (depth, width, thickness).</li> <li>- The After Frame (AF) dimension shall be a minimum of 1,905 mm (75 inches)</li> <li>- Specify dimensions of reinforcement if equipped.</li> <li>- Mounting of snowplow cheek plates shall be possible.</li> </ul>	<p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>SPECIFY: _____</p> <p>YES: _____ NO: _____</p>

	<ul style="list-style-type: none"> <li>- Must be a double frame</li> </ul>	YES: _____ NO: _____
7	<b>SUSPENSION:</b> <ul style="list-style-type: none"> <li>- C.A. shall be 3385 mm (132") approximately clear. Dealer must contact equipment installer to determine proper C.A.</li> <li>- Wheelbase shall be 204" approximately.</li> <li>- Front shock absorbers shall be supplied</li> <li>- Rear suspension shall be 46,000 lb. Hendrex's HMX with rear shocks.</li> </ul>	SPECIFY: _____  SPECIFY: _____  YES: _____ NO: _____  SPECIFY: _____
8	<b>WHEELS AND TIRES:</b> <ul style="list-style-type: none"> <li>- Dual rear wheels shall be supplied.</li> <li>- Two (2) front, first line steel belted radial tubeless type tires.</li> <li>- 425/65R22.5 20 Ply – Load range "L" shall be supplied.</li> <li>- Eight (8) rear, first line steel belted radial tubeless type tires 11.00 R22.5 -Load Range "H" 914 ply) shall be supplied</li> <li>- Tread Design – Front – Standard Highway tread Acceptable tires –  Front - Michelin XZY or equivalent.</li> </ul>	YES: _____ NO: _____  YES: _____ NO: _____  SPECIFY SIZE: _____  LOAD RANGE: _____  YES: _____ NO: _____ SPECIFY SIZE: _____  LOAD RANGE: _____  YES: _____ NO: _____  SPECIFY MAKE: _____  SPECIFY MAKE:

	<p>Rear - Michelin XDS or equivalent approved by municipality.</p> <ul style="list-style-type: none"> <li>- Two (2) aluminum wheel rims 571 mm x 311 mm (22.5 x 12.25)</li> <li>- Eight (8) aluminum wheel rims 571 mm x 209 mm (22.5 x 8.25)</li> <li>- Rims must have a load capacity and pressure rating equal to or exceeding the ratings of the tires.</li> <li>- Aluminum rims with hub pilot bud wheels and wheel not torque indicators shall be supplied.</li> </ul>	<p>_____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY PRESSURE RATING FRONT: _____</p> <p>REAR: _____</p> <p>YES: _____ NO: _____</p>
9	<p><b>ENGINE</b></p> <ul style="list-style-type: none"> <li>- Cummings or Detroit – Diesel, water cooled, in-line, four stroke cycle, six-cylinder, wet sleeved engine governed at 2150 R.P.M.</li> <li>- Engine shall include Jake Brake.</li> <li>- Engine gross power – 400 H.P. minimum within governed R.P.M. range (SAE J 1349)</li> <li>- Must be equipped with a block heater.</li> <li>- The engine shall come with standard base warranty.</li> </ul>	<p>YES: _____ NO: _____</p> <p>SPECIFY MAKE: _____</p> <p>MODEL: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY K W (H.P.): _____</p> <p>R.P.M.: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY: _____</p>

	<p>*Note: Required engine ratings must be set at the time of engine manufacture. Engines with locally altered ratings are not acceptable.</p>	
10	<p><b>TRANSMISSION:</b></p> <ul style="list-style-type: none"> <li>- Shall be ten (10) speeds forward, single stick type and two (2) reverse air shift.</li>   <li>- Approved Transmission: Fuller Fro – 15210C or compatible.</li>   <li>- The bell housing shall be cast iron.</li>   <li>- The transmission shall be supplied with 100% synthetic lubrication oil, approved for extended warranty.</li> </ul>	<p>YES: _____ NO: _____</p> <p>SPECIFY MAKE: _____</p> <p>MODEL: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
11	<p><b>CLUTCH:</b></p> <ul style="list-style-type: none"> <li>- Heavy Duty – 15.5” diameter, dual plate organic or ceramic button type shall be supplied.</li> </ul>	<p>SPECIFY: _____</p>
12	<p><b>ENGINE EQUIPMENT:</b></p> <ul style="list-style-type: none"> <li>- Key on/Key off engine control shall be supplied.</li>   <li>- Alternator – shall be 135 amp. capacity, minimum with built in diode rectifiers and shielded slip rings and brushes or be brushless.</li>   <li>- The alternator capacity at idle shall be at least 25 amperes.</li> </ul>	<p>YES: _____ NO: _____</p> <p>SPECIFY MAKE: _____</p> <p>MODEL: _____</p> <p>NORMAL CAPACITY: _____</p> <p>IDLE CAPACITY: _____</p>

	<ul style="list-style-type: none"> <li>- The SAE rating shall be combined 12 volt, 1950 C.C.A. minimum.</li> <li>- If the batteries are mounted behind the cab, they shall be on the left-hand side and be easily accessible for service.</li> <li>- Battery – maintenance free batteries shall be provided – 1950 C.C.A. minimum.</li> <li>- Governor – engine governor built-in type.</li> <li>- High temperature and low oil pressure engine protection alarm bell or buzz device shall be installed or electronic engine warning system.</li> <li>- A heavy duty two stage dry type air cleaner, including inside/outside air option air cleaner to be mounted on the driver’s side shall be supplied.</li> <li>- Oil filter – full flow type with bypass filter shall be supplied.</li> <li>- A heavy-duty fuel water separator with heater and sight glass shall be supplied, (Conmet CM – 99 – 327D or approved equal) mounted outside left frame rail behind cab or under front hood.</li> <li>- An automatic temperature controlled on/off fan clutch with a fan over-ride switch shall be supplied.</li> <li>- Engine hood shall be forward tilting with adequate access panels for easy engine access.</li> <li>- Exhaust – the muffler shall be vertical if possible. If the muffler is horizontal it shall have 500m/15” ground clearance and the exhaust pipe shall be vertical. The whole installation shall not interfere with the mounting of a snow-plow wing tower.</li> </ul>	<p>SPECIFY C.C.A.:</p> <p>_____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY TYPE:</p> <p>_____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
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	<ul style="list-style-type: none"> <li>- Corrosion resistor (spin on water filter) for engine coolant shall be supplied.</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
13	<p><b>CAB</b></p> <ul style="list-style-type: none"> <li>- Rear air suspended conventional cab shall be supplied.</li> <li>- Seats – separated air suspension driver and passenger seats shall be supplied.</li> <li>- Both seats shall be fully padded, heavy-duty cloth upholstery construction, foam rubber seat cushions, high back, adjustable fore and aft.</li> <li>- Outside visor shall be supplied.</li> <li>- Windshield wipers – dual, tow -speed electric, intermittent feature and electric washer pump shall be supplied.</li> <li>- Air conditioning shall be supplied.</li> <li>- Tachometer shall be supplied.</li> <li>- An hour meter either an electronic type or with ant vibration mount – Hobbs M-3888 Damerer equal mounted inside cab shall be supplied.</li> <li>- Seat belts – two (2) three (3) point with retractors shall be supplied.</li> <li>- Rubber floor mat shall be supplied.</li> <li>- Mirrors – two (2) outside 6” x 16” WEST COAST type mirrors complete with power adjustment four (4) ways and built in heaters and clearance lights shall be supplied.</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

	<ul style="list-style-type: none"> <li>- A heated windshield shall be supplied.</li> <li>- Two (2) heated convex mirrors hood fender mounted.</li> <li>- Grab bars on each side to assist entry and exit from the cab shall be supplied.</li> <li>- Rain gutters or drip mouldings shall be supplied.</li> <li>- Dual air horn with snow shield shall be supplied.</li> <li>- Armrests shall be supplied.</li> <li>- Electronic engine shall come with electric throttle and cruise control.</li> <li>- Tilt steering column mandatory.</li> <li>- Supplementary cab insulation to suppress engine noise shall be supplied.</li> <li>- AM/FM radio (electronic) with clock shall be supplied.</li> <li>- Must be equipped with Bluetooth technology.</li> <li>- Power operated side windows with a switch accessible by the driver and passenger.</li> <li>- Lower and intermediate footsteps, both sides shall be supplied.</li> <li>- A terminal panel shall be incorporated into the wiring system to access the following wiring circuits to add additional lighting for the body installation.</li> <li>- Left, Right Turn Parking Lights Back-up Lights Independent Brake Light</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>SPECIFY LOCATION:  _____</p> <p>_____</p> <p>_____</p> <p>_____</p>
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	<ul style="list-style-type: none"> <li>- The terminal panel shall be located inside the cab, preferably on the rear cab panel.</li> </ul>	YES: _____ NO: _____
14	<p><b>FUEL TANK</b></p> <ul style="list-style-type: none"> <li>- An aluminum 100 gallon minimum step tank mounted on the left side shall be provided. <u>Dual tanks are not acceptable.</u></li> <li>- Minimum Clearance from ground shall be 305 mm (12")</li> <li>- Anti – freeze to 40°C shall be supplied.</li> <li>- For snowplowing purposes, hydraulic driveshaft must be below the rad.</li> <li>- Front mounted pump without opening through the radiator.</li> </ul>	YES: _____ NO: _____ SPECIFY: _____ CAPACITY: _____ TYPE: _____  YES: _____ NO: _____  YES: _____ NO: _____  YES: _____ NO: _____  YES: _____ NO: _____
	<p><b>AUTOMATIC GREASING SYSTEM:</b></p> <ul style="list-style-type: none"> <li>- System to be installed on the vehicle and tested.</li> <li>- A system with all brass or stainless steel injectors, fittings, distribution blocks and connectors.</li> <li>- A system with a 4 kg grease reservoir.</li> <li>- A system with a pneumatic pump unit with follower plate and clear reservoir.</li> <li>- A system with nylon lines, stainless steel or copper/nickel line, wire braid/hytron hydraulic lines.</li> <li>- A system with heavy-duty corrosion-resistant pistons and cylinder linings in the “air” side of the system.</li> </ul>	YES: _____ NO: _____  YES: _____ NO: _____  YES: _____ NO: _____  YES: _____ NO: _____  YES: _____ NO: _____

	<ul style="list-style-type: none"> <li>- A system with a closed sealed reservoir that can only be filled through an in-line grease filter.</li> <li>- A system that delivers a minimum of 950 psi to the grease points.</li> <li>- A system with a corrosion resistant pump housing that can be rebuilt.</li> <li>- Electronics installed in the cab.</li> <li>- An audible alarm in the timer to alert operator and; <ul style="list-style-type: none"> <li>In cab system working light (green)</li> <li>In cab warning light (red)</li> </ul> </li> <li>- A system pressure check built into the timer when minimally 50% of the greasing cycle is complete.</li> <li>- A timing system capable to readout: # cycles, # of alarms and consecutive alarms.</li> <li>- A parallel/single line operating principle.</li> <li>- A system that is built by an ISO 9001 registered company.</li> <li>- A system that is supported by a strong service network and thorough training program.</li> <li>- Options included: <ul style="list-style-type: none"> <li>Automatic low – level warning light in the cab.</li> <li>Automatic low – level warning and automatic shut off feature.</li> <li>Extra grease and filler pump.</li> </ul> </li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
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15	<p><b>LIGHTING:</b></p> <ul style="list-style-type: none"> <li>- 1 pair halogen sealed beam, shock mounted headlamps, rectangular, with hi/low beam and turn signals, on the plow frame.</li> <li>- 1 plow spotlight on the front wing post.</li> <li>- 1 wing floodlight on the plow frame.</li> <li>- 2 spinner floodlight.</li> <li>- 1 set of body clearance/identification lights.</li> <li>- 1 of each 6" diameter blue and amber rear flashing light.</li> <li>- 1 LED strobe light with blue and amber mounted behind cab.</li> <li>- Two (2) fender mounted, 100 mm (4") diameter amber directional lights, facing front shall be supplied.</li> <li>- Rear red directional lights shall be supplied.</li> <li>- Stoplight shall be supplied.</li> <li>- Five (5) cab identification lights shall be supplied.</li> <li>- Four-way flasher shall be supplied.</li> <li>- Back-up lights shall be supplied.</li> <li>- Halogen headlights shall be supplied.</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
16	<p><b>PAINT:</b></p> <ul style="list-style-type: none"> <li>- International Red # 2303 or equivalent.</li> </ul>	<p>YES: _____ NO: _____</p>
17	<p><b>ATTACHMENTS:</b></p>	<p>YES: _____ NO: _____</p>

	<ul style="list-style-type: none"> <li>- Operator's manual and line ticket shall be supplied.</li> <li>- Service manual shall be supplied.</li> <li>- Back-up sound alarm shall be supplied.</li> <li>- Flare kit as per M.T.O. Spec. 1919 – 5A shall be supplied.</li> <li>- A 5 lb A-B-C Fire Extinguisher and Mounting bracket shall be supplied.</li> <li>- A first aid kit shall be supplied.</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
18	<p>WARRANTY:</p> <ul style="list-style-type: none"> <li>- The truck shall be covered by the standard manufacturer's warranty. A description of which shall be included with these RFP documents.</li> <li>- Where minimums are called for, the vehicle must meet or exceed the capacity, size of performance specified.</li> <li>- This specification lists only the major details of a unit; therefore, it is the supplier's responsibility to deliver a fully equipped vehicle with compatible components to provide dependable efficient service.</li> <li>- RFP units must comply with the following specifications in all aspects. Alternative components which meet the requirements of this specification but are not identified in their specification must be approved by the Township Road staff prior to RFP closing.</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
19	<p>NOTE:</p> <ul style="list-style-type: none"> <li>- It will be the responsibility of the supplier to obtain any M.T.O Standards referred to in the foregoing specifications.</li> </ul>	<p>YES: _____ NO: _____</p>

	<ul style="list-style-type: none"> <li>- Undercoating shall be provided by Krown or equivalent, to the cab and chassis, sanding conveyors, tailgate and box.</li> <li>- Vehicle shall be supplied with a valid Preventative Maintenance/Compulsory Vehicle Inspection (PMCVI) sticker.</li> <li>- Does your company have an accessibility plan in place?</li> <li>- If the Unit requires repairs or alterations upon inspection on the delivery date, any cost incurred will not be the responsibility of the Township of Killaloe, Hagarty and Richards, including labour or delivery costs of the Unit to where repairs may have to be performed.</li> <li>- The cab and chassis must be compatible with the snowplow harness to do the job without any hazardous situations.</li> </ul>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
20	<p>DELIVERY:</p> <ul style="list-style-type: none"> <li>- Delivery of the complete unit shall be on or before <u>Thursday November 1<sup>st</sup>, 2018.</u></li> </ul>	<p>YES: _____ NO: _____</p>

**ALL SEASON COMBINATION DUMP BODY / SPREADER REQUIREMENTS**

	<p>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 and right side of dump box.</p>	<p>YES: _____ NO: _____</p>
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	<p><b>Viking model Proline PL1415LW-II or equivalent approved by the municipality</b></p> <p>SPECIFY:  MAKE: _____  MODEL: _____</p>	<p>YES: _____ NO: _____</p>
<p>1</p>	<p><b><u>DIMENSIONS:</u></b></p> <p>To provide optimum combination of legal payload and capacity all dimensions below are maximum / minimum and will be exactly as specified.</p> <p>Body shall be oval shaped, permitting materials to unload by gravity flow onto spreading chain.</p> <p>Total weight of the complete body assembly in ready to work condition including hoist, tarp, tailgate, cross conveyor, main conveyor, and all other required components not to exceed 6,800lbs.</p> <p>SPECIFY: _____ LBS.</p> <p>Water level capacity will be 10.7 cu. yd.</p> <p>SPECIFY: _____</p> <p>Water level capacity with 10" sideboards will be 13.8 cu.yd. – sideboards to be provided. Must be steel tubing.</p> <p>SPECIFY: _____</p> <p>Outside length 15ft.</p> <p>SPECIFY: _____</p> <p>Inside length 14ft.</p> <p>SPECIFY: _____</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

	<p>Overall width outside 96" SPECIFY: _____</p> <p>Overall width inside 86" SPECIFY: _____</p> <p>Height of sides 45" from conveyor floor. SPECIFY: _____</p> <p>Height of tailgate 53" from conveyor floor SPECIFY: _____</p> <p>Height of front panel 60" SPECIFY: _____</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
2	<p><b><u>CONSTRUCTION:</u></b></p> <p>Body to be constructed from one (1) piece head sheet and side panels.</p> <p>The front head of the body will be completely clean and clear of any type of recesses or protrusions into the body including hoist dog houses, bulkheads, etc.</p> <p>Body front panel will be sloped design, sloping rearward from top to the bottom</p> <p>SPECIFY DEGREE: _____</p> <p>The front panel slope will be continuous and uninterrupted for the full length from top to bottom.</p> <p>Top rail of body will be 4" x 4" x 1/4" square tubing</p> <p>All body welds will be 100% continuous inside and outside</p> <p>Body front head 3/16" Cor-ten "A"</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

	<p>Body sides 3/16" Cor-ten "A"</p> <p>Rear vertical corner posts will be 10 ga. sheet steel, fabricated in such a way as to include provision for rear facing lighting requirements.</p> <p>Rear vertical corner-posts to be tied to radius side panels and horizontal top rails and welded 100 percent.</p> <p>Rear vertical corner-posts to be connected to main conveyor via a rear horizontal 3" x 8" x 3/8" wall HSS tube spanning the full body width.</p> <p>Body construction shall include integral side fenders fabricated from a minimum 10 GA Cor-ten A corrosion resistant material.</p> <p>Fenders shall be full length from front to rear of body.</p> <p>One fender right side and one fender left side shall be provided.</p> <p>Integral fenders to be sloped away from unit to prevent any excess material spilled during loading from building/piling up.</p> <p>Dump box access ladder shall be 15" wide, two piece fold-up ladder located at the front driver's side of body.</p> <p>Access ladder will be manufactured from safety grip strut material.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
3	<p><u>HOIST:</u></p> <p>Mailhot Nitrided top lift 3 stage telescopic hoist "C" series Model CS-130-5-3</p> <p>Hoist lift cylinder to be forward mounted three (3) stage top lift telescopic.</p> <p>Hoist capacity shall be 30 ton @ 2,000 P.S.I.</p> <p>Hoist cylinder will be rod sealed.</p> <p>Special Mailhot coating to provide protection to hoist seals in spreader position.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>



	<p>Cylinder stroke shall be 130"</p> <p>Dump box dump angle shall be variable to 50 degrees from horizontal.</p> <p>There will be no hoist doghouse protruding into front head of body, hoist will be external mounted to provide flat body front head.</p> <p>Rear hinge diameter shall be 2 ½" minimum – no exception.</p> <p>Hoist control valve shall be air operated from inside cab.</p> <p>The body to be equipped with a positive locking support brace integral with rear dump hinge.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
4	<p><u>TAILGATE:</u></p> <p>Tailgate shall be double acting.</p> <p>Tailgate height shall be 53" from conveyor floor.</p> <p>SPECIFY: _____</p> <p>Upper hinge plates to be offset design flame cut from 1" steel plate.</p> <p>Tailgate shall be rectangle shaped to allow use of asphalt or stone chip spreader.</p> <p>Construction shall be of 3/16" Cor-Ten "A" steel with 3/16" formed cross bracing.</p> <p>Exterior vertical side support tubes to be 3 ½" x 3 ½" x ¼" wall HSS tubing.</p> <p>Latch mechanism for the tailgate shall be air trip using two air pot chambers actuated from inside cab – single air pot chamber design will not be acceptable.</p> <p>Brake chambers directly coupled to ½" thick flame cut latches.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

	<p>Brake chambers one right side and one left side enclosed and protected by integral body fenders.</p> <p>Spreader chains and brackets shall be supplied on tailgate and rear apron. Chain shall be grade 70 coil proof 5/16" minimum.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
5	<p><b><u>MAIN CONVEYOR:</u></b></p> <p>The main conveyor shall be centered and recessed along the length of dump box floor.</p> <p>Three-piece formed construction minimum 25" wide.</p> <p>Constructed of 1/4" Cor-ten "A"</p> <p>Conveyor floor 1/4" Hardox 450</p> <p>SPECIFY: _____</p> <p>Permanent non-removable built in protective main conveyor chain link covers.</p> <p>The protective covers will run from the front to the rear of the body right and left side of the main conveyor.</p> <p>The protective non-removable main conveyor link covers will cover and protect the main conveyor chain links from damage by impact at all times in all operation modes.</p> <p>In addition to the permanent non-removable main conveyor chain link covers a second quick removable conveyor chain cover will be supplied.</p> <p>The removable cover will protect the main conveyor floor and conveyor chain cross flights from damage by impact when installed.</p> <p>The removable main conveyor cover will be manufactured from 3/8" 2 ply high temperature rubber.</p> <p>The removable main conveyor cover will self-feed into place to allow fast and simple installation.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

<p>Self-feeding will be achieved by simply attaching the conveyor cover to a main conveyor chain cross flight at the tailgate (idler end), starting the main conveyor will pull the cover into place under the permanent non-removable protective steel chain link covers.</p>	<p>YES: _____ NO: _____</p>
<p>The removable rubber cover will be complete with attachment brackets to couple easily and directly to main conveyor chain cross flights.</p>	<p>YES: _____ NO: _____</p>
<p>Removal of the rubber conveyor cover from the body will be accomplished by starting the main conveyor, which will then feed the cover out through the front material discharge gate.</p>	<p>YES: _____ NO: _____</p>
<p>Installation and removable of the rubber main conveyor cover into or out of the spreader body will be a one-man operation.</p>	<p>YES: _____ NO: _____</p>
<p>Conveyor chain to be self-cleaning D667 pintle type with a minimum tensile strength of 21,700 PSI, spaced apart 21" on center.</p>	<p>YES: _____ NO: _____</p>
<p>3/8" x 1 1/2" cross flights welded to every 2<sup>nd</sup> link (approx. 4.5" spacing).</p>	<p>YES: _____ NO: _____</p>
<p>All conveyor flights shall be 100% fully welded to the chain links.</p>	<p>YES: _____ NO: _____</p>
<p>Drive and idler shafts to be two (2) inches diameter.</p>	<p>YES: _____ NO: _____</p>
<p>Drive and idler shafts manufactured from high-resistance stress proofed SAMSON 100.</p>	<p>YES: _____ NO: _____</p>
<p>SPECIFY: _____</p>	<p>YES: _____ NO: _____</p>
<p>Drive and idler sprockets to be minimum eight-tooth cast steel.</p>	<p>YES: _____ NO: _____</p>
<p>All drive and idler sprockets to be minimum C1030 cast steel. SPECIFY: _____</p>	<p>YES: _____ NO: _____</p>
<p>Planetary drive for main conveyor.</p>	<p>YES: _____ NO: _____</p>

<p>Main conveyor drive shall be a single 25:1 high efficiency planetary drive with high torque low speed motor – standard 25 :1 gear boxes will not be acceptable.</p>	<p>YES: _____ NO: _____</p>
<p>The planetary drive shall deliver 50,000 IN/LB torque intermittent with 34,960 IN/LB constant.</p>	<p>YES: _____ NO: _____</p>
<p>Planetary drive close coupled to main conveyor shaft.</p>	<p>YES: _____ NO: _____</p>
<p>Specify make and model of planetary:</p> <p>MAKE: _____</p> <p>MODEL: _____</p>	<p>YES: _____ NO: _____</p>
<p>Connection of the planetary drive shaft to the main conveyor shaft shall be accomplished via a split two piece rectangular shaped coupler assembly.</p>	<p>YES: _____ NO: _____</p>
<p>The upper and lower half of the coupler assembly will be bolted together by (4) 5/8" x 4 1/2" N.C. Grade 8 Hex Head bolts.</p>	<p>YES: _____ NO: _____</p>
<p>Removal of the (4) coupling bolts will allow simple disassembly of the planetary drive shaft from the main conveyor shaft, for ease of maintenance.</p>	<p>YES: _____ NO: _____</p>
<p>The two main conveyor drive shaft flange bearings will be bolted directly to the body long sill weldments.</p>	<p>YES: _____ NO: _____</p>
<p>Each of the two body long sill weldment will be vertical slotted. Simply removing the drive shaft flange bearings and uncoupling the planetary and main conveyor drive shafts. The entire conveyor drive shaft assembly will drop out through the vertical long sill slots providing easy access and simple maintenance.</p>	<p>YES: _____ NO: _____</p>
<p>Idler end of main conveyor will also be vertical slotted drop out design as described above.</p>	<p>YES: _____ NO: _____</p>

	<p>Conveyor chain tension to be regulated via an automatic chain tensioning system. This tensioning system will provide appropriate chain tension for the main conveyor chain at all times and under all normal operating conditions – threaded rod or grease ram type chain tensioners will not be acceptable.</p> <p>The fully automated chain tensioner will eliminate the requirement for any manual chain tension adjusting mechanisms such as conventional threaded rod and nut tensioners or hydraulic grease ram tensioners.</p> <p>Automated chain tensioning system to be centrally located between main conveyor drive and idle shafts.</p> <p>Access to automated conveyor chain tensioning system shall be from the side(s) of the body.</p> <p>The flow control gate between main and cross conveyor shall be screw adjustable by hand crank from driver's side of dump body.</p> <p>The main conveyor flow control gate, will be flush and even with the front of the body, without any type of recess.</p> <p>Underside of main conveyor to be complete with full length poly guard to prevent material spillage on to chassis components and frame rails.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
6	<p><u>CROSS CONVEYOR:</u></p> <p>The cross conveyor shall be hydraulic direct drive.</p> <p>A cross conveyor assembly shall be used to discharge material from main conveyor to the right side, left side or both simultaneously via cross chain (no augers).</p> <p>Cross conveyor assembly to mount on chassis frame independent from and in front of main combination spreader unit.</p> <p>Cross conveyor unit shall be removable design to reduce added weight in non-spreading applications.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

	<p>Cross conveyor weldment shall be fabricated from a minimum 3/16" Cor-ten A corrosion resistant material.</p> <p>Cross conveyor chain to be fabricated from two strands of D662 pintle chain spaced apart 10 inches on center.</p> <p>Cross flights 100% welded to chain links.</p> <p>The cross conveyor chain shall be a pintle chain 3/16" x 1" crossers every 4" with a minimum tensile strength of 17,000 lbs.</p> <p>Cross conveyor assembly to include replaceable polymer guards to prevent material from entering between chain links.</p> <p>Cross conveyor assembly to provide provisions for mounting of material sand/salt chutes and spinner units.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
7	<p><b><u>SPINNER:</u></b></p> <p>A polyurethane spinner shall be installed on both the left hand side and right hand side to spread ahead of rear wheels.</p> <p>A 3.0 cubic inch hydraulic motor shall drive the spinner assembly.</p> <p>SPECIFY: _____</p> <p>The spinners height shall be adjustable from 20 to 28 inches below the mounting surface of the body.</p> <p>The spinners height shall be capable of spreading evenly up to a 20FT radius with a main operating range of 0 to 15 FT radius.</p> <p>Spinner assembly capable of discharge rate from 100 lbs./lane mile to 2,500 lbs./lane mile.</p> <p>Spinner position adjustable fore and aft horizontal along chassis frame rail.</p> <p>Spinner assembly will be flip up style allowing the spinner to be carried in an on board stored raised position.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

	<p>Hydraulic hoses to be spinner motor are to be complete with quick disconnect automatic sealing breakaway couplers and are to be assembled so that the male end may plug into the female end on the spinner motor and the hoist frame when the spinner assembly is disconnected.</p>	<p>YES: _____ NO: _____</p>
<p>8</p>	<p><u>LIGHTING:</u></p> <p>For improved rear visibility, provision for rear stop, tail and directional lights, as well as back up lights, to be mounted in rear corner posts within 3” of the outside of the tailgate shall be provided.</p> <p>Grote Ultra Blue Seal LED oval rear stop, tail and directional lights shall be provided in lower section of rear corner posts – 2 per side.</p> <p>Grote Ultra Blue Seal LED back-up lights shall be installed in mid section of rear corner posts – 1 per side.</p> <p>Grote blue and amber LED strobe lights shall be installed in each upper rear corner post.</p> <p>Rear blue and amber warning incandescent lights installed below body.</p> <p>3 in a row light cluster shall be supplied with mounting plate integral with dump hinge.</p> <p>2” round red clearance lights shall be provided in lower rear side corner posts.</p> <p>Spinner and cross conveyor lights shall be supplied.</p> <p>Star 200B blue and 200A amber strobe beacon lights to be installed on pedestal back of cab – separate in-cab switch for each beacon.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
<p>9</p>	<p><u>MUD FLAPS:</u></p> <p>Mud flaps shall be provided before and after of rear wheels, frame mounted via full width steel flat bar with access to put on rear wheel chains.</p>	<p>YES: _____ NO: _____</p>

10	<p><u>PAINT:</u></p> <p>The dump body shall be shot blasted and epoxy primed.</p> <p>Finish paint International Red #2303 or equivalent.</p> <p>SPECIFY PAINT TYPE: _____</p> <p>Finish paint to be baked on – no exception.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
11	<p><u>LOAD COVER:</u></p> <p>An air tarp shall be standard equipment with fabricated tarp arms dimensions of 1 ½" x 2 ½" steel tubing, 1/8" mesh tarp, powered by twin air cylinders operated from in the cab.</p>	<p>YES: _____ NO: _____</p>
12	<p><u>SCREENS:</u></p> <p>Body shall be equipped with heavy duty material screens, hinged from a center longitudinal tubular member of not less than 4" in diameter.</p> <p>Screen shall be woven mesh 0.375" rod into frame of 2" x 0.25" angle and securely to the central longitudinal member with pins of not less than 0.75" diameter.</p> <p>Mesh shall have maximum openings of 3".</p> <p>Screen shall not extend over the edge of the body and shall be pitched not less than 3.625" from center.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
13	<p><u>SANDER CONTROLS:</u></p> <p>A standard manual 2 knob spreader controller shall be supplied, plus switch to allow cross conveyer assembly to direct material to right side, left side or both from within the cab.</p> <p><b>Viking model VCL120HSE9 steel full trip one way snow plow or approved equivalent:</b></p> <p>SPECIFY:</p> <p>MAKE: _____</p> <p>Model: _____</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>



<p>This one way plow shall conform with the provisions of M.T.O. standards ES-414, except that the dimensions of this specification shall prevail when the two contradict.</p>	<p>YES: _____ NO: _____</p>
<p>The plow shall operate effectively and without modification with the M.T.O. snow plow truck harness as per spec ES-401.</p>	<p>YES: _____ NO: _____</p>
<p>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.</p>	<p>YES: _____ NO: _____</p>
<p>The plow shall have a hood extending 18" past the vertical centre line, in normal operating positions.</p>	<p>YES: _____ NO: _____</p>
<p>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%.</p>	<p>YES: _____ NO: _____</p>
<p>The thickness of the moldboard and hood shall be 10 U.S.S. ga. (.1345)</p>	<p>YES: _____ NO: _____</p>
<p>The moldboard shall be hydraulically pivoted to allow tilting in different positions.</p>	<p>YES: _____ NO: _____</p>
<p>The moldboard brace rod shall be hydraulically adjustable for plow angles of 45 degree, 50 degree and 55 degree. A hydraulic cylinder shall be connected to the male and female sections of the adjustable brace rod, with in-cab joystick control.</p>	<p>YES: _____ NO: _____</p>
<p>Male end of adjusting brace assembly to be solid steel.</p>	<p>YES: _____ NO: _____</p>
<p>Both male and female ends shall have 5/8" mounting pins.</p>	<p>YES: _____ NO: _____</p>
<p>The female end shall be at the top to prevent the accumulation of water.</p>	<p>YES: _____ NO: _____</p>

<p>Holes in drive bars for push frame shall be 1 ¼" diameter.</p>	<p>YES: _____ NO: _____</p>
<p>The distance from the centre line of the holes to the end of the drive bar shall be 1 ½".</p>	<p>YES: _____ NO: _____</p>
<p>The height of the moldboard at the top of curve shall be as follows:</p>	<p>YES: _____ NO: _____</p>
<p>Front End: 26" min.</p>	<p>YES: _____ NO: _____</p>
<p>Rear End: 54" min.</p>	<p>YES: _____ NO: _____</p>
<p>The overall length shall be 13'10"</p>	<p>YES: _____ NO: _____</p>
<p>The plow shall be fitted with two shoes as per M.T.O. ES-508.</p>	<p>YES: _____ NO: _____</p>
<p>There shall be eight vertical ribs, 3 ½" high by 3/8" thick. Minimum weld between the moldboard and rib shall be 100% weld each side.</p>	<p>YES: _____ NO: _____</p>
<p>The bottom rail on the moldboard shall be 5" x 3" x ½" angle below with a 3" x 2" x 3/8" gussets shall be welded between the two legs of the bottom angle, between each bolt hole, except for the two sets of end-holes and between two holes in the middle of the moldboard. The moldboard shall be continuously welded to the bottom rails.</p>	<p>YES: _____ NO: _____</p>
<p>The moldboard shall be designed for use with M.T.O. cutting edge ES-505 and with the M.T.O. standard nose piece ES-507. A carbide cutting edge and standard nose piece shall be supplied.</p>	<p>YES: _____ NO: _____</p>
<p>Moldboard shall have a total bearing area (pin dia. times web thickness times number of webs involved) or 4 ½" square inches minimum at the point where the drive links attach.</p>	<p>YES: _____ NO: _____</p>
<p>Trip links safety mechanism shall be incorporated the blade mechanism must return to the normal plowing position automatically. Trip springs must be secured with lock nuts.</p>	<p>YES: _____ NO: _____</p>

<p>Two separate lift chains shall be used and these shall pick up on the drive frame at points approximately 48" apart.</p>	<p>YES: _____ NO: _____</p>
<p>The height of the shoes shall be adjustable as shown on M.T.O. ES-521. Height adjustable one way snow plow shoe holder.</p>	<p>YES: _____ NO: _____</p>
<p>The shoes shall oscillate.</p>	<p>YES: _____ NO: _____</p>
<p>The moldboard shall be formed in the shape of a smooth curve.</p>	<p>YES: _____ NO: _____</p>
<p>The horizontal distance from the discharge end of the plow blade to the discharge end of the moldboard shall be 24" minimum.</p>	<p>YES: _____ NO: _____</p>
<p>A sturdy eye 1/2" thickness shall be provided at the centre of gravity for handling of the moldboard.</p>	<p>YES: _____ NO: _____</p>
<p>The design and quality shall meet M.T.O. requirements.</p>	<p>YES: _____ NO: _____</p>
<p>The complete snow plow unit shall be painted black as per M.T.O. ES-301.</p>	<p>YES: _____ NO: _____</p>
<p>36" high marker rods shall be installed on each side of the moldboard.</p>	<p>YES: _____ NO: _____</p>
<p>Rubber deflector to be installed along top edge of moldboard.</p>	<p>YES: _____ NO: _____</p>
<p>Driveframe shall be equipped with quick tach style swivel bar.</p>	<p>YES: _____ NO: _____</p>
<p>A spare parts manual shall be supplied.</p>	<p>YES: _____ NO: _____</p>
<p>A signed manufacturer's warranty shall be supplied.</p>	<p>YES: _____ NO: _____</p>
<p><b>Viking model VCL500T hydraulic tilt front plow harness or approved equivalent:</b></p> <p>SPECIFY:</p> <p>MAKE: _____</p> <p>MODEL: _____</p>	<p>YES: _____ NO: _____</p>

<p>The front plow harness will tilt forward to allow the chassis hood to tilt forward over centre of its pivots and stay open without the need of any additional supports.</p>	<p>YES: _____ NO: _____</p>
<p>The harness tilt and return function will be performed by the operator from inside the chassis cab via proportional air over hydraulic control.</p>	<p>YES: _____ NO: _____</p>
<p>One single locking shaft will be manually removed prior to performing the tilt function – dual load bearing pin designs to unlock front harness will not be accepted.</p>	<p>YES: _____ NO: _____</p>
<p>The locking shaft shall be non-load bearing design with no weight actually on the shaft</p>	<p>YES: _____ NO: _____</p>
<p>The single lock shaft will have an outside diameter of 1 ½” inches and overall length will be a minimum of 30 inches.</p>	<p>YES: _____ NO: _____</p>
<p>A handle will be provided on one end of the lock shaft 4 inches square, 3/8-inch tube by ¾ inch the other end will be chamfered at 30° degrees.</p>	<p>YES: _____ NO: _____</p>
<p>The lock shaft will when installed be located inside the full length connecting tube.</p>	<p>YES: _____ NO: _____</p>
<p>The connecting tube and lock shaft assembly will together form the upper connection point of the cheek plate weldment to the front plate assembly.</p>	<p>YES: _____ NO: _____</p>
<p>The connecting tube overall length will be 23 3/8” inch, inside 1.612” inches, outside diameter 1.90” inches.</p>	<p>YES: _____ NO: _____</p>
<p>The hydraulic power tilt cylinder will be double acting 2 ½ inches with a 6-inch stroke chrome piston rod.</p>	<p>YES: _____ NO: _____</p>
<p>Two lower pivot tubes will be provided, the outer pivot tube will be connected to the right and left side cheek plates, the inner pivot tube will be permanently attached to the front plate assembly.</p>	<p>YES: _____ NO: _____</p>
<p>The inner pivot tube will rotate forward inside the outer pivot tube allowing the front plate assembly to travel forward into the tilted position and will rotate rearward to return the front assembly to the normal working position.</p>	<p>YES: _____ NO: _____</p>

	<p>The inner pivot tube will be 4 inches outside diameter 2 3/4 inches inside diameter, 52 inch long seamless mechanical tubing.</p>	<p>YES: _____ NO: _____</p>
	<p>There will be two inner pivot tube gussets 1/2 inch plate, 18 13/16 inches long, 5 inches wide tapered to 2 1/4 inches.</p>	<p>YES: _____ NO: _____</p>
	<p>End plate located on inner tube 1/2" material 12" x 6" to provide lower mounting location for wing front post.</p>	<p>YES: _____ NO: _____</p>
	<p>The outer pivot tube will be 5 9/16" outside diameter, 4 1/16" inside diameter, 25 3/8 inch long extra heavy pipe.</p>	<p>YES: _____ NO: _____</p>
	<p>There will be two outer pivot tube gussets 1/2 inch plate, 8 inch x 8 inch triangular.</p>	<p>YES: _____ NO: _____</p>
	<p>Outer pivot tube fitted with three 1/8-inch NPT Grease fittings for lubrication, one each located approximately 2 inches in from the end of the tube and one located in the centre.</p>	<p>YES: _____ NO: _____</p>
	<p>The front plate will be one solid piece of 3/8 inch steel plate with cut out of sufficient size to allow cooling of the chassis radiator.</p>	<p>YES: _____ NO: _____</p>
	<p>Overall height of the front plate will be 49 inches with a 5.25 inch 90° degree bend at the bottom.</p>	<p>YES: _____ NO: _____</p>
	<p>Overall height of the front plate will be 49 inches with a 5.25 inch 90° degree bend at the bottom.</p>	<p>YES: _____ NO: _____</p>
	<p>Right and left side plates, 15 3/4" maximum width by 49 1/4" high by 3/8" plate welded to the front plate.</p>	<p>YES: _____ NO: _____</p>
	<p>Upper cross channel 6" by 52" at 13 lbs./ft. welded to the right and left side plates</p>	<p>YES: _____ NO: _____</p>
	<p>End plate located on upper cross channel 1/2" material 12" x 6" to provide upper mounting location for wing front post</p>	<p>YES: _____ NO: _____</p>
	<p>1/2" steel plate pump and tilt cylinder mounting bracket welded to the cheek plate assembly, 24 1/4" wide by 18 1/2".</p>	<p>YES: _____ NO: _____</p>

<p>Cheek plates will be specified to suit chassis frame rails, 1/2" steel plate and will extend back along the chassis frame rails as far as possible.</p>	<p>YES: _____ NO: _____</p>
<p>Cheek plates flame cut from 44W steel plate. SPECIFY: Minimum Yield: _____ Minimum Tensile: _____</p>	<p>YES: _____ NO: _____</p>
<p>Fasteners attaching cheek plates to the chassis frame rails will be minimum grade 8 N.C. hex head bolts</p>	<p>YES: _____ NO: _____</p>
<p>Two pairs of drive ears 100% welded to the front plate spaced at standard 30 1/2" centers</p>	<p>YES: _____ NO: _____</p>
<p>Three sets of plow drive bar connection holes located in drive ears - height to lower drive connection 19" mounted with truck empty</p>	<p>YES: _____ NO: _____</p>
<p>Quick-tack hitch pockets bolted to drive ears</p>	<p>YES: _____ NO: _____</p>
<p>Hydraulic plow lift cylinder, double acting 4" diameter with 10" stroke, cylinder rod chrome plated</p>	<p>YES: _____ NO: _____</p>
<p>Plow lift yoke 3/4" steel plate, braced with two 1/4" x 2" flat bar diagonal braces.</p>	<p>YES: _____ NO: _____</p>
<p>Two mounting locations in lift yoke to provide location for mounting of plow hydraulic lift cylinder in winter operating position and stored summer position</p>	<p>YES: _____ NO: _____</p>
<p>Mounting plates for plow lift cylinder, lift yoke and lift yoke braces all 1/2" steel plate 100% welded to front plate.</p>	<p>YES: _____ NO: _____</p>
<p>Two sealed beam halogen plow lights with high and low beam and built in integral directional's with switch in cab</p>	<p>YES: _____ NO: _____</p>
<p>Two independent double acting valve sections will be incorporated in the valve stack, one section will provide hydraulic power for the plow lift function and the second valve section will provide hydraulic power for the hydraulic power tilt function.</p>	<p>YES: _____ NO: _____</p>

<p>Two independent in cab feather joystick air controls will be pedestal mounted inside the chassis cab, one control will operate exclusively the plow lift function and the second control will operate exclusively the hydraulic power tilt function.</p>	<p>YES: _____ NO: _____</p>
<p>Lift yoke brace mounting plates positioned to provide minimum 23.5" span.</p>	<p>YES: _____ NO: _____</p>
<p><b>Viking model VCL275AHW All Hydraulic Type Wing Harness or approved equivalent:</b></p>	
<p>SPECIFY:</p>	
<p>MAKE: _____</p>	
<p>MODEL: _____</p>	<p>YES: _____ NO: _____</p>
<p>These specifications describe an all hydraulic, single push arm, towerless wing harness, with the ability to perform a high shelving operation and hydraulic extend and / or retract the wing to increase or decrease the cleared path.</p>	<p>YES: _____ NO: _____</p>
<p>The wing operation shall be fully hydraulic, without the use of any sheaves, pulleys or cables.</p>	<p>YES: _____ NO: _____</p>
<p>With the wing raised to the high shelving position, the distance from the bottom of the cutting edge to ground level will be 24 to 30 inches.</p>	<p>YES: _____ NO: _____</p>
<p>The wing post shall be made of 8" I-Beam, 18.4 lb/ft, minimum – no exception. Cross member shall be of heavy construction to sustain snow-plowing operation in severe conditions.</p>	<p>YES: _____ NO: _____</p>
<p>The front post will be a minimum of 48" in height.</p>	<p>YES: _____ NO: _____</p>
<p>To lift the front of the wing a 3" x 48" double acting hydraulic cylinder will be mounted in the rear inside of the front post.</p>	<p>YES: _____ NO: _____</p>
<p>Guide bars will be provided for the slide assembly running, for the full height of the wing post.</p>	<p>YES: _____ NO: _____</p>
<p>A safety stop, limited slide travel shall be supplied.</p>	<p>YES: _____ NO: _____</p>

	<p>The main supporting member for the front post shall be 4" OD x 2-3/4" ID x 5/8" wall tube crossmember running through both cheekplates, reinforced with a 1/2" steel plate between the cheekplate and front post.</p> <p>The auxiliary support shall be a 6" x 13 lb/ft channel running across the top of both cheekplates.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
14	<p><b><u>TRIP HINGE &amp; SLIDE ASSEMBLY:</u></b></p> <p>Front slide to be provided with a safety trip hinge assembly, the wing will return to the normal position after it has tripped.</p> <p>The safety trip block will be vertically mounted on the trip hinge above the inner and outer trip blocks connected by a .75" x 24.5" stud bolt.</p> <p>The hinge is designed to lift the wing as it trips through a trapezoidal design.</p> <p>Trip block will be rubber type with a triple convolution and a 55 density rating composition.</p> <p>Wing slide 3/4" thick steel plate, 72" overall length by 6 3/4" wide.</p> <p>Slide travel 48" minimum with provision for 14" minimum float – no exception.</p> <p>Sealed beam wing light shall be provided with separate switch.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
15	<p><b><u>HYDRAULICALLY ADJUSTABLE SINGLE WING BRACE ASSEMBLY:</u></b></p> <p>The rear harness will incorporate one only single push arm assembly.</p> <p>The push arm will be of telescopic design, outer tube 4" x 38 1/2" extra heavy pipe, inner tube 3 1/2" O.D. x 2 1/2" I.D. 38 1/2" tubing – these are mandatory minimum requirements to ensure wing stability.</p> <p>The operator will be able to change the cleared path instantly from inside the cab from 8' to 11'.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>



	<p>The push arm lift cylinder will be 3 ½" x 26" double acting.</p> <p>The telescopic push arm and lift cylinder shall quickly and easily disconnect from the rear brace via a single quick disconnect bracket. The quick disconnect bracket shall be attached via a single 1" x 15.5" pin.</p> <p>When the wing is in the normal carrying position, the push arm extension cylinder will be in the collapsed position. By extending the push arm cylinder, it will adjust the wing forward and upwards, allowing it to be carried in a position that will provide improved visibility from the right side chassis window.</p> <p>The push arm will incorporate a safety compression style trip spring, 5/8" wire, 3 ¾" O.D. x 2 ½" I.D., free length, to assist in absorbing shock.</p> <p>Safety prop to be provided, to secure wing in transport position, permanently attached to push arm outer tube, 24" Long, 4.1 lb. Ft. channel.</p> <p>Extension cylinder oscillation will be achieved through two ¾" I.D. x 2 1/8" O.D. spherical bushings press fitted and welded to ½" steel plate mounting lugs.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
16	<p><u>REAR WING TOWER:</u></p> <p>The wing tower shall be of a heavy construction and bolted to the right side of the truck chassis.</p> <p>The rear harness, when installed, shall not use up any cab to axle space and will allow the dump/sander body to be mounted directly behind the chassis cab, with minimum clearance.</p> <p>A rigid load carrying enclosure shall be provided to support the single wing brace and hydraulic lift cylinder.</p> <p>The rear supporting structure shall extend across both chassis side rails and along the right side to provide a distribution of the wing load under heavy duty operation.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>

<p>The portion of the rear supporting structure that extends across the top of the chassis side rails will be 1" thick steel plate.</p>	<p>YES: _____ NO: _____</p>
<p>Hydraulic hoses shall connect the rams of the tower with the valves in the control box. Hoses shall be two (2) ply braided steel, SAE 100R16 with swivels on both ends – Gates hydraulic hoses only – no exception.</p>	<p>YES: _____ NO: _____</p>
<p>A safety chain shall be provided for securing wing when not in use.</p>	
<p>Viking tube style crossmember located approximately 10" behind cab, braced and gusseted fore and aft.</p>	<p>YES: _____ NO: _____</p>
<p>Aeon rubber helper spring installed on right front axle to assist in supporting added weight oif wing system.</p>	<p>YES: _____ NO: _____</p>
<p>Wing light supplied and installed.</p>	<p>YES: _____ NO: _____</p>
<p>All steel will be shot blasted, epoxy primed and top quality black finish paint electro statically applied.</p>	<p>YES: _____ NO: _____</p>
<p>Parts manual shall be supplied with each unit.</p>	<p>YES: _____ NO: _____</p>
<p><b>Viking model VCL144AHW Steel Side Wing Moldboard or approved equivalent:</b></p>	
<p>SPECIFY:</p>	
<p>MAKE: _____</p>	
<p>MODEL: _____</p>	<p>YES: _____ NO: _____</p>
<p>12' wing moldboard completely enclosed and smooth paneled, the moldboard contour is designed to provide a superior cast over traditional wings. There shall be provision supplied for attachment of one only single hydraulic wing brace</p>	<p>YES: _____ NO: _____</p>
<p>Overall length 12 feet</p>	<p>YES: _____ NO: _____</p>
<p>Inside intake height 28"</p>	<p>YES: _____ NO: _____</p>
<p>Outside discharge height 34"</p>	<p>YES: _____ NO: _____</p>
<p>Moldboard thickness 3/16" minimum</p>	<p>YES: _____ NO: _____</p>

<p>The rear of the wing will be completely enclosed and smooth panelled – open style break-formed wing moldboards will not be acceptable - no exception.</p>	<p>YES: _____ NO: _____</p>
<p>Rear of wing enclosure shall be a two piece assembly consisting of:</p> <ul style="list-style-type: none"> <li>- moldboard channel 3/16" plate</li> <li>- 12 5/8 X 143 5/16" top angle</li> <li>- 3/16" plate 9 7/16" at intake end 18 1/16" at discharge end</li> <li>- -143 5/16" overall length</li> </ul>	<p>YES: _____ NO: _____</p>
<p>The operator will be able to change the clearing path from 5' to 8' hydraulically by featherable in-cab control on swivel pedestal between seats.</p>	<p>YES: _____ NO: _____</p>
<p>The push arm lift cylinder will be 3 1/2" x 26" hardened chromed double acting – nitrited type cylinders are not acceptable.</p>	<p>YES: _____ NO: _____</p>
<p>The push arm cylinder will incorporate a safety compression style trip spring, 5/8" wire, 3 3/4" O.D. x 2 1/2" I.D. free length – to assist in absorbing road shock.</p>	<p>YES: _____ NO: _____</p>
<p>Safety prop to be provided to secure wing in transport position permanently attached to push arm outer tube, 24" long, 4.1 lb. / ft. channel.</p>	<p>YES: _____ NO: _____</p>
<p>Extension cylinder oscillation will be achieved through two 3/4" I.D. x 2 1/8" O.D. spherical bushings press fitted and welded to 1/2" steel plate mounting lugs.</p>	<p>YES: _____ NO: _____</p>
<p>Three discharge end caps shall be provided. The caps to be constructed of 3/16" plate and each to be welded 100% to the moldboard face, the rear upper moldboard top angle and the rear lower moldboard channel.</p>	<p>YES: _____ NO: _____</p>
<p>Lower backer angle 5/8" X 4" X 4"</p>	<p>YES: _____ NO: _____</p>
<p>Backer angle reinforced with 4 gussets of 3/16" X 4" steel and 8 angle stiffeners 1/2" X 3" X 3"</p>	<p>YES: _____ NO: _____</p>
<p>Moldboard will be reinforced without the use of vertical ribs, horizontal internal reinforcement to be supplied – no excpetion.</p>	<p>YES: _____ NO: _____</p>

	<p>One knuckle weldment to be provided on back side of wing moldboard for connecting the single push arm</p> <p><u>THE WING WILL BE FITTED WITH THE FOLLOWING:</u></p> <p>One HIGH WEAR wing blade shall be supplied as per MTO spec. ES-504</p> <p>Two wing shoes as per MTO spec. ES-509</p> <p>Turn buckle assembly to be permanently mounted on the rear of the wing</p> <p>The turnbuckle will pivot out and attach to the single wing brace, in order to support the brace during the disconnecting and reconnecting of the wing assembly from the rear post. When removed from chassis, the turnbuckle will keep the wing and push arm in the upright position for ease of re-installation onto rear wing tower – all other methods of removing the wing/push arm including winch system will not be acceptable.</p> <p>Adjustable needle valve in hydraulics back of cab to allow operator to be able to slow / speed mode functions of wing.</p> <p>Height adjustable WING PARKING STAND permanently attached to wing</p> <p>36" ORANGE fluorescent wing marker attached to rear of wing</p> <p>Conspicuity reflective on wing arm and on rear edge of wing</p> <p>All steel will be shotblasted, epoxy ZINC primed and finished in Medium Gloss BLACK finish</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
17	<p><u>HYDRAULIC SYSTEM:</u></p> <p>The hydraulic pump supplied shall be a Dowty Model 2PL158/220 front mount Tandem Dry Mode pump with in cab air shift.</p>	<p>YES: _____ NO: _____</p>

<p>The first stage shall produce 13 US G.P.M. at 1,000 R.P.M. and 23 US G.P.M. at 1,800 R.P.M.</p> <p>23 US G.P.M. at 1,800 R.P.M</p>	<p>YES: _____ NO: _____</p>
<p>The second stage shall produce 18 US G.P.M. at 1,000 R.P.M. and 32 US G.P.M. at 1,800 R.P.M</p>	<p>YES: _____ NO: _____</p>
<p>One pump section shall be dedicated to the operation of the plow, wing and hoist only.</p>	<p>YES: _____ NO: _____</p>
<p>The second pump section shall strictly operate the conveyor and spinner assembly to ensure uninterrupted flow of material.</p>	<p>YES: _____ NO: _____</p>
<p>Pump mounting plate and splined drive shaft shall be supplied.</p>	<p>YES: _____ NO: _____</p>
<p>The pump shall be driven from the crankshaft of the truck engine.</p>	<p>YES: _____ NO: _____</p>
<p>The pump shall have a manufacturer's R.P.M. rating equivalent or higher than that of the truck engine at governed speed.</p>	<p>YES: _____ NO: _____</p>
<p>Hydraulic hoses to connect pump shall be supplied. Their size shall be adequate for quick operation of all hydraulic operations and shall be <u>2 ply braided steel SAE100RS</u>, with swivels on both ends.</p>	<p>YES: _____ NO: _____</p>
<p>Hydraulic hoses to be thoroughly protected by urethane hose wrap.</p> <p>SPECIFY: _____</p>	<p>YES: _____ NO: _____</p>
<p>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.</p>	<p>YES: _____ NO: _____</p>
<p>The hydraulic system must be set up so all other hydraulic functions do not "rob" the sander equipment.</p>	<p>YES: _____ NO: _____</p>
<p>Hydraulic control valves will be stackable and sectional type HCD-6 with HCD6-L20 air shift – no exceptions.</p>	<p>YES: _____ NO: _____</p>
<p>The valves shall be open center type to operate with a hydraulic gear pump.</p>	<p>YES: _____ NO: _____</p>

	<p>To prevent corrosion the air shifters will have a bronze sleeve.</p> <p>The control valve will include the following 7 sections:</p> <ul style="list-style-type: none"> <li>- 1 single acting for body hoist</li> <li>- 1 double acting for plow lift</li> <li>- 1 double acting for moldboard tilt</li> <li>- 1 double acting section for front harness hydraulic tilt forward</li> <li>- 1 double acting section for front of wing lift</li> <li>- 1 double acting section for rear of wing lift</li> <li>- 1 double acting section for hydraulically extendible wing brace</li> </ul> <p>The hydraulic control valves will be operated by proportional featherable in cab air controls – model RMH866000 – no exception.</p> <p>The control panel assembly shall be of a remote design pedestal mounted and adjustable.</p> <p>An oil reservoir of minimum 30 gallon capacity shall be supplied, complete with oil filter oil level sight gauge, breather type filler cap, drain plug and oil shut off valve.</p> <p>The oil reservoir will be installed on the side frame mounted. Not behind the cab.</p> <p>SPECIFY: _____</p> <p>Low hydraulic oil level in-cab light and alarm.</p> <p>The complete valve stack assembly will be installed well above the chassis frame rails on the left side back of cab in an easily accessible location, protected from the road debris. The junction boxes for the lights must also be installed at this location.</p>	<p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p> <p>YES: _____ NO: _____</p>
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\_\_\_\_\_  
Date:

\_\_\_\_\_  
Signature of Bidder

**PART C      REQUEST FOR PROPOSAL FORM**

Describe in detail the vehicle which you propose to supply if awarded the contract. Include in the detail a copy of a promotional breakdown or pamphlet with a picture of the vehicle and any information that may assist the Township of Killaloe, Hagarty and Richards in determining whether or not the proposed vehicle meets the specifications.

**VEHICLE DESCRIPTION**

**ONE ONLY 6 – TON TANDEM AXLE TRUCK:**

MAKE: \_\_\_\_\_

MODEL: \_\_\_\_\_

YEAR \_\_\_\_\_

**ONE ONLY COMBINATION DUMP BODY/SPREADER:**

MAKE: \_\_\_\_\_

MODEL: \_\_\_\_\_

YEAR \_\_\_\_\_

**ONE ONLY SNOWPLOW AND WING:**

MAKE: \_\_\_\_\_

MODEL: \_\_\_\_\_

**PART 1 – VEHICLE PRICES**

One Only 6 – Ton Tandem Axle Truck Proposed Vehicle Price \$\_\_\_\_\_CDN

One Only Combination Dump Body/Spreader Proposed Price\$\_\_\_\_\_CDN

One Only Snowplow and Wing Proposed Price \$\_\_\_\_\_CDN

Warranty Charges (if applicable) \$\_\_\_\_\_CDN

**TOTAL PROPOSED PRICE EQUIPPED AS REQUESTED** \$\_\_\_\_\_CDN  
(taxes not included)

Applicable Taxes (HST) \$ \_\_\_\_\_ CDN

A/C Tax \$ \_\_\_\_\_ CDN

Tire Tax \$ \_\_\_\_\_ CDN

TOTAL PROPOSED PRICE EQUIPPED AS REQUESTED \$ \_\_\_\_\_ CDN  
(including taxes)

## PART 2– OTHER INFORMATION

- (1) Location where warranty work, if necessary, will be available. Dealer must have a service facility within approximately 100 km from the Township of Killaloe, Hagarty and Richards Road Yard located at 16370 Highway 60, Wilno ON K0J 2N0.

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- (2) Proposed delivery date is on or before Thursday, November 1<sup>st</sup>, 2018.

## SECTION 2 – DELIVERY REQUIREMENTS

- I. The successful supplier is required to deliver the vehicle to the Township of Killaloe, Hagarty and Richards Roads Yard on or before the proposed delivery date as specified above. In the event that the successful supplier is able to make the vehicle available prior to the proposed delivery date as specified above, the Township of Killaloe, Hagarty and Richards may, but is not obliged to, accept delivery prior to that date.
- II. The vehicle shall remain the responsibility of and at the sole risk of the successful supplier until the Township of Killaloe, Hagarty and Richards accepts delivery.

Delivery Point: The Township of Killaloe, Hagarty and Richards Roads Yard  
16370 Highway 60, Wilno ON, K0J 2N0

Owner: The Township of Killaloe, Hagarty and Richards



Supplier:

\_\_\_\_\_  
Supplier's Name (Dealership)

\_\_\_\_\_  
Supplier's Address

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Authorized Signature  
(I have the authority to bind the company)

\_\_\_\_\_  
Printed Name and Position of Signer

I/We, the undersigned, having carefully examined the specifications and made all inquiries necessary or desirable in establishing the vehicle required, hereby offer to supply the vehicle described in this RFP to the Township of Killaloe, Hagarty and Richards in accordance with the said documents at the cost set forth in the attached Request for Proposal Form.

I/We acknowledge receipt of each of the RFP documents and acknowledge that each forms an integral part of this RFP.

Notification of acceptance of this RFP may be given by fax or email, addressed to me/us at the address contained in this RFP.

In submitting this RFP I/We hereby certify that I/We have made all such inquiries as may be necessary or useful in understanding the requirements and submitting a valid RFP. I/We shall not claim that the requirements have, or are in any way, are different or changed.

I/We understand that the contract will be terminated in the event that I/We fail to supply the vehicle and/or meet warranty obligations to the satisfaction of the Township of Killaloe, Hagarty and Richards.

I/We also declare that I/We did not rely on information provided by the Township of Killaloe, Hagarty and Richards, or its employees, other than written information specifically given in response to any inquiries made.

I/We hereby certify that, at the time of submitting this RFP, I am/we are in full compliance with all laws of Canada and the Province of Ontario.

If this RFP is accepted, I/We undertake and agree to supply the vehicle in full compliance with the specifications of this RFP.

DATED at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
Signature of Supplier

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
Supplier's Address

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

\_\_\_\_\_  
Email Address

## **PART D     TOWNSHIP CONTACTS AND ADMINISTRATION**

Any questions or any additional information contact:

Dean Holly, Works Superintendent  
Township of Killaloe, Hagarty and Richards  
1 John St., P.O. Box 39  
Killaloe, Ontario K0J 2A0  
(613) 757-2300 - office  
(613) 757-3634 – fax  
(613) 401-9073 - cell  
E-mail: [dholly@khrtownship.ca](mailto:dholly@khrtownship.ca)

## **PART E     REQUEST FOR PROPOSAL CLOSING**

### (a) Date of Closing

RFP submissions can be made until **Tuesday May 8<sup>th</sup>, 2018 at 4:30 PM Local Time**. RFP submissions received after this deadline will be given consideration only if no acceptable submissions are received otherwise.

### (b) Package Submission Process

RFP packages shall be submitted in a closed and sealed envelope clearly marked as to contents, to:

Lorna Hudder, CMO, Dipl.M.M.  
CAO/Clerk-Treasurer  
Township of Killaloe, Hagarty and Richards  
1 John St., P.O. Box 39  
Killaloe, Ontario K0J 2A0  
(613) 757-2300 - office  
(613) 757-3634 – fax  
E-mail: [lhudder@khrtownship.ca](mailto:lhudder@khrtownship.ca)

**Please note that the successful proposal may not necessarily be the lowest submitted cost but the one that provides the best long-term solution for the Township of Killaloe, Hagarty and Richards.**

**PART F      SIGNATURE PAGE**

By signing below, I acknowledge that I have read and understand this Request for Proposal 2018 – 03 and I agree to abide by the terms and conditions contained herein.

Total RFP Amount                                  \$ \_\_\_\_\_ CDN

\_\_\_\_\_  
Signature of Authorized Official  
(I have the authority to bind the company)

\_\_\_\_\_  
Name

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Date

**Note that this RFP form is not transferable and any alteration of the Company name entered hereon will be cause for considering the proposal irregular and subsequent rejection of the RFP.**