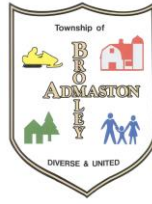


Township of Admaston/Bromley



477 Stone Road
Renfrew, ON K7V 3Z5

REQUEST FOR TENDER

04 - 18

**One Diesel Powered 6-Ton Tandem Axle Truck,
Combination Dump Body/Spreader, Snow Plow and Wing**

Sealed Tenders will be received until:

4:00 p.m. Wednesday December 5th, 2018

for the Supply and Delivery of the above equipment.

**All items must be submitted on Township Tender Forms
which are available from the undersigned and on the website at
<http://www.admastonbromley.com/>**

Faxed submissions are not acceptable.

Lowest or any quotation not necessarily accepted.

**Chris Kunopaski
Road Superintendent
Township of Admaston/Bromley
477 Stone Road, RR 2
Renfrew, Ontario
K7V 3Z5**

Telephone: (613) 432-3175

TENDER 04 - 18

**ONE DIESEL POWERED 6-TON TANDEM AXLE TRUCK
COMBINATION DUMP BODY/SPREADER,
SNOWPLOW AND WING**

CLOSING DATE OF TENDER

4:00 P.M., Wednesday December 5th, 2018

**TO: Township of Admaston/Bromley
477 Stone Road
Renfrew, Ontario
K7V 3Z5**

SUBMITTED BY:

FIRM NAME

ADDRESS

NAME OF PERSON SIGNING

PHONE NO.

FAX NO.

Tender 04 - 18

TENDER SUMMARY FORM

(1) One 6-Ton Tandem Axle Truck

MAKE: _____

MODEL: _____

YEAR: _____

PRICE: \$ _____

(2) One Combination Dump Body/Spreader

MAKE: _____

MODEL: _____

PRICE \$ _____

(3) One Snowplow and Wing

MAKE: _____

MODEL: _____

PRICE \$ _____

TOTAL BID (items 1, 2, 3)..... \$ _____

Plus A/C Tax..... \$ _____

Plus Tire Tax..... \$ _____

Plus HST..... \$ _____

TOTAL PRICE TENDERED FOR DELIVERY
TO TOWNSHIP OF ADMASTON/BROMLEY
GARAGE, 477 Stone Road,
Renfrew, ON K7V 3Z5

\$ _____

DATE

FIRM NAME

AUTHORIZED SIGNATURE

COMPLIANCE TANDEM AXLE SNOW PLOW TRUCK 2019

A GENERAL

- | | | | |
|---|---|-----|----|
| 1 | This Specification covers a New truck Tandem for Front plow and dump body sander. | Yes | No |
| 2 | Vehicles must be supplied with suitable components to comply with the following specifications in all aspects | Yes | No |

B DETAILED SPECIFICATIONS

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

Western Star model 4700 SF

International 7600 SF

A 2020 Model Year, if available.

Approved engine Minimum 12.8 litres – 470 HP.
Detroit DD 13

Engine not acceptable without use of urea.

MAKE AND MODEL

Specify make and model of unit being tendered.

SPECIFY:

MAKE: _____

MODEL: _____

YEAR: _____

ENGINE MAKE: _____

ENGINE MODEL: _____

DESCRIPTION

| 1. VEHICLE CONFIRGURATION | | YES | NO |
|----------------------------------|--|------------|-----------|
| 1 | Conventional chassis snow plow and spreader applications model name and number # _____ | | |
| 2 | 2020 model year specified | | |
| 3 | Set forward axle (Set back not acceptable) | | |
| 4 | Trailer towing provision at end of frame | | |
| 5 | Install back-up alarm that meets SAE standard. | | |
| 2. GENERAL SERVICE | | YES | NO |
| 6 | Expected front axle capacity 22,000 LBS. | | |
| 7 | Expected rear drive axle(s) load 46,000 lbs minimum | | |
| 8 | Expected gross vehicle weight capacity; 68,000 lbs. Expected gross combination weight 80,000 lbs. Allowable G.V.W.R. as supplied shall be shown on a metal or Mylar tag. | | |
| 3. ENGINE | | YES | NO |
| 9 | ENGINE 12.8 litres – MINIMUM 470 HP @ 1625 RPM, 1900 GOV. RPM, 1650 LB/FT @975 RPM | | |
| 4. ELECTRONIC PARAMETERES | | YES | NO |
| 10 | Road speed in top gear at shall be 105 km maximum speed. | | |
| 5. ENGINE EQUIPMENT | | YES | NO |
| 11 | 2013 ONBOARD DIAGNOSTICS 2010 EPA/CARB/GHG 14 Emission Certification | | |
| 12 | Side of hood air intake with firewall mounted Donaldson air cleaner and inside/outside air with snow door | | |
| 13 | Dr 12v 160 amp 28-si Quadra mount pad alternator with remote battery volt sense | | |
| 14 | (3)Alliance absorbed glass mat model 9A31, Group 31, 12 volt maintenance free 2190 CCA threaded stud batteries. | | |
| 15 | Passenger seat Battery box vented to outside cab | | |
| 16 | Battery box mounted under passenger seat | | |
| 17 | BW Model BA-921 19.0 CFM single cylinder air compressor with safety valve | | |
| 18 | Electronic engine integral warning and de rate protection system | | |
| 19 | Jacobs compression brake | | |
| 20 | RH outboard under step mounted horizontal after treatment system assembly with RH B-Pillar mounted vertical tailpipe | | |
| 21 | Engine after treatment device, automatic over the road regeneration and dash mounted regeneration request switch | | |
| 22 | 11 foot 06 inches (138 inch + 0/5 inch) exhaust system height | | |
| 23 | RH curved vertical tailpipe b-pillar mounted routed from step | | |
| 24 | 6 gallon diesel exhaust fluid tank | | |
| 25 | Stainless steel After Treatment device / Muffler / Tailpipe shield | | |

| ENGINE EQUIPMENT (continued) | | YES | NO |
|-------------------------------------|---|------------|-----------|
| 26 | Borg Warner (KYSOR) Rear air ON/OFF Engine Fan Clutch | | |
| 27 | Automatic fan control without dash switch, non engine mounted | | |
| 28 | DDC SUPPLIED ENGINE mounted fuel filter / fuel water separator with water-in-fuel indicator | | |
| 29 | Combination Full flow oil filter | | |
| 30 | DDC supplied coolant filter engine mounted | | |
| 31 | 1500 square inch Aluminum Radiator, with mounting for firewall mounted surge tank | | |
| 32 | Antifreeze to -60f, ethylene glycol pre-charged SCA heavy duty coolant | | |
| 33 | Gates blue stripe coolant hoses or equivalent | | |
| 34 | Constant tension hose clamps for coolant hoses | | |
| 35 | Radiator drain valve | | |
| 36 | Aluminum flywheel housing | | |
| 37 | Delco 12v 39mt + HD/OCO starter with thermal protection and integrated magnetic switch | | |
| 38 | PHILIPS-TEMRO 1500 WATT / 115 VOLT block heater with chrome receptacle mounted under LH door | | |
| 6. TRANSMISSION | | YES | NO |
| 39 | Allison 4500 RDS automatic transmission with PTO provision ON THE LEFT HAND SIDE | | |
| 7. TRANSMISSION EQUIPMENT | | YES | NO |
| 40 | Allison Vocational – 6 speed with auto neutral RDS (package 223) | | |
| 41 | Body lighting interface blunt cut wiring with fuse panel wire mounted between driver and passenger seats with additional 150 AMP service. | | |
| 42 | PTO mounting, LH side of main transmission | | |
| 43 | Push button electronic shift control, dash mounted | | |
| 44 | Water to oil transmission cooler, frame mounted | | |
| 45 | Transmission oil check and fill with electronic oil level check | | |
| 46 | Synthetic transmission fluid (tes-295 compliant) | | |
| 8. FRONT AXLE AND EQUIPMENT | | YES | NO |
| 47 | MFS-20-133A 22,000 lbs FL1 single front axle | | |
| 48 | Meritor 16.5 x 6 Q + 22,000# Cast spider cam front brakes, double anchor, fabricated shoes | | |
| 49 | Non Asbestos front brake lining | | |
| 50 | Conmet, Cast Iron front brake drums | | |
| 51 | Front brake dust shields | | |
| 52 | SKF Scotseal plus XL front oil seals | | |
| 53 | Meritor Automatic, front slack adjuster | | |
| 54 | TRW THP-60, power steering with RCH45 auxiliary gear | | |
| 55 | Power Steering Pump | | |
| 56 | 4 quart power steering reservoir | | |

| 9. FRONT SUSPENSION | | YES | NO |
|---|---|------------|-----------|
| 57 | 23,000# Flat leaf front suspension minimum specify | | |
| 58 | Graphite bronze, bushing with seals front suspension | | |
| 59 | Front shock absorbers | | |
| 10. REAR AXLE AND EQUIPMENT | | YES | NO |
| 60 | RT-46-164P 46,000# R-series tandem rear axle | | |
| 61 | 4.89 rear axle ratio minimum | | |
| 62 | MXL 18N Meritor extended lube main driveline with Full round yokes | | |
| 63 | MXL 17N Meritor extended lube inter-axle driveline with FULL round yokes | | |
| 64 | Driver controlled traction differential – both tandem rear axles full lock | | |
| 65 | Meritor 16.5x7 Q+ cast spider cam rear brakes, double anchor, fabricated shoes. NON-ASBESTOS REAR BRAKE LINING | | |
| 66 | Brake cams and chambers on forward side of drive axles | | |
| 67 | Conmet cast iron rear brake drums | | |
| 68 | Rear brake dust shields | | |
| 69 | SKF Scotseal plus xl rear oil seals | | |
| 70 | Haldex Gold-seal long stroke, 2-drive axles spring parking chambers | | |
| 71 | Haldex automatic rear slack adjusters | | |
| 72 | Synthetic 75w-90 rear axle lube | | |
| 11. REAR SUSPENSION | | YES | NO |
| 73 | Tuftrac 46,000 lbs Rubber and Spring suspension | | |
| 74 | 56 inch axle spacing | | |
| 75 | Fore/After and transverse control rods | | |
| 76 | Rear shock absorbers two axles (Tandem) | | |
| 12. BRAKE SYSTEM AIR BRAKE PACKAGE | | YES | NO |
| 77 | BW AD-9 brake line Air dryer with heater | | |
| 78 | Air dryer mounted inboard on LH rail | | |
| 79 | Steel air brake reservoirs mounted perpendicular RH INSIDE FRAME | | |
| 80 | Clear frame rails from back of cab to front rear suspension bracket, both rails outboard | | |
| 81 | Pull cables on all air reservoir(s) | | |
| 13. TRAILER CONNECTIONS | | YES | NO |
| 82 | Air connections, to end of frame, with glad hands | | |
| 83 | Primary connector/receptacle wired for separate stop/turn, ABS center pin powered through ignition | | |
| 84 | SAE J560, 7-way primary trailer cable receptacle mounted end of frame | | |
| 14. WHEEL BASE & FRAME | | YES | NO |
| 85 | Wheelbase 207" (CA 126" to be confirm with body builders) | | |
| 86 | 7/16X3-9/16X11-1/8 inch steel frame (11.11mmx282.6mm/0.437x11.13 inch) 120KSI | | |
| 87 | Partial Inner frame, reinforcement at the front suspension | | |

| WHEEL BASE & FRAME (CONTINUED) | | YES | NO |
|---|---|------------|-----------|
| 88 | 1825MM (72 INCH) rear frame overhang minimum | | |
| 89 | 12 inch integral front frame extension with 0.25 inch insert | | |
| 90 | Square end of frame | | |
| 15. CHASSIS EQUIPMENT | | YES | NO |
| 91 | 16 inch painted steel bumper | | |
| 92 | Front anti-spray cab mounted mud flaps | | |
| 93 | Clear frame rails from back of cab to front rear suspension bracket, both rails outboard | | |
| 94 | Grade 8 threaded hex headed frame fasteners | | |
| 16. FUEL TANKS | | YES | NO |
| 95 | 80 GALLON ALUMINUM FUEL TANK – LH | | |
| 96 | 25” diameter Fuel Tank frame mounted driver side under cab | | |
| 97 | FUEL TANK flush with back of cab | | |
| 98 | Alliance fuel filter / water separator with heated bowl | | |
| 17. TIRES | | YES | NO |
| 99 | MICHELIN XZY-3 425/65R22.5 20 PLY RADIAL FRONT TIRES | | |
| 100 | MICHELIN XDS-2 11R22.5 16 PLY RADIAL TIRES. | | |
| 18. HUBS | | YES | NO |
| 101 | Conmet pre-set bearing iron front hubs | | |
| 102 | Conmet pre-set bearing iron rear hubs | | |
| 103 | Accuride 29374A 22.5x12.25 10-hub pilot 4.75 Inset 10—hand aluminum disc front wheels | | |
| 104 | Accuride 28828 22.5x8.25 10-hub pilot 4.75 Inset 10—Hand HD Steel Disc rear wheels | | |
| 19. WHEELS | | YES | NO |
| 105 | Front and rear WHEEL NUTS | | |
| 106 | Disc hub piloted rims must have a load capacity and pressure rating equal to or exceeding the ratings of the tire | | |
| 20. CAB EXTERIOR AND INTERIOR | | YES | NO |
| 107 | 110 inch BBC Steel conventional cab | | |
| 108 | Air cab mount with check valve | | |
| 109 | Non removable bug screen mounted behind grill. | | |
| 110 | 2” fender extensions | | |
| 111 | LH and RH Grab handles and RH interior grab handle mounted to a post. | | |
| 112 | Stationary bright finish grille | | |
| 113 | Chrome Hood mounted air intake grille. | | |
| 114 | Galvanealed steel severe service cab. | | |
| 115 | Fiberglass hood | | |
| 116 | Single Hadley SD-978 26 inch rectangular air horns | | |

| CAB EXTERIOR AND INTERIOR (continued) | | YES | NO |
|--|---|------------|-----------|
| 117 | Single electric horn | | |
| 118 | Single horn shields | | |
| 119 | LED CHROME BULLET MARKER LIGHTS | | |
| 120 | Wiring and switch for customer furnished snow plow lamps with dual connections at bumper | | |
| 121 | Daytime running lights | | |
| 122 | Integral stop/tail/turn/ back up lights | | |
| 123 | Dual west coast stainless steel heated mirrors with remote | | |
| 124 | Door mounted mirrors | | |
| 125 | 102 inches equipment width | | |
| 126 | LH and RH super plus 574 8 inch bright finish heated convex mirrors with separate adjustment, mounted below mirrors | | |
| 127 | Fiberglass exterior sun visor | | |
| 129 | 17.5 x 35 inch tinted rear window | | |
| 129 | Tinted door glass LH and RH | | |
| 130 | RH & LH electric POWERED windows | | |
| 131 | Lower RH door window with Fresnel lens | | |
| 133 | 2 Pieces Tinted curve gasket mounted HEATED Windshield | | |
| 133 | 1.5 gallon windshield washer reservoir mounted under cab with remote fill | | |
| 134 | Interior convenience package with CB provision | | |
| 135 | Gray vinyl base interior | | |
| 136 | Black hard trim, base left hand and right hand door trim | | |
| 137 | Black mats with double insulation | | |
| 138 | Forward roof mounted console | | |
| 139 | (1) cup holder mounted in bottom center of dash | | |
| 140 | Two tone charcoal upper / cool gray lower soft touch wing dash with black driver side cosmetic under dash cover | | |
| 141 | Heater, defroster and air conditioner with cosmetic cover | | |
| 142 | HVAC ducting with foam main fresh air filter and outside pre-filter / HVAC controls with recirculation switch | | |
| 143 | Cab insulation with additional cab sidewall insulation | | |
| 144 | Automatic self reset circuit breaker in main dash power distribution box and circuit breaker/fuse in auxiliary power distribution boxes | | |
| 145 | Door activated dome light, under dash light and LH and RH, door mounted courtesy lights | | |
| 146 | Cab door latches with manual door locks | | |
| 147 | ELITE High back air suspension driver seat with HEAT, 3 chamber air lumbar integrated cushion extension, forward and rear cushion tilt and adjustable shock | | |
| 148 | Battery box mid back non suspension passenger seat | | |
| 149 | Inboard driver seat armrest, no passenger seat armrests | | |
| 150 | Black Mordura cloth driver & passenger seat covers | | |
| 151 | 3 point fixed d-ring retractor driver and passenger seat belts | | |
| 152 | Adjustable tilt and telescoping steering column | | |
| 153 | 2-spoke 20 inch (500mm) black steering wheel | | |
| 154 | Driver and passenger interior sun visors | | |

| 21. INSTRUMENTS & CONTROLS | | YES | NO |
|---------------------------------------|---|------------|-----------|
| 155 | Standard gauge with black bezels (or equivalent) | | |
| 156 | Royal rosewood matte finish driver instrument panel | | |
| 157 | Low air pressure light and buzzer | | |
| 158 | 2 inch primary and secondary air pressure gauges | | |
| 159 | Dash mounted air restriction indicator with graduations | | |
| 160 | 87 DB to 112 DB self-adjusting backup alarm | | |
| 161 | Cruise control switches in the center panel | | |
| 162 | 2 inch Electric fuel gauge | | |
| 163 | Electrical engine coolant temperature gauge | | |
| 164 | 2 inch Transmission oil temperature gauge | | |
| 165 | Electric engine oil pressure gauge | | |
| 166 | Dash mounted PTO switch with indicator lamp | | |
| 167 | AM/FM/WB Radio with CD player, Bluetooth and microphone, USB, with front and rear auxiliary input, and J1939 / 4 radio speakers in cab | | |
| 168 | Cobra 29 WX ST factory installed CB radio with weather band & Multi-band AM/FM/WB/CB antenna system | | |
| 169 | Roof overhead console mounted radio | | |
| 170 | Electronic KPH speedometer with secondary MPH scale, with odometer | | |
| 171 | Electronic 3000 RPM tachometer with hour meter | | |
| 172 | Trailer hand control brake valve | | |
| 173 | Single electric windshield wiper motor with delay and arctic type blades | | |
| 174 | Cab Marker light and headlight switch with separate interrupter switch for trailer marker lights and switch and terminals for customer furnished snow plow lights | | |
| 175 | Two valve parking brake system with dash valve control auto neutral and warning indicator | | |
| 176 | Self cancelling turn signal switch with integral headlamp dimmer, with brake over ride | | |
| 177 | Pacific insight electronic flasher | | |
| 178 | 2-1/2 lb. Fire extinguisher mounted outboard of driver seat | | |
| 179 | Triangular reflectors without flares | | |
| 180 | Design paint: one solid color MTO Yellow | | |
| | Cab interior painted same as cab color | | |
| 181 | White, high solids polyurethane chassis paint | | |
| 182 | Sun visor painted same as cab color | | |
| 22. CERTIFICATION / COMPLIANCE | | YES | NO |
| 183 | Canada CMVSS certification | | |
| 23. SECONDARY FACTORY OPTIONS | | YES | NO |
| 184 | Corporate PDI center option installation / modification only | | |
| 24. EXTENDED WARRANTY | | YES | NO |
| 185 | Roadside service warranty, 1 year / unlimited mileage / specified extended warranty | | |

| 25. AUTOMATIC GREASING SYSTEM | | YES | NO |
|--------------------------------------|--|------------|-----------|
| 186 | System to be installed on the vehicle and tested. | | |
| 187 | A system with all brass or stainless steel injectors, fittings, distribution blocks and connectors. | | |
| 188 | A system with a 4 kg grease reservoir. | | |
| 189 | A system with a pneumatic pump unit with follower plate and clear reservoir. | | |
| 190 | A system with nylon lines, stainless steel or copper/nickel line, wire braid/hytron hydraulic lines. | | |
| 191 | A system with heavy-duty, corrosion-resistant pistons and cylinder linings in the “air” side of the system. | | |
| 192 | A system with a closed, sealed reservoir that can only be filled through an in-line grease filter. | | |
| 193 | A system that delivers a minimum of 950 psi to the grease points. | | |
| 194 | A system with a corrosion resistant pump housing that can be rebuilt. | | |
| 195 | Electronics installed in the cab. | | |
| 196 | An audible alarm in the timer to alert operator and In cab system working light (green) In cab warning light (red) | | |
| 197 | A system pressure check built into the timer when minimally 50% of the greasing cycle is completed. | | |
| 198 | A timing system capable to readout: # of cycles, # of alarms and consecutive alarms. | | |
| 199 | A parallel/single line operating principle. | | |
| 200 | A system that is built by an ISO 9001 registered company. | | |
| 201 | A system that is supported by a strong service network and a thorough training program. | | |
| 202 | Options included: Automatic low-level warning light in the cab. Automatic low level warning and automatic shut off feature. Extra grease and filler pump. | | |

**TANDEM SNOW PLOW
FULLY DETACHABLE
Harness and Wing with rear wing
tower as one unit.**

**Required hydraulic winch
to detach and attach rear tower.
No tool or equipment required.**

***11' One Way Plow High Speed
MTO Spec.***

***12' Fully hydraulic wing with 36" rear
wing tower.***

11' ONE WAY PLOW MTO SPEC

| | | |
|--|----------------------------|---------------|
| The Plow shall provide 114" clear path minimum. | YES | NO |
| ELP 11' One-Way Model NEI 673-11 High Speed. | Specify Make: Model: | |
| This one-way snow plow shall conform with the Provision MTO Standard. | YES | NO |
| The Plow shall operate effectively and without modification. | YES | NO |
| The Plow shall be constructed to prevent accumulation of Water in any area. | YES | NO |
| The mouldboard should be reinforced with a minimum of five (7) Ribs vertical reinforcements and shaped the mouldboard | YES | NO Specify |
| The thickness of the mouldboard and hood shall be 10 U.S.S. gauge Minimum. | YES | NO |
| The push frame of the one-way plow shall be equipped with an oscillating coupler, fabricated with two (2) plates of 1" minimum | YES | NO |
| The one-way plow shall be built to receive 3 sections of Cutting edge 8" x 3/4" x 44" length. | YES | NO |
| The cutting edge of snow plow will be supported with 1 section blade holder 7" x 4" x 5/8" thick reinforcement. | YES | NO |
| The blade holder of the cutting-edge snow plow should be built with triangular reinforcement gussets 3/8" thick and position equally between each bolt hold of the cutting edge. | YES | NO |
| The drive bar shall be spaced 30.5 inch centre to centre. | YES | NO |

| | | |
|---|-----|------------------------------|
| Drive bar for push frame shall be 2.25 inch diameter. | YES | NO Specify |
| The height of the mouldboard at the top of curve shall be as follow: Front End: 29 inches (Approximately) Discharge End: 54 inches (approximately) | YES | NO Specify <hr/> <hr/> |
| The plow shall be fitted with two (2) adjustable shoes, MTO standard ES 508 | YES | NO |
| The connection pin between the push frame and the plow should have the following dimensions: 1 3/4" diameter x 6 1/2 " length. | YES | NO Specify |
| Trip mechanism shall have 2 springs to return to normal position automatically. | YES | NO Specify |
| Two separate chain grades 70 1/2 inch diameter minimum, shall be used and these shall pick up on the push frame at a point approximately 32 inches apart minimum. | YES | NO Specify |
| The mouldboard shall be smooth shape. | YES | NO Specify |
| Sturdy eye 1/2 inch minimum thickness shall be provided at the centre of gravity for handling of the mouldboard. | YES | NO |
| The drive frame shall be fitted with a quick tack hitch for fast one-man hook up to the truck harness. | YES | NO |
| The design and quality shall meet MTO requirement for Carbide cutting edge 7/8". | YES | NO |
| The plow shall 1/2" inch x 12 inches rubber deflector strip, bolted to the top edge of the plow mouldboard along its full length. | YES | NO Specify |
| The one-way plow unit and wing shall be painted black | YES | NO |
| A white sandblast (Bare Metal). | YES | NO Specify |

| | | |
|--|-----|---------------|
| Two (2) coats minimum (5.00 mil. dry) of high-quality epoxy primer and Electrostatic application (before assembly). | YES | NO Specify |
| Two (2) coats minimum (2.00 mil. dry) of high-quality Polyurethane paint PPG, Electrostatic application (before assembly). | YES | NO Specify |

HYDRAULIC DETACHABLE HARNESS AND WING

| 1 CHARACTERISTICS | | |
|---|-----|---------------|
| 1.1 Specify make and model of full detachable harness ELP Series 3-48 Quick tack. (Quick attached and detaches one-man operation no tools required). | YES | NO Specify |
| 1.2 The harness shall be mounted at the front end of the frame and shall be (PINE) to the check plate with integrated front Bumper. | YES | NO Specify |
| 1.3 The lifting frame shall be bolted to the push plate conform to MTO standards. | YES | NO Specify |
| 1.4 Lifting Ram diameter – 4” D.A. minimum | YES | NO Specify |
| 1.5 Lifting Ram Stroke – shall be 12” minimum. | YES | NO Specify |
| 1.6 The cylinder rod shall be nitrated. (ARCOR-N) | YES | NO Specify |
| 1.7 Lift of grab link for nose chain shall be 18” minimum. | YES | NO Specify |
| 1.8 Drive ears shall be 30 ½” centre to centre. | YES | NO Specify |
| 1.9 Height of drive connection shall be approx. 20” when mounted, truck empty. | YES | NO Specify |
| 1.10 Check plates ¾” thick 44 W steel to match truck frame shall be supplied and shall be compatible with harness and plow. | YES | NO Specify |
| 1.11 Three (3) grab links shall be supplied. | YES | NO Specify |

| | | |
|---|-----|---------------|
| 1.12 Two (2) sealed beams Halogen type headlamps, with high and low beam shall be supplied and installed on the Hood one each side to eliminate vibration. | YES | NO Specify |
| 1.13 Right front helper spring shall be provided. (AEON rubber) shall be used. | YES | NO Specify |
| 1.14 Two (2) turn signals shall be installed and the wires for the truck turn signal shall be connected to these lights. These wires shall be well-protected in looms. | YES | NO Specify |
| 1.15 The plow lights and signals shall be equipped with "Quick-Tack" ends. | YES | NO Specify |
| 1.16 All hydraulic hoses and wiring shall be adequately supported to ensure that wear and sag is completely eliminated. | YES | NO Specify |
| 1.17 The plow and wing front harness to be easily and quickly attachable or detachable as one unit (ONE MAN OPERATION) ELP Model Series 3.48 - Quick Tack. | YES | NO Specify |
| 1.18 When detached it shall reduce the weight of the vehicle and improve operating safety and driving convenience. | YES | NO Specify |
| 1.19 Hydraulic power tilts function to be controlled by in cab feather air control. | YES | NO Specify |
| 1.20 All hydraulic quick coupler shall be (Thread Lock). | YES | NO Specify |
| 1.21 A convex mirror 12" of diameter shall be mounted front wing post. | YES | NO Specify |
| 1.22 The truck harness shall be Sandblast / Prime Epoxy 2 coats min. 5.00 Mil. Dry and Painted 2 coats of polyurethane black min. 3.00 mill. dry Electrostatic application. | YES | NO Specify |
| 1.23 A parts manual shall be supplied with each unit. | YES | NO Specify |
| 1.24 Warranty one year parts and labour. | YES | NO Specify |

| 2 HYDRAULIC CONTROLS | | |
|--|-----|---------------|
| 2.1 Hydraulic control valves will be stackable sectional type ELP LOADSENSING (SBV-DLS8) air shift control. | YES | NO Specify |
| 2.2 To prevent corrosion the air shifters will have a bronze sleeve. | YES | NO Specify |
| 2.3 The control valve will include the following sections: 1 - D.A. Plow Lift. 1 - D.A. Front wing. 1 - D.A. Wing Braces. 1 - D.A. Hydraulic winch for removal of wing and tower. 1 – D.A. Rear wing column 1 – Dump Box control 1-Spare Hydraulic valve Console 1 - Air Tailgate control 1 – Heavy duty / Load sensing Electric Tarp Control | YES | NO Specify |
| 2.4 The hydraulic control valves will be operated by proportional feather able in cab air controls. | YES | NO Specify |
| 2.5 The control panel assembly shall be an ELP Model CAM2151 centre console design with Ergonomic Operation of Control. | YES | NO Specify |
| 2.6 An oil reservoir of (26 gallons) adequate capacity shall be supplied complete with oil level sight gauge, breather type filler cap, drain plug and oil shut off valve. (Oil reservoir to be the proper size for Snow Plow and U Body Dump, Sander). | YES | NO Specify |
| 2.7 The valve assembly (Frame Mounted) will be completely closed and Rust proof, easily accessible from the driver's side of the chassis for washing and maintenance. | YES | NO Specify |

| 3 12' SNOW LEVELLING WING WITH FULLY DETACHABLE WITH REAR COLUMN AS ONE UNIT WITH FRONT HARNESS (HYDRAULIC WINCH) TO ATTACH OR DETACH WING POST AND WING WITH FRONT HARNESS | | |
|---|-----|---------------|
| 3.1 ELP Model NEI 4011 DY Fully detachable rear wing and 36" rear wing post as one unit with front harness and shall included one hydraulic winch to detach and attach rear wing to wing harness . | YES | NO Specify |
| 3.2 The front height of the wing shall be 29" minimum. | YES | NO Specify |
| 3.3 The rear height of the wing shall be 39" minimum. | YES | NO Specify |
| 3.4 Overall length of the wing shall be approx. 12 feet. | YES | NO Specify |
| 3.5 The thickness of the mouldboard shall be 10 U.S.S. Ga. minimum. | YES | NO Specify |
| 3.6 The wing shall be fitted with the following: | YES | NO Specify |
| 3.6.1 Snow plow cutting edge (High wear blade) | YES | NO Specify |
| 3.6.2 The top edge of the wing shall be boxed in and welded 100% to the ribs and the mouldboards so as to avoid all pockets. | YES | NO Specify |
| 3.6.3 The drive rib assembly shall be mounted on an upper and lower horizontal slide assembly. | YES | NO Specify |
| 3.6.4 The drive rib assembly slide shall be powered by a single stage, D.A. cylinder Nitrated (ARCOR-N). | YES | NO Specify |
| 3.7 Two (2) adjustable wing braces shall be supplied. | YES | NO Specify |

| | | | |
|--------------------------------|--|-----|---------------|
| 3.8 | Approved sizes of ram controlling the rear of wing braces shall be 3.5" X 26" stroke minimum cylinder with end of stroke flow reducer to lower the speed of the wing. | YES | NO Specify |
| 4 HYDRAULIC PUMP | | | |
| 4.1 | Direct mounted hydraulic pump in compliance with the following specification Model Danfoss 75 CC Load- sensing installed on Engine front crank adaptor. Approved pump: Danfoss | YES | NO Specify |
| 4.2 | The pump shall be PISTON type and shall be of sufficient capacity to operate continuously one front mounted Plow, One Levelling Wing, U Body Sander. | YES | NO Specify |
| 4.3 | Spare parts manual shall be supplied with the unit. | YES | NO Specify |
| 4.4 | Signed manufacturer's warranty shall be supplied. | YES | NO Specify |
| 5 ELECTRICAL CIRCUITS | | | |
| 5.1 | The truck should come complete with all lighting to meet the <i>Highway Traffic Act</i> . If it is not in the Traffic regulations, these lights should be installed. | YES | NO Specify |
| 5.2 | Spot light 4 3/4" diameter minimum sealed beam, shock free mounted rear wing – Truck Lite - Model 80360. | YES | NO Specify |
| 5.3 | Snow lights installed on the hood. | YES | NO Specify |
| 5.4 | One (1) spinner – flood light 4 1/2" diameter single face, single white lens (located to light spinner and surrounding areas) TRL 80360 | YES | NO Specify |
| 5.5 | Sander lights to be completely independent for summer use of the vehicle. | YES | NO Specify |
| 6 ELECTRONIC CONTROLLER | | | |
| 6.1 | Spreader controller Dickey John LT (2 Section valves) | YES | NO Specify |
| 6.2 | The regulator to be pressure compensated so that selected flow will not change as load and engine speed change | YES | NO Specify |

| ELP Model 300 + | | |
|---|-----|---------------|
| MINIMUM BODY LENGHT 14' MINIMUM 11 CU. YARD WATER LEVEL CAPACITY WITH OUT SIDE BOARD | | |
| These specifications describe an all-season Combination dump body and Sand / Salt spreader. The dump body shall remain stationary on the chassis frame while spreading sand / salt. Rear discharge shall be front hoist tilt action as per conventional dump body. The unit will be oval shaped and smooth sides with brake-form to permit gravity flow unloading. The main conveyor will be centre and recessed along the length of the body. The cross conveyor will be chassis frame mounted with spreader discharge on the left side chute. | YES | NO Specify |
| ELP Model U 300 Plus 14' Hardox 450 | YES | NO Specify |
| SPECIFICATIONS | | |
| Body shall be oval shape to permit materials to unload by gravity flow into spreading position. | YES | NO Specify |
| Water level capacity will be 11.05 CU. YD. Minimum | YES | NO Specify |
| Capacity with a 7.5" side boards will be 14.25 CU. YD. | YES | NO Specify |
| Outside length 15' minimum | YES | NO Specify |
| Inside length 14' minimum | YES | NO Specify |
| Overall width 99" | YES | NO Specify |
| Side height W/O board top of conveyor 46" | YES | NO Specify |
| Height of front panel 60". | YES | NO Specify |
| Standard Tailgate height 54". | YES | NO Specify |

| | | |
|--|-----|---------------|
| Tailgate to be standard opening. | YES | NO Specify |
| Top rail of body will be a shape (square tubing not acceptable). | YES | NO Specify |
| All body welds will be 100% continuous inside and outside. | YES | NO Specify |
| Body floor, sides, front panel and tailgate will be of 3/16" Hardox 450 – Tensile steel. | YES | NO Specify |
| Dump body access ladder shall be 16" wide, 2 pieces fold up ladder located at the front driver side of body. | YES | NO Specify |
| Access ladder will be manufactured from safety grip material. | YES | NO Specify |
| Fenders shall be continuous along the full body length of dump body to cover rear wheels and protect dump body. Mud flaps shall be provided fore and after tandem wheels. Fender to be ready for future liquid system and slope. | YES | NO Specify |
| <u>Hoist</u> | | |
| Hoist shall be front mounted 3 stage telescopic cylinder. | YES | NO Specify |
| Mailhot Nitrated cylinder 3 stage telescopic CS-130-5-3 And a body prop for maintenance | YES | NO Specify |
| Cylinder stroke shall be 130" minimum. | YES | NO Specify |
| Dump body tipping angle approx. 50 degrees. | YES | NO Specify |
| Rear hinge diameter shall be 2" minimum. | YES | NO Specify |
| Front safety prop installed beside dump cylinder. | YES | NO |
| Hoist control valve shall air operated from inside the cab. | YES | NO Specify |

| Air Tailgate | | |
|---|-----|---------------|
| Barn door Air tailgate with height shall be 54" minimum. | YES | NO Specify |
| Construction shall of 3/16" Hardox 450 high tensile steel with 3/16" formed cross bracing 100% weld. | YES | NO Specify |
| Latch mechanism for the tailgate shall be air trip and latch using 1 Air Pot Booster Model 30-30 installed in the centre of the body. | YES | NO Specify |
| Spreader chain and bracket shall supply on the tailgate (Chain grade 70 coil proofs 3/8"). | YES | NO Specify |
| Coal chute centre with lever handle. | YES | NO Specify |
| Conveyor | | |
| The main conveyor shall be recessed along the length of dump body floor. | YES | NO Specify |
| Three (3) pieces formed constructed minimum 26" wide. | YES | NO Specify |
| Conveyor floor 3/16" Hardox 450. | YES | NO Specify |
| Permanent non- removable built in protective main conveyor chain link. | YES | NO Specify |
| The main conveyor chain D88K a minimum of 30,000 lb tensile strength chain with cross bars 3/8" x 1.25" welded every 4 links minimum. | YES | NO Specify |
| The flow control gate between main conveyor and cross conveyor shall be adjustable by hand crank from the driver side. | YES | NO Specify |
| Worm Gear drive for main conveyor 25.1. Make; Canimex Model; C131 | YES | NO Specify |
| Main conveyor shall be a 25.1 High efficiency worm gear drive with high torque and low speed. | YES | NO Specify |
| The worm gear drive shall deliver 12,900 in. lbs. Torque intermittent. | YES | NO Specify |

| | | |
|---|-----|---------------|
| Worm Gear direct drive to main conveyor shaft. | YES | NO Specify |
| Automatic chain tensioner will eliminate the requirement for any manual chain tension adjustment. The chain tensioner adjustment shall be with out the use of wrenches and there shall be no treaded rod or lock type nuts in the mechanisms. | YES | NO Specify |
| For safety, the main conveyor and cross conveyor chain and shaft shall be cover with safety screen cover CSA approved. | YES | NO Specify |
| Polyurethane sheeting shall be installed under the entire length of the main conveyor to protect the truck frame from any debris. | YES | NO Specify |
| Cross Conveyor | | |
| The cross conveyor shall be hydraulic direct drive. | YES | NO Specify |
| The cross-conveyor assembly will be mounted on the chassis frame independent from, and in front of, the main combination spreader body. | YES | NO Specify |
| The cross conveyor shall be of removable design to reduce weight in non-spreading application. | YES | NO Specify |
| The cross-conveyor assembly shall be used to discharge materials from the main conveyor to the left side spinner and right-side chute. | YES | NO Specify |
| The cross-conveyor chain D88K shall be a pintle chains with welded cross bars 3/8" x 1.25" every 4" with a minimum tensile of 30,000 in. lbs. | YES | NO Specify |
| The cross conveyor shall have a close bottom to protect the chassis frame from falling materials. | YES | NO Specify |
| Others | | |
| The main conveyor chain shall include a cover constructed of 3/16" Hardox 450 Hi-Tensile steel for summer work. | YES | NO Specify |
| A polyurethane spinner (18") shall be installed on the left side to spread ahead of rear drive wheel. | YES | NO Specify |
| A 3.05 Cubic inch hydraulic motor shall drive the spinner assembly. | YES | NO Specify |

| | | |
|--|-----|---------------|
| The spinner height shall be adjustable from 20” to 28” below the mounting surface of the body. | YES | NO Specify |
| The spinner shall be capable of spreading evenly up to 20 ft radius with main operating range of 0 to 15 ft radius. | YES | NO Specify |
| Spinner assembly capable of discharge rate from 100 lbs lane mile to 2,5000 lbs lane miles. | YES | NO Specify |
| An MTO style poly lined chute shall be installed on the left side or equivalent system shall be supplied to lay a narrow strip, 75% of the discharge going between the outside of the dual and a point 8” outside the rear dual tires. | YES | NO |
| Hydraulic hoses to the spinner motor are to be quick coupler and are to be assembled so that the male end may plug into female end on the spinner motor and the chassis frame when the spinner assembly is disconnected. | YES | NO Specify |
| Load cover | | |
| An electric tarp system shall be supplied. Power by a 12 volt load sensing switch. Installed with a # 4 wire, operated from inside the cab. | YES | NO Specify |
| Vapour proof lights and wiring shall be supplied and installed through a separate breaker panel located in the truck cab and shall be conform to the Ontario Traffic Act. | YES | NO Specify |
| One (1) spinner floodlight for driver side. | YES | NO |
| One (1) Main conveyor discharge floodlight. | YES | NO |
| One (1) set of LED body clearance lights / identification lights stop / turn signal. | YES | NO Specify |
| Rear corner post of body shall have one set of each LED strobe amber rear flashing. | YES | NO Specify |
| One (1) GROTE 77163 Revolving Amber and blue lens for winter installed on the cab shield of the body. | YES | NO Specify |
| Paint | | |
| Body shall be sandblast (White sandblast) and prime with 2 coats of Epoxy primer 5.00 mil. Dry Electrostatic application. | YES | NO Specify |
| Paint with 2 coats of polyurethane paint PPG 3.00 mil. Dry Electrostatic application. | YES | NO Specify |

| CMVSS | | |
|--|----------------------|----|
| Installation of this equipment shall meet or surpass the mandatory requirements of the Motor Vehicle safety standard and its regulations in effect on the date of installation and must bear the National safety Mark. Safety mark # | YES SPECIFY: # | NO |
| Auto Grease system Groeneveld for truck and sander | YES | NO |

C ATTACHMENTS

Operator's manual and line ticket shall be supplied. YES: _____ NO: _____

Service manual shall be supplied. YES: _____ NO: _____

Back up sound alarm shall be supplied. YES: _____ NO: _____

Flare kit as per M.T.O. Spec. 1919-5A shall be supplied. YES: _____ NO: _____

A 5 lb. A-B-C Fire Extinguisher & Mounting bracket shall be supplied. YES: _____ NO: _____

A first aid kit shall be supplied YES: _____ NO: _____

D WARRANTY

The truck shall be covered by the standard manufacturer's warranty, a description of which shall be included with the tender documents. YES: _____ NO: _____

Where minimums are called for, the vehicle must meet, or exceed the capacity, size of performance specified. YES: _____ NO: _____

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. YES: _____ NO: _____

Tendered units must comply with the following specifications in all aspects. Alternative components which meet the requirements of this specification but are not identified in the specification must be approved by the Township Road Staff prior to tender closing. YES: _____ NO: _____

E NOTE

It will be the responsibility of the supplier to obtain any M.T.O. Standards referred to in the foregoing specifications. YES:_____NO:_____

Undercoating shall be provided by Krown or equivalent, to the cab and chassis, sanding conveyors, tailgate and box. YES:_____ NO_____

Vehicle shall be supplied with a valid Preventative Maintenance/Compulsory Vehicle Inspection (PMCVI) sticker. YES:_____NO:_____

Does your company have an accessibility plan in place? YES:_____NO:_____

The following information is to be taken into consideration when tendering this equipment:

LIGHTING REQUIREMENTS FOR COMBINATION DUMP BODY/SPREADER, SNOW PLOW AND WING

- . 1 pair halogen sealed beam, shock mounted headlamps, rectangular, with hi/low beam and turn signals, on the plow frame.
- . 1 plow spotlight on the front wing post.
- . 1 wing floodlight on the plow frame.
- . 1 spinner floodlight.
- . 1 set of body clearance/identification lights.
- . 1 of each 6" diameter blue and amber rear flashing light.
- . 1 Grote 77163 revolving amber flashing light on wing tower with 360 degree visibility, and with an extra blue lens Grote 92885.

F GENERAL INFORMATION TO BIDDERS

This specification describes a 6-Ton diesel powered tandem axle truck, equipped with a combination dump body/spreader, snowplow and wing.

The units will be used for hauling sand and gravel in the summer, and snow plowing, salting and sanding in the winter.

- (a) Tenders will be accepted by the Clerk-Treasurer up until 4:00 p.m. Wednesday December 5th, 2018.
- (b) The complete snowplow truck shall be delivered F.O.B. Admaston/Bromley Township Garage, 477 Stone Road, Renfrew ON by Friday, March 29, 2019.
- (c) Township tender form must be used.
- (d) Appropriate manufacturers literature must be submitted with tender.
- (e) Lowest or any tender not necessarily accepted.
- (f) The tender price shall be firm on delivery and any price escalation clause shall render the tender unacceptable.
- (g) Bids may not be considered if: (1) The product on which the price is submitted does not meet all the requirements of the specification, or (2) 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 on the confirmation.
- (h) The Dealer must have a service facility within approximately 100 kilometres of our yard.

If the Unit requires repairs or alterations upon inspection on the delivery date, any cost incurred will not be the responsibility of the Municipality, including labour or delivery costs of the Unit to where repairs may have to be performed.

The cab and chassis must be compatible with the snowplow harness to do the job without any interference or causing any hazardous situations.

Delivery of the complete unit shall be on or before September 30, 2019.

Date: _____

Signature of Bidder: _____