CORPORATION OF THE TOWN OF
KEARNEY ®

Email: info@townofkearney.com
Website: www.townofkearney.com
Phone: 705 636 7752
Fax: 705 636 0527

P.O. Box 38
8 Main Street
Kearney, Ontario
POA 1M0

TANDEM SNOW PLOW TRUCK WITH ALL SEASON COMINATION DUMP BODY/SPREADER

Tender Number:	RFT – PW-04-2026
Sealed Tenders will be received by:	Corporation of the Town of Kearney 8 Main Street, PO Box 38 Kearney, ON P0A 1M0
Tender Closing Date:	July 30th , 2026
Tender Closing Time:	2:00pm
Tender Opening Time:	2:15 p.m. Thursday, July 30th, 2026
Tender for:	Supply & Delivery of one (1) only NEW Tandem Snow Plow Truck with All Season Combination Dump Body/Spreader
Note:	Lowest or any tender not necessarily accepted.

TANDEM SNOW PLOW TRUCK WITH ALL SEASON COMBINATION DUMP BODY/SPREADER

TENDER FOR THE SUPPLY AND DELIVERY OF (1) ONE ONLY **NEW**

Tandem axle Snow Plow Truck with All Season Combination Dump Body and Spreader

SPECIFICATION AND CONFIRMATION

These 2 item specifications should be submitted as one tender.

GENERAL

This specification covers a tandem axle truck used in the maintenance of highways and municipal roads.

This specification covers only the major details of both units (truck and dump body/spreader). It is the supplier's responsibility to deliver fully equipped units with compatible components to provide dependable efficient service.

TENDERED UNITS MUST COMPLY WITH THE FOLLOWING SPECIFICATIONS IN ALL ASPECTS. ALTERNATIVE COMPONENTS, WHICH MEET THE REQUIREMENT OF THIS SPECIFICATION BUT ARE NOT IDENTIFIED IN THE SPECIFICATION, MUST BE APPROVED BY THE PURCHASER PRIOR TO TENDER CLOSING.

THE LOWEST OR ANY TENDER NOT NECESSARILY ACCEPTED.

TANDEM SNOW PLOW TRUCK SPECIFICATIONS

Specify Make and Model Supplied:
Make: Model:

	CONFIRM-YES/NO	COMMENTS
MANDITORY REQUIREMENTS		
This specification only lists the major components of a unit, therefore, it is the responsibility of the vendor to deliver a complete functioning unit to provide dependable and efficient service.		
Proponent must be a licensed motor vehicle dealer in good standing with the Ontario Motor Vehicle Industry Council.		
Proponent must be a licensed Motor Vehicle Inspection Station for class of vehicle being supplied.		
Proponent must have a valid Commercial Vehicle Operators Record (CVOR), and proof of liability insurance.		
CAB & CHASSIS		
New vehicle, current model year. State actual		
Specify make and model		
Safety DOT sticker to be applied on final delivery		
Minimum GVWR 68,000 lbs		
Set back front axle to be provided		
Trailer towing package to be provided with air connections at end of frame		
ENGINE		
Diesel 6 cylinder engine, must be emission compliant		
Specify engine make and model		
Minimum 12 liter displacement. Specify		
Minimum ratings are 410 HP / 1650 ft-lbs		
Ratings must be set at factory level and not altered by dealer before delivery		
Engine must have warning and de-rate protection		
Engine diagnostic information must be capable of sending error codes over network while vehicle is in use. Provide details on separate sheet. (i.e. Virtual Technician) First 2 Years to be included with cab & chassis.		
Alternator minimum 160 AMP		
3 Batteries to be provided, minimum		
Battery box to have HD aluminum cover		
Air intake to have inside/outside switch with snow door		
Heavy duty air compressor, minimum 19.0 CFM		
Must have Jacobs engine brake as standard		
Exhaust shall be horizontal aftertreatment system mounted under RH steps with horizontal tail pipe under frame. Mounting should not interfere with box or wing tower as required.		
Stainless steel heat shields where available		
Antifreeze should be good to -60 deg F minimum		
Engine to have front PTO adapter for body builder supplied hydraulic pump		
1500 Watt block heater		

	CONFIRM-YES/NO	COMMENTS
HD starter required with over-crank protection		
TRANSMISSION		
Eaton 13 speed transmission model RTLO-16913A		
Self-adjusting clutch with hydraulic control		
Water to oil transmission cooler, with synthetic oil		
RPM in top gear at 105kph should be suitable for highway cruise speed transportation while maintaining vocational performance. State actual		
AXLES & SUSPENSION		
Meritor 22,000# front axle, Model: MFS-20-133A FL1		
Flat leaf 23,000# front suspension		
Twin power steering gear		
Power steering cooler, oil to air		
Meritor 46,000# rear axle, Model: RT-46-164 R-Series		
Ratio 4.30/4.56, with full lock up		
Extended lube Meritor RPL driveline		
Tuftrac 46,000# rear spring suspension with 56” spread		
Shock absorbers on front and rear suspension		
Dust shields front and rear brakes		
FRAME COMPONENTS		
Air dryer AD-9, mounted inside frame		
Standard air tanks, mounted inside and below frame near rear suspension. Must be clear of wing tower and spinner installation.		
Pull-type drain cables on all air tanks		
Air connections to end of frame for towing provision		
Combination stop/turn light receptacle end of frame		
Wheelbase and CA to be confirmed with body builder, approximate dimension minimum 128” CA. Specify		
Double channel frame 7/16” x 3-9/16” x 11-1/8”		
Inner channel to be 1/4" full length		
Front frame extensions minimum 24”, with frame insert		
Rear frame overhang as required by body builder		
O.E.M. back of cab, MTO cross member for snow plow		
Painted steel bumper to be provided for reinstallation if front equipment harness is removed for summer		
FUEL SYSTEM		
Minimum 70 US GAL aluminum fuel tank		
Fuel tank mounted with stainless steel bands		
Minimum 6 US GAL DEF tank		
Factory insulation for fuel lines required		
WHEELS & TIRES		
Premium steer tires 425/65R22.5 20PLY State make & model:		
Premium rear drive tires 11R22.5 14PLY State make & model:		
Aluminum front wheels, 12.25” wide, hub pilot		
Steel HD rear wheels, powder coated white, hub pilot		
Nylon wheel guards between all hubs and wheels		
Iron HD hubs required front and rear		

	CONFIRM-YES/NO	COMMENTS
CAB EXTERIOR		
Air cab mounts		
3-1/2 fender extensions		
Non-removable bug screen mounted in grill		
Hood with access hatches for checking oil		
Premium floor and firewall insulation		
Dual rectangular air horns mounted on cab with covers		
LED aerodynamic marker lights on cab roof		
LED rear brake and indicator lights		
All lights where available must be LED		
Backup alarm		
Bright finish, remote controlled mirrors		
Power locks and windows		
Hood mounted fender mirrors		
Diamond plate aftertreatment system cover		
Factory installed sun visor		
Rear tinted cab window		
Washer fluid reservoir with level indicator		
OEM heated windshield with automatic operation		
CAB INTERIOR		
Grey vinyl interior covering		
Roof mounted storage compartment		
Center storage console mounted on back wall		
5 lb fire extinguisher and first aid kit provided		
Triangle reflector kit with flares		
HD heating unit with air conditioning		
Additional factory fit rubber floor mats provided		
Snow shield for fresh air intake		
Premium insulation package		
Dual reading lights in cab roof		
(2) power point connections in dash		
Matching driver and passenger premium air ride seats with both arm rests and black HD covering		
Adjustable tilt-telescopic steering		
Interior flip down sun visors		
Standard instrument panel with gauge package		
Dash mounted air restriction indicator		
Transmission and engine oil temp gauges		
Inside/outside air temp gauge		
AM/FM/AUX Bluetooth/Microphone standard radio		
Roof console provision for CB radio prewire		
Premium AM/FM multiband antenna mounted on mirror		
Factory provided minimum (8) optional switches wired to back of cab with relays for body builder use		
Vehicle interface and high amp PDM for body builder		
Pre-trip light check inspection switch		
Trailer brake spike control		
Voltage display in dash		
HD winter wiper blades and washer system		
Factory pre-wire for integrated snow plow lights with OEM signal stat and dash switch		
ADDITIONAL SPECIFICATIONS		
Cab paint to be one solid colour, base clear process. Colour code to be determined on award		

	CONFIRM-YES/NO	COMMENTS
Body paint to match cab colour		
Frame and mounted components to be painted black		
Rust proofing spray to be applied to completed vehicle before final delivery		
Chassis and powertrain standard warranty to be provided on separate sheet, with options for extended coverage.		
Printed shop manual required		
Printed parts manual or online access required		
Final delivery to be received at Municipal garage		
Chassis to match with equipment selection and it is the responsibility of the vender to confirm any dimensions and clearance issues.		
Provide (5) references minimum where similar equipment has been supplied. Include as attachment		
Nearest location for factory service and support on cab & chassis. Specify		
One year, unlimited kms towing/roadside service extended coverage. Specify details		

ALL SEASON COMBINATION DUMP BODY / SPREADER

General

These specifications describe an All-Season Combination Dump Body and Sand/Salt Spreader. The dump box shall remain stationary on the chassis frame while spreading. Rear discharge shall be front hoist tilt action as per conventional dump bodies. The unit will be oval shaped of a roll-formed type design to permit gravity flow unloading and prevent material bridging over conveyor chain. The body side panels shall be smooth rolled without breaks. Body designs that include breaks will not be accepted and will deem their bid inadmissible. The main conveyor will be centered and recessed along the length of the box. The cross-conveyor chain will be chassis frame mounted with spreader discharge on the front, left side (driver's) of dump box.

Viking Model Proline PL1415HW Generation II or equivalent – other makes must be approved by the **Town of Kearney** prior to the closing of this tender.

YES:_____ NO:_____

SPECIFY
MAKE:_____
MODEL: _____

Specification	***YES***	***NO***
Body shall be oval shaped, permitting materials to unload by gravity flow into spreading position.		
Water level capacity will be 12.5 cu.yd., minimum. Bodies of less capacity will not be accepted.		
Water level capacity with 10" sideboards will be 15.4 cu.yd., minimum.		
Outside length 15' minimum.		
	YES	***NO***
Inside length 14' minimum.		
Overall width 8' maximum.		

Height of sides to be 50” minimum.		
Height of tailgate to be 55” minimum.		
Height of front panel to be 60” minimum.		
Top rail of body will be 6” x 4” x 3/8” structural rectangular tubing – a break-formed type steel top rail support system will not be acceptable.		
All body welds will be 100% continuous inside and outside.		
Body sides, front panel and tailgate will be constructed of 3/16" thick, Corten corrosion resistant steel.		
Body floor will be constructed of 3/16" thick, Hardox 450, hi-tensile, 205,000 psi yield strength, abrasion resistant steel.		
Dump box access ladder shall be 16” wide, recessed and be flush with dump body top rail and fender. The ladder must slope inward from bottom to top, and be located on drivers side at front of box.		
Hoist		
Hoist shall be a front mount, three (3) stage telescopic with 5” bore – must be Mailhot model CS130-5.5-3 – alternate or inverted type hoists will not be acceptable.		
Hoist class shall be 80/30 ton.		
Cylinder stroke shall be 330 cm (130”) minimum.		
Dump box tipping angle shall be a minimum of 50 degrees.		

Rear hinge assembly shall be supplied with hinge pin dia. of 2.5” minimum.		
Hoist control valve shall be air operated.		
Tailgate		
Tailgate height shall be 55” minimum.		
Tailgate shall be rectangular shaped to allow use of asphalt or stone chip type spreaders.		
Construction shall be of 3/16" thick, Hardox 450, hi-tensile, 205,000 psi yield strength, abrasion resistant steel		
Exterior vertical side support tubes to be 3 ½” x 3 ½” x ¼” wall HSS square tubing – no exception.		
Latch mechanism for the tailgate shall be air trip and latch type utilizing two air pot boosters – units with only a single air pot booster, or air cylinder to activate tailgate, will not be acceptable.		
Spreader chains and brackets shall be supplied on tailgate and rear corner posts. Chains shall be grade 70 coil proof 5/16” minimum.		
Aspalt door in tailgate with a dimension of 17” x 26” shall be provided. Cantilevered handle offset to curbside to operate sliding door.		
Conveyor		
The main conveyor shall be recessed along the length of dump box floor.		

The conveyor chain shall include the minimum specifications: – 30,000 lbs. tensile strength – D667X self cleaning pintle chain – no exception – utilizes ¼" x 1 ¼" crosses welded to every 4th link (approx. 9" apart)		
The main conveyor shall be hydraulic direct drive via planetary drive mechanism providing a minimum of 38,000 lbs., torque capacity and 50,000 in/lbs peak. Standard 25:1 gear reducers will not be acceptable.		
Connection of the planetary drive shaft to the main conveyor shaft shall be accomplished via a split two piece coupler assembly.		
Each of the two body long sill weldments will be vertical slotted. By 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.		
Idler end of main conveyor will also be of the vertical slotted drop out design as described above.		
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.		
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. Automated chain tensioner system must be provided – no exception.		
Bolt-on door panel shall be provided for easy access to automatic chain tensioning mechanism. Access panel to be located on body longmember.		
Underside of main conveyor to have poly guard to prevent material spillage on to chassis components and frame rails.		
The flow control gate between main and cross conveyor shall be screw adjustable by hand crank from drivers side of dump body.		
Cross Conveyor		

The cross conveyor shall be hydraulic direct drive via a single reversible 11.9 cu. in. hydraulic motor controlled by a 12V solenoid valve with in cab toggle switch.		
A cross conveyor assembly shall be used to discharge material from main conveyor to the either left hand or right hand of chassis sides.		
Cross conveyor assembly to mount on chassis frame independent from and in front of main combination spreader unit.		
Cross conveyor unit shall be removable design to reduce added weight in non-spreading applications.		
Cross conveyor weldment shall be fabricated from a minimum 3/16” Cor-Ten A corrosion resistant material.		
Cross conveyor belt to be fabricated from 3/8” thick, 2 ply, 12" wide by 121" long molded, seamless conveyor belting.		
Belt shall be positive drive to eliminate slippage.		
The cross conveyor belt shall have a high temperature, asphalt application available.		
Cross conveyor assembly to include replaceable steel guards to prevent material from entering under belt or spilling off conveyor.		
Cross conveyor assembly to include 4 poly runners to maintain an even belt surface, preventing material from getting under belt.		
Cross conveyor assembly shall have snub rollers constructed with high temperature, low stick, 2.5" diameter by 2.0" poly rollers, to reduce material build up under conveyor.		
Cross conveyor assembly shall come with external, quick coupler washout connection.		
Cross conveyor assembly shall include 5 external, greaseable flange bearings and 2 external, greaseable take up bearings		
Cross conveyor assembly shall include 8 external grease fittings for application of grease to all bearings.		
Cross conveyor assembly to provide provisions for mounting of material sand/salt chutes and spinner units.		

Spinner		
A polyurethane spinner shall be installed on the left hand side (Driver side) to spread ahead of rear wheels.		
Spinner disc will be hydraulic direct drive and to include a clean - off **anti coning device**.		
Spinner height shall be adjusted to accommodate various chassis heights and capable of a discharge rate from 199 lbs./lane mile to 2,500 lbs./lane mile.		
A poly lined hinged extendible salt chute shall be installed on the left side.		
A standard chute only is to be mounted on the right side of the cross conveyor.		
Sander Controls		
SpreadSmart Rx 7" for Auger and Spinner Application. Must include a JEMS Open Centre 3 section valve within Enclosure and the PW port plugged		
GPS System		
Ace Infobite wireless GPS System including required wiring harness and GPS module.		
Fenders And Flaps		
Fenders shall be continuous along the full length of dump body to provide cover for rear wheels and to protect the body. Fenders to be fabricated from minimum 10 GA Cor-ten "A" corrosion resistant steel.		
Integral fenders to be sloped away from unit (material shedding design) to prevent any excess material spilled during loading from pilling up on fenders.		
Red/White 2" reflective tape to be installed along body fenders and across bottom of tailgate.		
Aluminum fenders covering the rear axle shall be bolted to each side of the chassis frame rails. The aluminum fenders shall remain stationary on the chassis when the body is raised.		

Paint		
The dump body shall be shot blasted and epoxy primed with 3 mils of Dupont DTM type primer.		
Finish paint shall be Dupont Imron 5000 "ELITE" polyurethane enamel and colour matched yellow to the truck cab – Dupont Imron 5000 Elite finish paint must be utilized – no exception.		
Specify Paint Manufacturer : _____. Specify Paint Type : _____.		
Finish Paint to be a **"Baked On" process (no substitutes)**.		
Load Cover		
An air tarp shall be supplied with fabricated tarp arms dimensions of 1 ½" x 2 ½" rectangular steel tubing, and a 1/8" asphalt type mesh tarp. Tarp to be operated by twin air cylinders operated from inside the cab. Electric type tarp mechanisms, and air tarps utilizing air motors in lieu of cylinders, will not be acceptable.		
Pintle Hook		
A Holland PH410RA pintle hook with air cushion shall be installed onto a heavily reinforced pintle plate. Two(2) tow hooks shall also be mounted onto the pintle plate. Body builder shall relocate the chassis supplied glad hands and 7 pin trailer plug onto the pintle plate.		
Screens		
Body shall be equipped with heavy duty material screens, hinged from a center longitudinal tubular member of not less than 4" in diameter.		
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.		
Mesh shall have a maximum openings of 3".		
Screen shall not extend over the edge of the body and shall be pitched not less than 3.625" from center.		

Lights And Wiring		
All box lights to be LED type.		
Grote "Ultra Blue Seal" wiring harness for body lights & electrical shall be supplied (no substitutes).		
Auxilliary lighting will plug directly into OEM supplied connections. ***Cutting, splicing, soldering or shrink tubing of connections is*** *not acceptable.*		
Box lighting kit to include Grote Ultra Blue Seal LED rear stop lights, tail lights, turn signals, and back-up lights, and shall be installed in rear corner posts.		
Grote blue and amber **LED** strobe lights to be high mounted in each upper rear corner posts for maximum visibility.		
Spinner and cross conveyor lights shall be supplied, with separate in-cab switches.		
Blue and amber incandescent warning lights to be installed below tailgate, centre of rear axle.		
Star 200B blue and 200A amber revolving beacon lights shall be installed on pedestal attached to top of oil reservoir behind cab. Beacon lights shall be visible 360° around vehicle.		
Hydraulics		
All fittings, valves, hoses and drive shaft shall be supplied and installed. All hoses shall be equipped with swivels on both ends.		
The hydraulic reservoir shall be of sufficient capacity to supply necessary oil supply. Reservoir must not interfere with the box installation.		

A sight gauge to allow easy checking of the hydraulic oil level in the reservoir shall be supplied.		
General		
Prototype units will not be acceptable. The bidder must be able to demonstrate a solid history of use of the combination U-body/spreader offered in this tender by Ontario Municipalities, for a minimum period of five(5) years, and references must be supplied as upon request.		
Installation of this equipment shall meet or surpass the mandatory requirements of the Canada Motor Vehicle Safety Act and its regulations in effect on the date of manufacture. Installer of the truck equipment **must** be certified with Transport Canada and bear the **National Safety Mark.** **Specify National Safety Mark Number: _____.**		
PROVIDE OPTIONAL PRICING FOR THE BODY TO BE CONSTRUCTED FROM HARDOX 450, HI-TENSILE, 205,000 PSI TENSILE STRENGTH STEEL THROUGHOUT IN LIEU OF CORTEN STEEL - $_____ net extra per unit		

Specification:	***Yes***	***No***
Viking model VCL4151-12-45C steel full trip EXPRESSWAY type reversible snow plow or approved equivalent:		
The moldboard height shall gradually increase from the centre to both the left and right sides, so as to form a "cone" design on either side. This will permit a superior casting distance during plowing operations.		
The moldboard height in the centre shall be 41" maximum.		
The height at both the left and right side discharge ends shall be 51" maximum.		
The overall width shall be 12'.		
The path cleared in the bulldozing position shall be 12'. At a 35 degree angle, the path cleared shall be 10'.		

Set at a 50 deg. attack angle, the overhang from the cutting edge to the front of the moldboard shall be 20” minimum – no exceptions.		
Set at a 60 deg. attack angle, the overhang from the cutting edge to the front of the moldboard shall be 25” minimum – no exceptions.		
Set at a 50 deg. attack angle, the height from the ground to the front of the moldboard shall be 28” maximum – no exceptions.		
Set at a 60 deg. attack angle, the height from the ground to the front of the moldboard shall be 24” maximum – no exceptions.		
The moldboard shall be fabricated from 10 ga. steel.		
There shall be a minimum of 10 x 3/8” thick reinforcing ribs 100% welded to the moldboard.		
The safety trip mechanism shall consist of two compression coil springs incorporated into the drive frame. Upon encountering a road obstruction, the moldboard will raise vertically through the 2 compression springs. Note that reversible plows whereby the moldboard tilts forward through extension springs, will not be accepted by the Municipality.		
The two compression trip springs will be 5/8” wire, 5 ¼” O.D., 14” free length with a total of 8 active coils.		
“Mushroom style” screw adjustable skid shoes shall be fitted on the drive frame.		
These shoes shall carry the weight of the plow when the moldboard trips.		
The bottom of the moldboard is to be reinforced with a ½” x 6” x 4” backer angle.		
A second angle 3/8” x 3” x 2” shall be welded above for added strength and rigidity.		
The drive frame shall be of A frame and sector design.		
The A frame will be constructed of 3 ½” x 3 ½” x ¼” square tubing with two ¾” thick pivot plates.		
Sector frame constructed of 4” x 4” x 3/8” square tube.		
The sector angle shall provide a 30° radius and be constructed of ½” x 3 ½” x 2 ½” steel.		
To prevent wear, the sector will glide between two low friction replaceable polymer bearings bolted on the A frame.		

There shall be two 3” x 14” double acting hydraulic cylinders to reverse the plow to a maximum of 35 right or left.		
Moldboard shall be fitted with 2 shoes and scuff shoes shall be supplied on each end.		
A 3/4” X 8” X 14’ steel cutting edge shall be supplied and bolted to the moldboard.		
Three 3/8” lift chains shall be provided to lift the plow to the carrying position.		
These chains must be as wide spread as possible in order to make the plow stable, and the plow must remain level when carried.		
It will be possible to perform the power angle function with the plow in both the lowered working position and the raised carrying position.		
Four hinge points are to be provided to connect the moldboard to the pushframe, spanning a minimum distance of 80”.		
To prevent damage to the reversing cylinders a cross-over relief valve shall be supplied.		
Drive frame shall be complete with an adjustable parking stand.		
All steel shall be epoxy primed prior to application of finish paint.		
All paint finishes shall be top quality, rust resistant black.		
Quick tack oscillating beam shall be supplied.		
Standard steel cutting edge shall be provided.		
Moldboard to be fitted with 2 moldboard shoes and 2 curb shoes.		
Fluorescent markers to be fitted on each end of the plow moldboard.		
Viking model VCL500T hydraulic tilt front plow harness or approved equivalent:	***Yes***	***No***
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		
The harness tilt and return function will be performed by the operator from inside the chassis cab via proportional air over hydraulic control.		
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.		

The locking shaft shall be non load bearing design with no weight actually on the shaft		
The single lock shaft will have an outside diameter of 1 ½" inches and overall length will be a minimum of 30 inches.		
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 30º degrees.		
The lock shaft will when installed be located inside the full length connecting tube.		
The connecting tube and lock shaft assembly will together form the upper connection point of the cheek plate weldment to the front plate assembly.		
The connecting tube overall length will be 23 3/8" inch, inside 1.612" inches, outside diameter 1.90" inches.		
The hydraulic power tilt cylinder will be double acting 2 ½ inches with a 6-inch stroke chrome piston rod.		
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.		
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.		
The inner pivot tube will be 4 inches outside diameter 2 ¾ inches inside diameter, 52 inch long seamless mechanical tubing.		
There will be two inner pivot tube gussets ½ inch plate, 18 13/16 inches long, 5" inches wide tapered to 2 ¼ inches.		
End plate located on inner tube ½" material 12" x 6" to provide lower mounting location for wing front post.		
The outer pivot tube will be 5 9/16" outside diameter, 4 1/16" inside diameter, 25 3/8 inch long extra heavy pipe.		
There will be two outer pivot tube gussets ½ inch plate, 8 inch x 8 inch triangular.		
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.		

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.		
Overall height of the front plate will be 49 inches with a 5.25 inch 90º degree bend at the bottom.		
Overall height of the front plate will be 49 inches with a 5.25 inch 90º degree bend at the bottom.		
Right and left side plates, 15 3/4" maximum width by 49 1/4" high by 3/8" plate welded to the front plate.		
Upper cross channel 6" by 52" at 13 lbs./ft. welded to the right and left side plates		
End plate located on upper cross channel 1/2" material 12" x 6" to provide upper mounting location for wing front post		
1/2" steel plate pump and tilt cylinder mounting bracket welded to the cheek plate assembly, 24 1/4" wide by 18 1/2".		
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.		
Cheek plates flame cut from 44W steel plate. Specify: Minimum Yield:_____ Minimum Tensile:_____		
Fasteners attaching cheek plates to the chassis frame rails will be minimum grade 8 N.C. hex head bolts.		
Two pairs of drive ears 100% welded to the front plate spaced at standard 30 1/2" centers.		
Three sets of plow drive bar connection holes located in drive ears - height to lower drive connection 19" mounted with truck empty.		
Quick-tack hitch pockets bolted to drive ears.		
Hydraulic plow lift cylinder, double acting 4" diameter with 10" stroke, cylinder rod chrome plated.		
Plow lift yoke 3/4" steel plate, braced with two 1/4" x 2" flat bar diagonal braces.		

Two mounting locations in lift yoke to provide location for mounting of plow hydraulic lift cylinder in winter operating position and stored summer position.		
Mounting plates for plow lift cylinder, lift yoke and lift yoke braces all 1/2" steel plate 100% welded to front plate.		
Two LED plow lights with high and low beam and built in integral directional's with switch in cab shall be supplied.		
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.		
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.		
Lift yoke brace mounting plates positioned to provide minimum 23.5" span.		

Viking model VCL275METRO Full Hydraulic Type Wing Harness or approved equivalent :

	SPECIFICATIONS	**CONFIRMATIONS**	
	All Hydraulic VCL275METRO FRONT WING POST		
	48” front post shall be a Viking Model VCL275METRO – full hydraulic type without the requirement of sheaves and cables – capable of high-winging or benching at a height of 48" from the ground to the bottom of the wing cutting edge.	o YES	o NO
	The post shall be an 8” I beam @ 18.4 lbs/ft. – no exception.	o YES	o NO
	SPECIFY:		
	The post shall be designed for heavy duty service and incorporate a hydraulic ram to operate the front of the wing.	o YES	o NO
	The main supporting member for the front post shall be 4” OD x 2 ¾” ID x 5/8” wall tube cross member running through both cheek plates, reinforced with a ½” steel plate between the cheek plate and front post.	o YES	o NO
	The auxiliary support shall be a 6” x 13 lb/ft channel running across the top of both cheek plates.	o YES	o NO
	Aeon 5000 lb. rubber block helper spring kit shall be installed to the R.H. front chassis springs	o YES	o NO
	The front post slide shall be hydraulically operated by a 3” x 48” double acting fully chromed hydraulic cylinder – mounted in the rear of the front wing post (nitrided type cylinders are not acceptable). Front post will include a 4” O.D. x 2 ¾” I.D. x 5/8” wall tube cross member running through both cheek plates and front post.	o YES	o NO
	12” Grote #12020 convex mirror on backside of front post on a extended 10” angle iron bracket to aid driver in winging mode.	o YES	o NO
	The slide and hinge assembly shall be equipped with a TORSION SPRING which will allow the wing to trip over obstacles.	o YES	o NO

	Two (2) 6” Grote front post spot lights on 18” extended adjustable bracket, separate in-cab switches.	o YES	o NO
	The front post shall also be reinforced with a diagonal brace of heavy pipe running back to the chassis side rails	o YES	o NO
		o YES	o NO
	FULL HYDRAULIC VCL275METRO REAR WING POST – NO CABLES OR SHEAVES	o YES	o NO
	The rear structure shall attach directly to the right side of the Chassis close behind the cab.	o YES	o NO
	The 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.	o YES	o NO
	A rigid load carrying enclosure shall be provided to support the wing braces and hydraulic cylinder for the rear of the wing.	o YES	o NO
	The hydraulic valves shall be operated by featherable air controls.	o YES	o NO
	The wing operation shall be a “full hydraulic” type, without any sheaves or cables.	o YES	o NO
	30 U.S. gallon integral oil reservoir, installed on the side of the frame rails, shall be supplied complete with oil filter, oil level sight / temperature gauge, breather type filler cap, drain plug and ball valve shut-offs		
	6” rear wing light w/in-cab switch	o YES	o NO
	Manufacturer’s literature shall be included	o YES	o NO
	Manufacturer’s warranty		
	SPECIFY:		
	Harness shall be prepped and painted Medium Gloss BLACK	o YES	o NO

Viking model VCL144WHD-M Steel Side Wing Moldboard or approved equivalent :

	SPECIFICATIONS	**CONFIRMATIONS**	
	12’ WING MOLDBOARD		
		o YES	o NO
	Viking model VCL144WHD-M	o YES	o NO
	SPECIFY:		
	MAKE:		
	MODEL:		
	Overall length 12 feet	o YES	o NO
	Inside intake height 29” minimum.	o YES	o NO
	Outside discharge height 39” minimum.	o YES	o NO
	Moldboard thickness 10 gauge minimum.	o YES	o NO
	Two drive ribs for connecting the wing brace shall be provided.	o YES	o NO
	Two drive ribs shall be located approximately 10’ 2” and 10’ 8” from the nose end of the wing.	o YES	o NO
		o YES	o NO

	The plate for mounting the wing to the wing post shall be 1" thick. The mounting hole shall be far enough from the edge of the plate to	o YES	o NO
	avoid failure in this area. Lower wing angle shall be 6" x 4" x ¾". The mounting of the nose end of the wing to the wing post shall be	o YES	o NO
	by means of a hinge and rectangle spring, to allow tipping over of	o YES	o NO
	the wing. Two adjustable wing braces shall be supplied. The upper brace shall be of a shock release type, including a spring retraction. The spring shall provide adequate stability of the wing in normal operating conditions, and shall retract the wing from tip-over position.	o YES	o NO
	The lower brace shall incorporate a 5/8" x 6" compression spring to absorb any shock the wing encounters.	o YES	o NO
	A 3" x 14 7/8" hydraulic lift cylinder shall be mounted between the upper and lower wing braces.	o YES	o NO
	Upper brace – extended 90" C.C.	o YES	o NO
	Collapsed 60" C.C.	o YES	o NO
	Extended distances shall be measured with spring fully retracted.	o YES	o NO
	Lower brace – Extended 88" C.C.	o YES	o NO
	Collapsed 58" C.C.	o YES	o NO
	One spare pin for adjusting the wing braces shall be supplied with each brace.	o YES	o NO
	The top edge of the wing shall be boxed in and welded 100% to the ribs and the moldboard so as to avoid any pockets.	o YES	o NO
	Adjustable needle valve in hydraulics back of cab to allow operator to be able to slow/speed mode functions of wing.	o YES	o NO
	5/8" thick standard steel cutting edge and 2 moldboard shoes shall be supplied.	o YES	o NO
	36" ORANGE fluorescent wing marker attached to rear of wing.	o YES	o NO
	Conspicuity reflective on wing arm and on rear edge of wing.	o YES	o NO
	Parking stand shall be attached to back side of wing.	o YES	o NO
	All steel will be shotblasted, epoxy ZINC primed and finished in Medium Gloss BLACK finish.		

HYDRAULIC SYSTEM:		
The hydraulic pump supplied shall be a Dowty Model 2PL158/220 front mount crankshaft driven Tandem Dry Mode pump with in cab air shift.		
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. 23 US G.P.M. at 1,800 R.P.M		
The second stage shall produce 18 US G.P.M. at 1,000 R.P.M. and 32 US G.P.M. at 1,800 R.P.M.		
One pump section shall be dedicated to the operation of the plow, wing and hoist only.		

The second pump section shall strictly operate the conveyor and spinner assembly to ensure uninterrupted flow of material.		
Pump mounting plate and splined drive shaft shall be supplied.		
The pump shall be driven from the crankshaft of the truck engine.		
The pump shall have a manufacturer's R.P.M. rating equivalent or higher than that of the truck engine at governed speed.		
Hydraulic hoses to connect pump shall be supplied. Their size shall be adequate for quick operation of all hydraulic operations and shall be 2 ply braided steel SAE100RS, with swivels on both ends.		
Specification	Yes	No
The drive shaft shall be supplied with spline long enough to allow telescopic retraction of the shaft in order to change fan belt without removing the pump.		
The hydraulic system must be set up so all other hydraulic functions do not " rob " the sander equipment.		
A parts manual shall be supplied with each unit.		
Hydraulic control valves will be stackable and sectional type HCD-6 with HCD6-L20 air shift – no exceptions.		
The valves shall be open center type to operate with a hydraulic gear pump.		
To prevent corrosion the air shifters will have a bronze sleeve.		
The control valve will include the following 6 sections: 1 single acting for body hoist 1 double acting for plow lift 1 double acting for plow reverse 1 double acting section for front harness hydraulic tilt forward 1 double acting section for front of wing lift 1 double acting section for rear of wing lift		
The hydraulic control valves will be operated by proportional featherable in cab air controls – model RMH866000 – no exception.		
The control panel assembly shall be of a remote design pedestal mounted and adjustable.		
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.		
The oil reservoir will be installed on the side of the chassis frame rails.		
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.		

Company /Firm	Description	Bid Price
	Applicable Taxes	
	Total Bid Price	