Attachment - B

The Town of Orange is seeking competitive bids for a new truck.

The following specification is intended to describe the body, hoist, hydraulics, sander and equipment controls, for the Town of Orange for purchase. These specifications are not meant to be restrictive but are meant to set a minimum standard for product quality, installation and standardization of fleet. Please indicate "Yes" or "No" if the proposed equipment being submitted ***exactly*** meets with each specification including proposed manufacturer. If "No", please describe variance in the exception column. If the equipment bid exceeds any specification, check "No" and describe the variance in the exception column. Simply writing "exceed" in the exception column without explanation may disallow proposal. Equipment vendor shall be responsible for ***all*** ancillary equipment and must be factory authorized distributer for proposed items, No Exceptions!
The Town of Orange reserves the right to accept or reject any and all submitted proposals if deemed to be in the best interest of the town.

	Yes	No	Exception
A. BODY 6 to 8 CY, GALION 453FT OR EQUAL			
1. Length 120"			
2. Inside Width 84"			
3. Side Height 30"			
4. Front Height 44"			
5. Tailgate Height 40"			
6. Floor, 3/16" AR450 180,000 PSI with 2" floor to side radius, 3/16" Hi-tensile steel			
7. Front head, 7 gauge stainless steel			
8. Entire body will be constructed of 210-2B high polish stainless steel, no exceptions.			
9. Sides shall be constructed from 7 gauge 201-2B stainless steel with three vertical side posts on each side, 10" side board extension pockets.			
10. Dirt sheading boxed top rail, 4-11/16" x 3-38" 7 gauge 201-2B stainless steel.			
11. 9" full rear bolster, 7 gauge 201-2B stainless steel.			
12. Sub-frame, crossmemberless, two 11-1/8" wide top, x 9" high x 4" wide bottom trapezoidal long-members, 3/16" 100,000 PSI, no exceptions.			
13. Tailgate, six panel design with full perimeter box bracing, two intermediate vertical braces and one additional horizontal brace, 7 gauge 201-2B stainless steel.			
14. Tailgate, double acting with long 3/8" chains and two sets of banjo plates (punched banjo eyes in rear corner post will not be accepted) 2-1/2" x 8" double acting air release tailgate installed at rear center with 1-1/4" greaseable cross shaft. There shall be two each coal doors installed lower right and lower left corner of tailgate.			
15. Heavy duty (Tarp Friendly) top hardware with grease fittings.			

16. 15" wide full depth rear corner post, 7 gauge 201-2B stainless steel, with three six inch oval holes for stop, tail and turn, reverse and strobe lights.			
17. Full and continuous welded body shell and tailgate.			
18. 7 Gauge 201-2B stainless steel cab protector, with six inch oval holes, two facing forward and two facing out. No exceptions.			
19. One each LED stop tail & turn along with LED reverse lights and Sound-Off strobe system. No exceptions			
20. The front head sheet of the body shall be one piece construction.			
Body shall have a pull out, fold down body access ladder installed in the front left side of the body			
21. Hoist shall be class 50 with two year warranty on cylinder, it shall be bail mounted to the body (No Dog House) with the largest diameter of the cylinder at the bottom for increased stability.			
22. The hoist cylinder will have 32 ton capacity and operating pressure of 2,000 PSI			
The front plow hitch shall be heavy duty design fully welded assembly, (no bolted together hitches will be accepted) the hitch shall have two ¾" x 18" x 32" side plates integrally welded to lower main push frame rail and externally bolted through the front frame extensions utilizing ¾" grade eight fender bolts and fender locking nuts with grade eight washer behind nuts. The vertical members shall be 4" x 4" x ½" angle coped back towards the chassis and caped with 4" x 4" x ½" angle. There shall be 3" 12" x ½" reinforcements coped and fully welded to the vertical members for additional support. The lower main push plate shall be 14" x 3-1/2" x ½" thick "C" channel with multiple push height and 21" and 30.5" push centers. There shall be a 4" x 6" x ½" angle coped to match the upper portion chassis frame rail and set back to allow the upper portion of the hitch to be welded. The outside edges of this angel shall be welded to the upper portion of the ¾" side plates, there will be two each 4"x 4" x ½" x12" angles installed under the inside lower portion of the chassis frame rail and fully welded to the interior portion of the outer side plates, there shall be a 4" x 4" x ½" angle installed at the bottom rear of the outer side plates and fully welded to create a complete boxed assembly. There shall be a 4" x 10" double acting plow lift cylinder attached to ½" brackets welded to the upper portion of the main "C" channel and attached to the tapered top lift arm.			

The hydraulic system shall have a hot shift PTO with direct mount load sense Danfoss pump with 1" 15 spline shaft, the pump shall have a stainless steel custom fabricated support bracket, pumps hanging from PTO only will not be accepted.			
The combination hydraulic reservoir and valve enclosure shall be stainless steel with integral side porting for all hydraulic hoses, fittings and air control lines. It shall be bolted to the side of chassis without interfering with other chassis components. It shall have a removable sealed stainless steel cover held in place with two fabricated slot and tab locks and two rubber latches. No exceptions			
Separate hydraulic reservoir and valve enclosures, or combination units with bottom feed hoses will not be accepted			
The valve shall be a PVG32 load sense valve with air control bonnets with fully adjustable spool settings, the valve porting shall be integrally connected to the side portion of the enclosure utilizing custom bent stainless steel tubing. No exceptions			
There shall be a spreader manifold directly integral to the valve sections with infinitely manual run adjustment on the cartridge valves. This manifold will control all spreader operations.			
All main hydraulic lines shall be fabricated from 1/2" 304 stainless steel tubing custom formed and fully vibration mounted and supported throughout the chassis. All lines must use stainless steel ferules, mild steel will not be accepted. The lines must not interfere with normal maintenance of chassis components.			
All hydraulic hoses shall be short run hoses and shall have swivels on each end. All hoses and fittings shall be Parker manufacturing or pre-approved equal, no exceptions			
The in cab controls shall be ARB6 arm rest control stand with integrally mounted modular compartments including a fully rotational padded arm rest, the entire unit shall rotate on a 3" steel tube fitted to the underside on the arm rest and slide into the "L" shaped floor mount. There shall be multiple adjustment tightening thumb screws to hold unit in desired location. Del Hydraulics air controls to operate plow up/down, plow left/right, body up/down, and load cover. There shall be a modular switch compartment to operate front and rear strobes, load light and work light, air tailgate and auxiliary. There shall be a body up and tailgate warning light in the switch panel. There shall be a			

low oil warning and override modular compartment mounted on the side the air control compartment. All switches shall be replaceable lighted rocker switches. There shall be a sealed modular compartment mounted on the side of the arm rest to house a constant duty solenoid, resettable circuit breaker, positive and negative terminal strips. All warning lights and switches shall be clearly marked by white color silk screened permanent markings. This is the only control system that will be accepted by the town for standardization purposes.			
The sander control shall be a Certified Power Freedom 2.0 electronic spreader controller integrally mounted above the switches on the ARB6 in cab control system. No other controller will be accepted. Vendor must be factory authorized distributer for The Freedom 2.0 electronics. No exceptions			
The load cover shall be Power Cover USA, hydraulically operated from the central hydraulic system, the body and chassis shall be plumbed with stainless steel line for the load cover, the load cover shall have aluminum actuating cylinders and rotate on a "TrueTrac" with spherical bearings.			

Sander:	**Yes**	**No**	**Exception**
Specification shall describe a V-box material spreader capable of hauling and spreading free flowing granular materials from a minimum width of (4) four feet to a maximum of (40) forty feet.			
Unit shall consist of a 201stainless steel body, discharge/feed conveyor, spinner assembly, power drive, and all components necessary to make a complete operating unit.			
The spreader hopper shall be constructed of 10 gauge 201 stainless steel with a 2" double crimped top edge formed for greater rigidity.			
The hopper body length shall be ten feet with a two foot bolt-on longitudinal overhung for supporting the spinner assembly.			
The body shall be designed to accommodate doghouse of dump body IF REQUIRED. A lesser length spreader body will NOT be acceptable.			
The hopper shall not be more than 84" outside width.			

The hopper height shall be 50" with a 12" bolt-on extension and a cubic yard capacity of 7.8 water level full.			
The body longitudinals shall be manufactured of 7 gauge steel. The longitudinal shall commence at the end of the hopper with a bolt on flange assembly welded in place to bolt on the replaceable long member tail kit.			
The channel cross sills shall be 3" 201 SS formed channel that tie the lower edge of the longitudinals to each side support.			
These cross supports shall be wide enough to allow the V-box to slide into a dump body.			
A bolt-on 6" x 9.0# wide flange "H" beam will be elevated 3" above the top edge of the hopper, thus providing a longitudinal brace and hinge point for the top screens.			
There shall be a 2" SS angle iron bolted from the "H" beam to each hopper side for additional side support.			
The body and conveyor longitudinals shall be electrically welded into a rugged solid unit with a continuous weld between the outside joint to prevent a pocket for rust.			
There shall be a screw type self-locking gate.			

	Yes	No	Exceptions
The 12" x 18" ten gauge SS feed gate and ruler shall be provided at the rear of the hopper to allow for accurate discharge. The door slide rails shall be bolt on and replaceable.			
There shall be 10 gauge SS formed side supports that extend the full side angle height spaced on approximately (2) two foot centers.			
A heavy duty bolt on lift loop shall be provided with pre-punched locations on the front and rear of body or side mounted.			
The rear endplate shall be reinforced inside and supported to give it maximum strength.			
Conveyor system shall be of chain barflight type running longitudinally with the body feeding material to the feed gate opening.			
The overall conveyor width shall be not less than 24".			

To protect the chain link strands, a 10 gauge SS replaceable chain shields shall cover the strands exposing only the drag bar to the material.			
The conveyor floor shall be of flat design and manufactured of replaceable 3/16" stainless steel and rolled over ends.			
The conveyor chain shall be driven through the worm drive gearbox by a low speed/high-torque "orbital type" hydraulic motor. This motor shall be directly coupled to the gearbox and protected from the elements by a cast housing.			
The worm gear drive shaft shall have provision for a servo sensor, integral with the driveshaft.			
The cast iron gearbox shall have hardened and ground bronze gears mounted on a 2" diameter drive shaft and supported on tapered roller bearings.			
The gears shall be machine cut and mounted in anti-friction sealed bearings and running in oil.			
The gearbox ratio shall be 50:1			
The drive and idler sprockets shall be 8 tooth cast grey iron sprockets keyed to the 2" diameter drive shaft and 2" idler shaft.			
Both conveyor shafts shall have heavy duty, dust sealed self-aligning four bolt flange bearings equipped with grease fittings.			

	Yes	No	Exceptions
A heavy duty spring loaded idler adjustment assembly shall provide 4" of adjustment for proper conveyor chain tension.			
The conveyor shall have an internal front wiper and an external rear wiper.			
The conveyor chain shall be heat-treated, 2.25 pitch, self-cleaning, pintle type, with 7/16" pins and tensile strength per strand of 21,000 pounds.			
This chain shall utilize a 3/8" x 1-1/2" x 18-3/4" cross bar welded on both the top and bottom to every other chain link making an overall width of 22-1/4".			
Cross bars to be positioned on approx. 4.5" centers.			
The distributor disc shall be at least 20" in diameter of polymer material with 6 formed fins.			
This disc shall be mounted on a cast iron replaceable hub connected directly to the top mounted motor.			

The material shall be guided from the conveyor to the distribution disc by means of two internal adjustable 10 gauge material deflectors.			
These deflectors shall control the spread pattern from left to right by controlling where the material drops on the disc.			
The entire spinner assembly shall be manufactured of not less than 10 gauge SS steel and shall be adjustable in height to accommodate either the slip-in V-box or chassis mounted V-box.			
There shall be four (4) external adjustable baffles, adjustable without the use of tools.			
A rear diverter chute shall be provided to permit the unloading of material without running the material over the spinner.			
The entire spinner shall tip-up to allow cleaning, unloading or storage.			
The top screens shall be constructed of 3/8" rods welded to form a 2.5" square mesh which is formed by a combination of ¼" x 1-1/2" flat steel and 2" angle iron.			
Each section shall be secured to the "H" beam with two (2) non-freeze 5/8" rod hinges.			
There shall be not less than four (4) screen assemblies per V-box.			

	Yes	No	Exceptions
All hardware and fasteners shall be stainless and corrosion resistant.			
Manufacturer shall provide caution labels, decals and any warnings deemed necessary.			
Manufacturer shall attach their standard warranty statement. All components described herein shall carry minimum one-year warranty.			
All welding performed on the spreader must be in compliance with current AWS procedures and guidelines recognized within the State of manufacture.			
There shall be a ¾" rear pintle plate installed on chassis, integrally reinforced with custom fabricated ¾" gussets and fully welded inside and out along with being welded to the lower angle of the rear hinge assembly.			
The pintle plate shall have a 35 ton pintle hook along with heavy duty D-Rings			

There shall be factory supplied glad hands and trailer plug, location and installation must be pre-approved by town officials prior to installation			
Vendor shall furnish and install auxiliary snow plow lights installed on custom fabricated stainless steel brackets, the lights installed must be exact match to the lights currently utilized by the town now			
Optional Equipment:			
Poly rear fenders			
On-Spot tire chains			
Rear barn door in lieu of standard tailgate			
Equipment vendor must be located with-in a 25 mile radius of the Town of Orange public works garage.			

Each bidder shall submit three references of municipalities currently utilizing the proposed equipment in the exact configuration required in the specifications listed

Municipality	Contact	Phone Number