## GOGEBIC COUNTY ROAD COMMISSION FABRICATION & ASSEMBLY OF ATTACHMENTS 2019 BID SPECIFICATIONS

Each unit bid as described below shall be to furnish, fabricate and install attachments and specialty equipment to a new, *tandem dump truck* that is complete, serviced, ready for work, and includes all items furnished and installed as specified and includes delivery to the Gogebic County Road Commission, F.O.B. Bessemer, Michigan.

DEALER:			
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For the following bid specifications sheets, use the column marked compliance to indicate compliance with the specifications. Write "yes" in the blank if the component complies. If not, so indicate and provide model actual or attach detailed manufacturer's specifications for the substitute component. If not applicable, so indicate by writing "NA" in the blank and provide necessary comments. Bidders must fill in compliance and cost for each line item or option. Questions asked of the bidder for a particular specification item shall be answered on the line provided.

Note: Final delivery of finished snow plow truck shall be no later than November 1, 2019.

LOADSENSE HYDRAULIC SYSTEM	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Oil Gear PVWH-45L 6 cu. in. load sensing pump with $\frac{1}{4}$ turn high pressure shut off valve on pressure port		
Heavy-duty 1310 series driveline		
Gresen Add-A-Stack V-40/V-20 8 section control valve, 3-way V-40 section to operate hoist, 4-way for plow lift/lower, 4-way for wing toe, 4-way for wing heel with flow control and 500 psi down pressure relief, 4-way for underbody up/down, 4-way for scraper angle, Spin-A-Veyor proportional electric operated cartridges, 15 GPM for conveyor, 7 GPM for spinner.		
Valve mounted in a weatherproof enclosure-stainless steel		
Sealed air over hydraulic controls, single axis for box, dual axis for wing, plow, and scraper		
80-gallon fuel / 30-gallon hydraulic combination tank on the side of frame rails. Hydraulic tank with top mounted return filter, 2" suction screen with shut off valve, sight/temperature gauge, separate return port for case drain, low oil level sensor installed in top of tank and wired to in cab warning light and buzzer. Oil lines for V-box spreader located at the back of the truck for use in summer. **Note – Fuel Tank configuration may be different but shall allow 24 inches of ground clearance.		
5100EX (or equivalent) closed looped electronic sander control that has manual operated rate controls, standby feature with indicator light, adjustable blast function, automatic spreader shut down when vehicle stops and five auxiliary switches or equivalent.		

Bid Due: 02/04/2019

Ground based closed loop spreader system so amount of materials can be calibrated for pounds per lane mile	
Low oil shut down with manual override system	

12' HEAVY-DUTY UNDERBODY SCRAPER	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
12' length; 1" thick x 20" tall moldboard		
2½" hinge shaft 96" long with 12" long outer hinges and 15" long center hinge		
Hangerboard constructed of 10" x 30 lb. structural channel reinforced by ½" plate and 4"x13.8 lb. channel the entire length of the hinge		
2 heavy-duty spring shock absorbers actuated by 3½" diameter double acting cylinders with nitrided rods		
1" thick one-piece notchless circle with 6" center pivot bearing		
Hold down clamps are 20.5" long with poly wear pads		
Dual 4" diameter double acting reversing cylinders with 2" nitrided rods, protected by a 1000 psi cushion block		
Nitrogen charged accumulator kit with pilot operated down pressure relief		
Underbody to be set up to use 8" cutting edges		

TRUCK PORTION OF SNOW PLOW QUICK HITCH	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Thrust arms installed from plow hitch to truck frame. The height from the center of the hitch to the ground must be no less than 13"		
4"x10" double acting lift cylinder, painted black		

HIGH SPEED SLOTTED TRIP, ONE-WAY PLOW	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
12' cutting edge length, 14' 3" moldboard length with 40" intake and 63" discharge heights, full curl moldboard		
Plow with nitrided rods		
3/16" rolled moldboard continuous welded, nine 1/2"x31/2" flame cut ribs		
6"x4"x <sup>3</sup> / <sub>4</sub> " bottom angle gusseted		
2½"x2½"x3/8" top angle		
94" wide main push frame with two slotted trip lugs, one center roller and adjustable trip springs		

Two-position attack angle adjustment, 30 or 45-degree, adjustable stabilizer arm has safety shear pin	
Two bolt adjustable mushroom shoes with 8" wide x 14" long x 1.63" thick cast skid shoe with 3/4" bolts on 6" centers, shoes are 370 brinnel	
Moldboard wear shoe installed on discharge end and intake end and middle	
5/8" x 8" cutting edge AASHO center edge	
117" wide heavy-duty push frame constructed of 6"x6"x½" angle with two slotted trip lugs. Slotted trip lugs constructed of 1½" thick plate. Two 5"x5"x½" wall structural tube push members. All welds are continuous.	
Oscillating quick hitch installed	
All surfaces phosphate cleaned, moldboard is primed and painted highway yellow, push frame is powder coated black	
End orange moldboard markers installed	
Full trip moldboard will also be reviewed as alternative bid	

10' HEAVY-DUTY MID MOUNTED WING	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Must be mounted behind scraper discharge		
10' heavy duty mid mounted wing. Para glide or equivalent. Trailing arm mount wing preferred, others shall be considered at the best interest of the Road Commission		
10' length, 29" intake, 38" discharge		
Para-Glide or equivalent		
Continuous welded 3/16" gauge grade 50 steel formed moldboard with eight flame cut ribs, six ribs all ½" thick		
3/4" x 5" x 31/2" frog angle		
Dual push arms with adjustable length		
Power up and down on toe and heel cylinders		
8" of built in mechanical float		
5/8" x 8" one piece cutting edge with AASHO punching standard edge		
All hydraulic-no cable		

Both cylinders have nitrided rods, heel cylinder has hydraulic wing lock valve	
Wing stop utilizing upper push arm	
Moldboard painted highway yellow, all mounting iron is black	

DUMP BOX	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Beau Roc model SSM-1 dump body or equivalent		
15' long, 42" high sides, 54" high tailgate		
Floor one-piece 1/4" AR450 steel		
Front and sides are 7-gauge 201 stainless-steel		
Formed horizontal side reinforcement		
Top rail is dirt shedding		
Straight tailgate, 7-gauge 201 stainless-steel, formed 3 panel with lift hop top and center, 3/8" spreader chains		
Stainless tailgate latches one-piece flame cut and are greaseable		
10" I-beam longitudinals welded 100%		
Rear hinge assembly with 2 1/4" diameter nitride steel pins that are clamped into hinge frame, rear hinges are greaseable		
Mailhot non-inverted trunnion mounted hoist with cylinder, Model CS140-5.5-3 full double acting hoist, 26.8-ton capacity with limiter valve		
Two body safety props		
24"x78" 10-gauge stainless cab shield welded 100%		
Air trip tailgate with 3 ½"x8" air cylinder, push/pull in cab control		
One fork style shovel holder with lower loop on driver's side front corner		
Ladder on the driver's side front with two steps inside box and 2 <sup>nd</sup> ladder at the rear above tire		
Front and rear board pockets		
License plate bracket on tailgate		
Bolt on rear spill pan 12" length		
Cougar 3200 vibrator installed, solenoid in cab wired to factory switch in the dash		

Mountain K612CSE electric operated tarp system, aluminum side arms with external springs, aluminum wind deflector, mesh tarp, solenoid pack mounted in the cab and wired to factory chassis momentary switch	
3 oval light holes cut into rear posts	
LED stop/tail/turn, backup and marker lights recessed in rear posts, wired into a junction box with one-piece harness	
Amber/green oval LED warning lights installed in the top oval hole in corner post and wired to same switch as cab warning lights	
LED flood lights installed on the outside of corner posts and wired to backup circuit	
Back up alarm, body up light and mud flaps ahead of and behind drive axles frame mounted	
Body is bare stainless – not painted. Underside of body is undercoated	
Reflective safety tape installed on sides and rear of body	

V-BOX STAINLESS-STEEL SANDER	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Sander box shall be 14' in length all stainless-steel		
Sander box capacity shall be 9 cyds minimum hopper width 84", height 56" minimum		
45° sloped sides		
10-gauge 201 stainless-steel enclosed design all mounting and adjustment hardware (pins, rods, bolts, nuts) shall be 201 stainless-steel		
Body floor shall be 7-gauge Stainless-steel bolt-in replaceable		
Seven-inch (7") dual counter-rotating auger conveyor system		
Safety interlock to disable auger motors before operator can open top grate		
Grease hose extensions for front bearings		
Inverted V above feed augers		
50:1 gear ratio		
Adjustable rear door with screw jack		
Adjustable chute (driver's side). Provide spreader pattern adjustment baffles to direct flow of material.		

Tip up spinner chute with poly spinner	
Top grizzly shall be heavy-duty grate or pipe with 3" vertical openings – grate to be raised 12" in the center minimum	
12-volt vibrator installed on v-box side wall on a 3/8" plate from brace to brace – second brace from rear	
Provide necessary hardware and bracing to mount spreader into truck dump box	
Centerline chute – manual operation	

LIGHTING SYSTEM	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Nordic N520 snow plow lights with directionals installed on truck hood and wired to factory wiring or with relay, right light is mounted higher if necessary, to clear discharge end of plow or equivalent		
Ecco 5590 green/amber, two oval strobes recessed into spreader box body and two front strobes mounted on roof of cab so lights (with brush guards) can be seen from rear of truck. Brackets to be stainless steel or aluminum and all connections outside cab have weather pak connectors		
Clear wing and amber sander lights. Wiring to have weather pak connections		
Strobe on end of wing-amber wiring to have weather pak connections		
In cab controls for trailer operations (tarp, tailgate lock, etc.)		
Furnish and install single axle poly fenders to cover full tandems with steel mounting brackets with mud flaps		

PAINT	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
All metal and bracing (other than stainless/aluminum) shall be solid color paint-black		

**OTHER DEALER FEATURES** (Use this sheet to describe other features included. Bidder may provide information as to why their equipment is the most advantageous purchase for the Gogebic County Road Commission. Data with factors such as operating and repair cost per hour or re-sale value may be provided. Attach addition sheet(s) and or report(s) or studies with the proposal if needed.

## GOGEBIC COUNTY ROAD COMMISSION FABRICATION & ASSEMBBLY OF ATTACHMENTS 2019 BID FORM

## **BID ADDENDUM ACKNOWLEDGEMENT**

**BID ADDENDLIM #** 

Bidders shall acknowledge receiving any and all bid addendums that may be required as part of the final bid specifications. Bid addendums shall be provided by Gogebic County Road Commission ONLY and shall be included in the TOTAL NET BID per Tandem Dump Truck. Bidder shall review and fully understand addendum(s) and sign and date acknowledgement below. Bidder shall attach bid addendum to bid form as part of their bid submittal.

RIDDER SIGNATURE

DID ADDLINDON	νι π	DIDDLIK GIGINATONE
		DATE
BID ADDENDUM	1 #	BIDDER SIGNATURE
		DATE
BID OPTIONS		
•	ders shall provide price to furni d Speed Control equipment	ish truck in accordance with the above detailed specifications which
•	dders shall provide price to fond Speed Control equipment.	urnish truck in accordance with the above detailed specifications
TOTAL NET BID	Option 1	\$
	Option 2	\$
Delivery Date:		
Submitted by:		
Signad by:		
Signed by:		

Bids to be opened on **February 4, 2019 10:00 am (CST)**. at the Board Room of the Gogebic County Road Commission office: 200 North More Street, Courthouse Annex, Bessemer, MI 49911.

Note: It is the intent that this unit will be used as a highway maintenance truck equipped with a fifth wheel, sand

spreader box, snowplow, patrol wing, and underbody blade.

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