#### ALLEGAN COUNTY ROAD COMMISSION

### SPECIFICATION FOR BIDS

# PROPOSAL FOR DUMP BOX BODIES, V BOX SPREADERS, UNDER BODY SCRAPERS, PLOW WINGS, FABRICATION AND ASSEMBLY OF COUNTY DUMP TRUCKS

(For consideration at 11:00 A.M., E.S.T., Wednesday, November 1, 2017)

Board of County Road Commissioners Of the County of Allegan 1308 Lincoln Road Allegan, MI 49010

Good day,

We hereby propose to fabricate and assemble new Dump / Plow Trucks. The units designated herein meet the minimum requirements as listed on the attached sheets.

Bidder to be located within a 50 mile radius from the Allegan County Road Commission. Should radius exceed limit bidder will reimburse the commission for travel mileage (each way .55 per mile) required for inspections (minimum of two per week).

## Purpose for Which Trucks Are to be Used

It is intended that the trucks offered under this proposal will be used as heavy-duty dump trucks for general hauling purposes. In addition, the trucks will be fitted with (hydraulically operated) front snow plow, right side mount wing, v box insert, tail gate spreader, and underbody scraper attachments. All hydraulic units will be run by a single pump, mounted in front of the engine, connected directly to the crankshaft with cab control systems

Body make	, model Federal and State tax.	, equipped as specified, F.O.B.
	, model, model	
Side Wing make F.O.B. Allegan, Michigan, exclu	, model usive of Federal and State tax.	, equipped as specified,
	ke, model igan, exclusive of Federal and State ta:	, equipped as
V Box insert make	, model usive of Federal and State tax.	, equipped as specified,

Our total bid price for each dump box body / hoist is		\$
Our total bid price for each under body scrapers is		\$
Our total bid price for each side wing assembly is		\$
Our total bid price for tail gate spreader is		\$
Our total bid price for each v box insert		\$
Finish (including fabrication and installation	listed below) price per truck	
Total price for one complete unit is		\$
Total price for two complete units is		\$
Total price for three complete units is		\$
Total price for four complete units is		\$
NAME OF FIRM	SIGNATURE & TITLE	
ADDRESS	PHONE NUMBER	
	FAX NUMBER	
E MAIL		
DATE		
Payment terms		
We can make delivery in	_ days from date of order.	

NOTE: \*This price includes all service, destination and delivery charges and constitutes the complete and total amount of the bid. No other charges will be allowed \*

The following is a list of minimum acceptable requirements for components that are to be bid under this proposal. All blank spaces listing options or dimensions are to be filled in. If it is impossible to provide certain items that are required, list all exceptions as identified under heading.

# <u>COMPONENTS</u> (All parts books are to be furnished)

# 1. Dump Box Body (unpainted stainless steel)

- A. Box sides side braces, head board, tailgate shall be minimum of 7 gauge 201 stainless steel.
- B. Box floor <sup>1</sup>/<sub>4</sub>" AR 400 steel, 180,000 PSI tensile strength.
- C. 7' wide, 14' long, box sides front 44", box side rear 34" plus 8" side board pockets, 2" wide.
- D. Head board 54" high or to top of dog house.
- E. Tailgate 42" high.
- F. Dog house dimensions: \_\_\_\_\_\_ inches wide, \_\_\_\_\_ inches deep.
- G. Minimum of 3 vertical side braces, full height to top rail, 2 formed horizontal braces
- H. Top rail to be fully boxed-in type.
- I. Bottom box rail sloping dirt free.
- J. Head board 7 gauge 201stainless with 2 interior horizontal braces.
- K. Rear box corner pillars shall be made out of 7-ga 201 stainless steel, 16" wide x 5-1/2" deep. Full height from top of tailgate hinge to bottom of side rail.
- L. Do <u>not</u> include lights or cut holes in box for lights.
- M. Box substructure shall be interlocking with 12" long members, 4" Channel 7.25 lbs cross members on 12" centers.
- N. Cab shield for tarp, 7 gauge 201 stainless steel construction 18'x 85.8"x 37.5"

# 2. Tailgate Assembly

- A. 7 gauge 201 stainless steel.
- B. Double acting and easily removable.
- C. One (1) horizontal and two (2) vertical braces making six (6) panel tailgate.
- D. Tailgate chains minimum 3/8 diameter and sufficient length to let tailgate lay down flat and adjustable chain keepers.
- E. Tailgate top and bracing shall be sloping dirt free.
- F. Installed rear mounted air trip cylinder, hand trip lever not required.
- G. The top of tailgate to be held by heavy duty off-set hinges made of  $1\frac{1}{2}$ " stainless steel.
- H. Upper hinge pin 1 ½" diameter, lower hinge pin 1 ¼" diameter.
- I. 100% continuous welded construction.
- J. Adjustable tailgate latch on each side.
- K. Tailgate lift hook.
- L. Tailgate latch fingers shall be made out of 1" stainless steel.
- M. Installation of upper chain hooks (3/8) for gate support chains
- N. Moving parts to have grease zerks installed

#### 4. Hoist

A.	4" wide rear hinge block with minimum of 2"	diameter hinge pin.	Pin bearing
	surface shall be 2" per side.		

- B. Shall be trunnion mounted telescopic style.
- C. Power up and power down cylinder.
- D. Diameter of cylinder is , stroke of cylinder is .
- E. Minimum hoist capacity is 42 tons.
- F. Hoist class is \_\_\_\_\_ (minimum NTEA Class 120).
  G. Hoist cylinder make \_\_\_\_\_, model \_\_\_\_\_,
- H. The hoist shall be equipped with O.S.H.A. approved Safety Legs.
- I. Grease zerts and extensions to be installed on moving parts
- 5. V-Box insert. The V-Box will be installed in the above 14 foot dump body above.

(Bidder must verify dimensions so v box will clear the doghouse for telescoping hoist cylinder.)

- A. The V-Box shall be 13' long, 82" wide, 56" high with a sloping front of box (approx. 8.5 cu. yd.).
- B. Box 10 ga stainless steel with minimum 7 ga longsills.
- C. Box sides 45° slope with 10 ga side supports on 24" centers.
- D. Box sides and longsills are to be one piece for entire length.
- E. Cutout for doghouse approximately 12" deep and 12" wide, 48" tall, bidder must verify.
- F. Box shall have two (2) supports to keep sides from spreading. One support in center of box approximately 12" below top of box and one support in rear of box just below tailgate pins.

Supports are to be a minimum of 2" x 2" x 3/16" tubing. There shall also be an 8" x 8" x 3/8" doubler plate between the box and the support tubing.

- G. Body must be 100% continuously welded.
- H. 4 Heavy Duty Lift hooks.
- I. Box shall have single acting tailgate with manual rear trip lever.
- J. 10" x 18" 7 gauge adjustable feed gate.
- K. Conveyor 24" wide rear discharge pintle chain #D667X with 3/8 x 1-1/2 cross bars on the 4-1/2 center.
- L. 3/16 replaceable floor and replaceable chain shields.
- M. Front and rear chain wipers.
- N. Front bearings to be greased at adjusted at the rear of box.
- O. 8-tooth steel sprockets with 2" diameter rear drive and front idler shaft.
- P. 50:1 gear box with a White hydraulic motor.
- 6. Tail Gate Spreader Sander
  - A. Monroe MS969, left discharge 9 inch
  - B. Stainless construction
  - C. Continuous welds
  - D. Poly spinner
- 7. Under Body Scraper and Side Wing
  - A. Monroe MS4512 under body 12 foot snow scraper (specifications below)
  - B. Monroe 9 foot Parallelogram wing assembly with sequencing valve

# FABRICATION AND ASSEMBLY (material, parts and labor charges as listed)

- 1. Fabrication, purchase (if not included above) and or installation of the following
  - A. Under body scraper assembly (minimum 19" from ground to top of circle)
  - B. Wing assembly
  - C. Tail gate spreader auger assembly
  - D. V- box insert (ACRC will supply rigging)
  - E. Front bumper assembly (including brackets and end caps)
  - F. Kicker legs for front hitch with tow hooks
  - G. Husting, 34 inch front hitch assembly (plow mount) two way 3"cylinder and horn
  - H. Relocation of steer shock mounting brackets
  - I. Driver side steps (cab and dump box)
  - J. Box body props and prop stops
  - K. Airlines and air controllers and trip tail gate latch
  - L. Mud flap brackets
  - M. Shovel racks / chain hooks on box
  - N. Stainless tool box mounted on left front of dump body
  - O. Modification DEF tank cover
  - P. 5 3/8 grab hooks with backing plates on external of box (one on lower left front of box)
  - Q. D rings with backing plates on longitudinals and dog house
  - R. Heavy duty down pressure springs on scraper
  - S. Two chain boxes mounted to front bumper
  - T. Rear tow hooks
- 2. Purchase and installation of hydraulic systems
  - A. Rexloth AA10VS0100 Piston Pump (Rexloth is mandatory) front mount, Spicer drive shaft
  - B. Rexroth 8M4-12 control valve (specifications below)
  - C. 8 section stainless steel enclosure
  - D. Morse/Apsco 5 section air control station (cab driver console style mounting)
  - E. CS430 controller and related wiring
  - F. Monroe (or equal manufacture) combination fuel/hydraulic tank, behind the cab mount (specifications below)
  - G. Electric solenoid operated low oil shut down
  - H. Plumb hydraulic circuits for scraper, plow, wing, hoist, spreader and steering
  - I. Stainless steel (sch 80) pipe for spreader circuits
  - J. Necessary shut off ball valves
  - K. Mobile CAM-2 ATF used for hydraulic oil
- 3. Installation of dump box body, hoist, tarp and v box assemblies
  - A. Hydraulic hoses to meet or exceed pressure requirements
  - B. Tarp assembly, US Tarp 115Z5EZ, 4 spring external mount with bullet proof gear and switch, steel arms, 7x14 lumite mesh
  - C. Bolt holds for tarp wiring
  - D. Road sign holder on front of dump body 37" x 37"
  - E. Mount strap rigging for v-box insert mounting (ACRC will provide rigging)
  - F. Drill holes for side boards 2/3" each corner
  - G. Fabricate and mount stainless bracket for tail gate strobe on V box inser

4. Electrical	
A. Plow lights complete with turn signals, wired into fa	actory harness and switch
B. Wing spot light and strobe	
C. Scraper spot lights (mounted on left step and upper a	right cab wired to factory switch)
<ul><li>D. Cab strobe, amber</li><li>F. Back up alarm</li></ul>	
G. Tail gate strobe on v-box, green	
H. Flaming River shut off switch mounted inside passe	enger door (positive disconnect)
I. Relocate batteries and battery box to right side of cha	
J. Junction box for wiring	
K. Rear box and wing strobes, green	
5. Sand blast and paint with Deflect Exxcential 4.6 epoxy	
A. Front hitch	
B. Bumper	
<ul><li>C. Scraper</li><li>D. Steps</li></ul>	
E. Wing posts	
6. Under coat frame and lower steel components	
o. Order coat frame and lower steer components	
Options to consider:	
	d.
	\$
	\$
	\$
	\$
	\$
Exceptions:	

Warranty - proposa	- Please attach manufacturer's warranty sheets hereto and are part of this al.
A.	Body warranty is
В.	Hoist warranty is
C.	Hydraulic system warranty is
D.	V-Box warranty is
F.	Underbody Scraper warranty is
G.	Wing warranty is
Н.	Fabrication warranty is

# **Component Specifications**

# Scraper

1 inch solid circle
20.5 inch circle clamps with poly shims
Dual cylinder power reverse with 2" anchor pins
6 inch center swivel bolt
Heavy duty hangers

# Fuel / Hydraulic tank

7 gauge construction
21"deep 46"wide 40"high
120.5 fuel capacity
30.1 gallon hydraulic oil capacity
Two 1 ½" ports for steering
¾" port for drain
2" supply for main hydraulic pump and return
Auxiliary return tank
Sight glass gauge level indicator
Inline return filter
Ball valve shut offs
Low oil sensor

## Rexloth 8M4-12 Valve

- 4 way air operated section with adjustable LS reliefs on A+B ports for hoist with a 34 GMP spool
- 4 way air operated section with adjustable LS reliefs on A+B ports for scraper up/down with 16 GPM spool
  - 4 way air operated section with adjustable LS reliefs on A+B ports for scraper wing with 16 GPM spool
  - 4 way air operated section with adjustable LS reliefs on A+B ports for plow with 16 GPM spool
  - 4 way air operated motor spooled section with adjustable LS reliefs on A+B ports for wing with 19 GPM spool
  - 4 way EPC section for spinner rated at 8 GPM
  - 3 way EPC section for cross conveyor rated at 15 GPM
  - 3 way EPC section for main conveyor rated at 15 GPM
  - Color coded air control lines

Existing unit available for inspection or photograph of specific design upon request.

\*\* The Allegan County Road Commission reserves the right to review all specifications or modifications before final assembly. \*\*