

# Manistee County Road Commission

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8946 Chippewa Highway • Bear Lake, Michigan 49614 • (231) 889-0000 • Fax (231) 889-0011

**November 22, 2010**

## **ADVERTISEMENT**

SEALED PROPOSALS WILL BE RECEIVED AT THE OFFICE OF THE MANISTEE COUNTY ROAD COMMISSION LOCATED AT 8946 CHIPPEWA HWY., BEAR LAKE, MICHIGAN FOR THE FOLLOWING:

**ONE - 2011 GLIDER TANDEM AXLE TRUCK PER SPEC  
ONE – HYDRAULIC SYSTEM  
ONE – UNDERBODY SCRAPER  
ONE – SPREADER BODY**

Further information may be obtained at the Road Commission office. Bid price shall include cost of delivery to a point designated by the Commission.

All proposals are to be received in sealed envelopes, plainly marked as to item bid upon and bear the name of the bidder. Bids are to be received by **3:30 p.m. Friday, December 3, 2010**, and will be read aloud at **10:00 a.m. Thursday, December 9, 2010** at the Road Commission's regular meeting. The Board reserves the right to accept or reject any or all bids and to accept the bid it feels is in the best interest of the Manistee County Road Commission.

### **BOARD OF MANISTEE COUNTY ROAD COMMISSIONERS**

William Eckhardt, Chairman  
Paul Adamski, Vice-Chairman  
James J. Russell, Member  
John J. Miller, Jr., Member  
Sally Reckow, Member

**GLIDER TANDEM AXLE TRUCKS  
PROPOSAL FORM**

**TO: Manistee County Board of Road Commissioners**  
**8946 Chippewa Highway**  
**Bear Lake, MI 49614 231-889-0000 FAX 231-889-0011**

The undersigned hereby certifies that \_\_\_ ha \_\_\_ examined the specifications and is/are fully informed as to the nature of the items to be furnished.

The undersigned hereby proposes to furnish all items to meet specifications, F.O.B. Manistee County as specified to-wit:

No.	Item	Bid Price
1.	One (1) Glider Tandem axle conventional cab & chassis According to Road Commission Specifications	_____ Each
	Manufacturer _____ Model _____	
	Delivery Location _____ Delivery Date _____	_____ Total

State the Warranties and Guaranties to be furnished by the supplier and/or manufacturer. \_\_\_\_\_

State Terms of Sale and Discounts: \_\_\_\_\_

The undersigned agrees that, if awarded this bid, he will deliver the proposed item(s) as required, on or before \_\_\_\_\_ at the bid price.

The owner reserves the right to reject any or all bids, to waive informalities and to increase or reduce quantities and delete bid items in the Proposal Form.

The undersigned further states that he has (they have) not directly or indirectly entered into any combination collusion, undertaking or agreement with any other bidder or bidders to maintain the price or bid on this work, or to prevent any bidder or bidders to refrain from bidding, and that this proposal is without reference or regard to any other proposal or proposals, and without agreement, understanding or combination with any other bidder or prospective bidder or agent thereof in any way or manner whatsoever.

**Company Name** \_\_\_\_\_ **Submitted by:** \_\_\_\_\_

**Address** \_\_\_\_\_ **Name & Title** \_\_\_\_\_

**Telephone No.** \_\_\_\_\_ **FAX No.** \_\_\_\_\_

**Dated** \_\_\_\_\_ **at** \_\_\_\_\_, Michigan.

Item(s) No. \_\_\_\_\_ is/are hereby accepted by the Manistee County Road Commission.

Date \_\_\_\_\_ By \_\_\_\_\_

**MINIMUM GLIDER TRUCK SPECIFICATIONS FOR  
ONE (1) 2011 TANDEM AXLE  
CONVENTIONAL CAB & CHASSIS  
53,000 L.B. GVW MINIMUM 6 X 4**

- WHEEL BASE**----- 206" Maximum – Set forward front axle
- CAB TO AXLE**----- 116"
- B.B.C.** ----- 110" Minimum
- ENGINE**----- PrepKit C15-435-550 ELEC98 EPA CARB
- TRANSMISSION**--- Fuller RTLO 14713A PrepKit
- CLUTCH**----- Customer Supplied
- AXLES**----- Front 18,000 Lb. Rated capacity  
Rear 46,000 Lb. Rated capacity Pump Type Differential
- GEAR RATIO**----- Gear Ratio to provide a top speed of 65 MPH at governed RPM  
(4.56 Ratio)
- DIFFERENTIAL**----- Locking Power Divider, Divider Controlled Full Locking Mains  
Differential, Pump Type Lubrication
- REAR SUSPENSION**- Neway AD246 Air Ride 54" TT or Equivalent  
  
Level valve with dash-mounted pressure gauge
- SPRINGS**----- Axle capacity or more. State capacity. Capacity must be  
appropriate to meet GVW
- STEERING**----- Dual power. State make & model. Tilt wheel
- BRAKES**----- Full Air S Cam with Auto Slack Adjusters – Gunite
- AIR COMPRESSOR**- 16.5 Cu. Ft. Water Cooled Air Compressor. Tank inside frame,  
Spin on Air Drier Cartridge, mounted on outside of frame with

Guard, Low Pressure Warning Device and Pressure Gauge

- RADIATOR**----- The radiator must have an opening for a front mounted hydraulic Pump with a minimum 4" clearance from center of crank shaft Hub. The fan must clear the drive shaft for a hydraulic pump
- ELECTRICAL**----- 12 Volt Electrical System with a 130 Amp. Alternator and four (4) Heavy Duty 12 volt batteries, mounted on driver's side w/battery disconnect switch, breaking the ground side, Flaming River Model #FR1005
- FRAME**----- Straight full length super single frame starting at front spring Hangers, State type of steel, section modulus, and dimension
- WHEELS**----- Front 8.25 "Dayton" cast steel spoke  
Rear 8.25 "Dayton" cast steel spoke
- FR. WHEEL SEALS**- Chicago Rawhide, Wet Type
- TIRES**----- Front 315.75R 22.5 18 Ply Rad Tubeless-Goodyear G291ECD  
Rear 11R 22.5 14 Ply Radial Tubeless--- Goodyear G622RSD
- EXHAUST**----- Single vertical muffler and tail pipe to go up behind back of Cab. Piping outside of frame.
- PROP SHAFT**----- Dynamically balanced Prop Shaft to be 4 inch diameter with Series 1810 U-Joints, Half Round Yokes
- AIR CLEANER**----- Heavy duty dry type air cleaner under hood with inside-outside Ducting and restriction indicator
- POWER TAKE-OFF**- Front Mount P.T.O. provision with front frame extension for Hydraulic pump and snow plow mounting. The engine to be Equipped with crank shaft adaptor fitted, drilled and tapped to Receive flange yoke #2-2-329 part of a 1,300 series splicer drive
- HOOD**----- Standard
- GRILL**----- Stationary
- CAB**----- Air-Ride system and high level interior trim package (delete Carpet), factory cup holder, a minimum of (5) extra toggle switches shall be factory installed in-panel board labeled "AUX", "BEACON" and "TAILGATE" "WORKLIGHT", "WING"
- SEATS**----- Driver's EZ Ride Bostrom and Passenger Seat with room

For control valve handles between them

**HEAT & DEFROST--** Deluxe fresh air type. Air conditioning

**WINDSHIELD WIPERS-** Dual windshield wipers and washers. Intermittent

**MIRRORS-----** Dual West Coast mirrors retract Model #158. Heated

**WINDOWS-----** Power

**PAINT-----** Imron 5000 N-1985H Pale Green

**RADIO-----** AM-FM

**MISCELLANEOUS--** All standard gauges and lights, hour meter on engine, in-cab tachometer, oil pressure gauge, Kysor engine shut-down with early warning light and bell for high water temperature and low oil pressure, air horn, cruise control, master kill switch mounted in cab, parts and service books for chassis and engine, magnetic drain plug, ground clearance for under truck scraper, minimum 24" on air tanks, drive line, steps, exhaust pipe, fuel tanks, etc.

Please state on your specification sheet what you are bidding on each item, the make, model and actual capacity.

November 22, 2010

## MINIMUM SPECIFICATIONS FOR HYDRAULIC SYSTEM

### HYDRAULIC COMPONENTS

- a. Piston pump, crank shaft driven load sense hydraulic system to operate a double acting front plow hoist, scraper up & down, scraper reverse, patrol wing and heavy duty material spreader, main chain and spinner. All capable of simultaneous operation.
- b. System shall consist of a 1300 Series Spicer driveshaft, Oil Gear 6 cubic inch piston pump; Model PVWH45-LDFY-CFNN-ADJZ-245C. Direct mount electronic low oil shutdown system with a manual override switch.
- c. Rexroth, model M-4-12, 6-bank, 4-bank airshift, 2-bank electronic proportional; to include pressure limiting feature – No exceptions
- d. Plow, scraper and scraper reverse banks shall be 16 GPM, wing bank 19 GPM, 24 GPM main chain, 7 GPM spinner.
- e. Main chain and spinner controls; shall be Dickey John Control Point – No exceptions

Closed loop control system used for simultaneously controlling the spreading of granular and liquid ice control materials in conjunction with ground speed, also controls liquid channel for applying pre-wetting material.

Dickey John Control consisting of six basic components:

- (1) Console
- (2) Switch module
- (3) Ground speed sensor
- (4) Feed back devices to monitor application rates
- (5) Activator devise to regulate applicator rates
- (6) Harnesses to interconnect all system devices

County will need (1) keyboard, (1) Dart data retrieval tool. The data collected for records includes:

- Quantity of granular and liquid material dispensing during spreading operation
- Total vehicle motor driving and miles spreading granular and liquid materials

- Application rates selected while spreading granular and liquid materials
  - Time and date records indicating when granular and liquid materials were spread
  - Alarm history that indicates when the control system operated in an error condition
- f. Supply stainless steel valve enclosure large enough to house 6 bank valve body, cushion and lock valves.
- g. Plow/scrapper/scrapper reverse and wing shall be air proportional, self-centering type, configured for maximum clearance between handles by using 20/35/45/55 degree offsets, supply custom built pedestal to house controls that can be mounted between the seats.

**FUEL AND HYDRAULIC COMBINATION RESERVOIR: Riverside - No Exceptions.**

They are UL certified, meet FHWA requirements, 30 ft. drop and pressure tested.

- a. Combination diesel & hydraulic two separate tanks, each constructed of 7 ga. steel mounted together using an angle iron carriage; tanks are to set on neoprene cushion pads, including ¼” retainers – total of ten; strapped in place using three spring loaded straps.
- b. FUEL TANK
- 122 gallon diesel fuel capacity mounted on street side
  - Brass fuel cap
  - ½” supply with ½” – ¼” turn ball valve for ease of changing fuel filter, ½” return port
  - Threaded moisture drain plug
  - Isspro RA9536-ACLP fuel sending unit
- c. HYDRAULIC TANK
- 49 gallon hydraulic oil capacity mounted on curb side
  - AB Screened fill cap
  - Oil site tube
  - 3” flange and include 2” Zinga suction strainer #TS2030-03
  - Top of tank filter flange and include Zinga return filter #FR1215-S-MP-1 with RE-409-10 Micron element
  - ½” low oil level port with Parker’s #ROM 1221 low oil monitor
  - 2” ¼ turn full flow ball valve
- d. ACCESSORIES:
- Decals as to the contents “Diesel Fuel” or “Hydraulic Oil”
  - Low oil light and alarm
- e. Tank shall be prepped and Corsol treated

Option to have hydraulic system components installed; to consist of the following:

a. Installation of all of the above components

- Supplying pump mounting bracket
- All air lines, fittings to plumb air controllers
- In cab switches, wiring – complete for low oil level, electronic shut down and Dickey John System.
- Installation of hydraulic and fuel reservoirs including tank mounting brackets, all necessary fuel lines and sending units, painting urethane top coat.
- Supply line from reservoir to pump shall be 2” hard pipe, with short hose assemblies at each end, minimum 2” I.D. swivel crimp on hose ends
- All necessary hoses, fittings and adaptors: All hose to have crimp swivel type fittings each end and have abrasive resistant sleeve covering in high wear areas. All clamps to be lined with abrasive resistant sleeve covering. Routing of pressure hoses shall be on the left side of engine as to stay away from turbo heat, using proper extension hangers and to leave room for service of engine filters
- Sander and wing plumbing to the rear shall be stainless steel piping. Shall have jumper hoses each end rated minimum 3,000 PSI, including bulk head fittings capped off.
- Hydraulic system to be filled with AW32 oil, all pressures set and system tested.



**SPREADER TRUCK BODY**

**PROPOSAL FORM**

**TO: Manistee County Board of Road Commissioners**  
**8946 Chippewa Highway**  
**Bear Lake, MI 49614 889-0000 FAX 231-889-0011**

The undersigned hereby certifies that \_\_\_ ha \_\_\_ examined the specifications and is/are fully informed as to the nature of the items to be furnished.

The undersigned hereby proposes to furnish all items to meet specifications, F.O.B. Manistee County as specified to-wit:

No.	Item	Quantity	Price Each	Bid Price
1.	Spreader Truck Body as Per Specifications	1		
	Option 1 – Heavy Duty Top Screens			

State the Warranties and Guaranties to be furnished by the supplier and/or manufacturer. \_\_\_\_\_

State Terms of Sale and Discounts: \_\_\_\_\_

The undersigned agrees that, if awarded this bid, he will deliver the proposed item(s) as required, on or before \_\_\_\_\_ at the bid price.

The owner reserves the right to reject any or all bids, to waive informalities and to increase or reduce quantities and delete bid items in the Proposal Form.

The undersigned further states that he has (they have) not directly or indirectly entered into any combination collusion, undertaking or agreement with any other bidder or bidders to maintain the price or bid on this work, or to prevent any bidder or bidders to refrain from bidding, and that this proposal is without reference or regard to any other proposal or proposals, and without agreement, understanding or combination with any other bidder or prospective bidder or agent thereof in any way or manner whatsoever.

**Company Name** \_\_\_\_\_

**Submitted by:** \_\_\_\_\_

**Address** \_\_\_\_\_

**Name & Title** \_\_\_\_\_

**Telephone No.** \_\_\_\_\_

**FAX No.** \_\_\_\_\_

**Dated** \_\_\_\_\_ **at** \_\_\_\_\_, Michigan.

Item(s) No. \_\_\_\_\_ is/are hereby accepted by the Manistee County Road Commission.

Date \_\_\_\_\_ By \_\_\_\_\_

**2011**

**MINIMUM SPECIFICATIONS  
FOR  
ONE SPREADER TRUCK BODY**

**UNITS** – One – Spreader Truck Body with Cab Shield, Ladder, and Plumbing  
For Conveyor and Spinner made of 304 Stainless Steel  
No mounting hardware required

**LENGTH** – 12 Foot

**CAPACITY** – 7.5 CYS Truck Minimum

**BODY SHELL** – 7 Gauge Stainless Steel (3/16")

**FLOOR** – ¼ Inch

**MUD FLAPS** – To be included

**LIGHTS** – None Required

**CONVEYOR** – 34" Width Minimum with cross bars every other link

**CONVEYOR DRIVE** – High-Low (2) speed hydraulic drive gear cases, driven by two integral mounted hydraulic motors, one containing internal counter for Dickey-John set-up. Plumbing for motors to be down each side with hoses crossing on front of sander

**TOP CENTER BEAM** – To be included

**PLUMBED FOR REAR SPINNER ASSEMBLY** – (No Spinner Assembly Needed)

**BOX** – Front wall to be on a maximum vertical angle to front of chain

**TAILGATE** – Air controlled

**OPTION 1** – Heavy duty top screens

# UNDERBODY SCRAPERS

## PROPOSAL FORM

**TO: Manistee County Board of Road Commissioners**  
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The undersigned hereby certifies that \_\_\_\_ ha\_\_ examined the specifications and is/are fully informed as to the nature of the items to be furnished.

The undersigned hereby proposes to furnish all items to meet specifications, F.O.B. Manistee County as specified to-wit:

No.	Item	Quantity	Price
1.	Underbody Scraper as per Specifications	1 \$ _____ Each	\$ _____ Total
2.	Installed in Shop Per Specifications	1 \$ _____ Each	\$ _____ Total

State the Warranties and Guaranties to be furnished by the supplier and/or manufacturer. \_\_\_\_\_

State Terms of Sale and Discounts: \_\_\_\_\_

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**Company Name** \_\_\_\_\_

**Submitted by:** \_\_\_\_\_

**Address** \_\_\_\_\_

**Name & Title** \_\_\_\_\_

**Telephone No.** \_\_\_\_\_


**FAX No.** \_\_\_\_\_

**Dated** \_\_\_\_\_ **at** \_\_\_\_\_, Michigan.

Item(s) No. \_\_\_\_\_ is/are hereby accepted by the Manistee County Road Commission.

Date \_\_\_\_\_ By \_\_\_\_\_

SCRAPERBID

The logo features a green triangle pointing upwards, with a green and purple stylized wave or road shape below it. The text "Manistee County Road Commission" is written in a dark blue, serif font to the right of the graphic.

# Manistee County Road Commission

8946 Chippewa Highway • Bear Lake, Michigan 49614 • (231) 889-0000 • Fax (231) 889-0011

November 22, 2010

## MINIMUM SPECIFICATIONS FOR UNDERBODY TRUCK SCRAPERS

One Root Model F-89 underbody truck scraper delivered to Manistee County Road Commission.

## UNDERBODY SCRAPER SPECIFICATION CHECKLIST

Manufacturer \_\_\_\_\_

Model \_\_\_\_\_

- a. Hangerboard shall be ½" formed plate reinforced with ½" x 7-1/2" flat plate to make full 1" thick with ¾" reinforced full length of the hinge. Designed and engineered for optimum strength.
- Yes \_\_\_\_\_ No \_\_\_\_\_
- b. Hinge shaft shall be 2-1/2" OD x 96" long with (4) grease points and (3) hinge points. The two (2) outer hinges shall be 3-1/4" OD x 6" long with .344 wall thickness. Each outer hinge shall have (1) ½" wrap-around gusset, center hinge to have (2) ½" thick wrap-around gussets, center to have thrust bearing wear plates to prevent side to side shifting of moldboard
- Yes \_\_\_\_\_ No \_\_\_\_\_
- c. Moldboard shall be 1" thick x 20" high x 12' long, heat treated carbon steel
- Yes \_\_\_\_\_ No \_\_\_\_\_
- d. Shocks & Housings shall be cushioned by (2) HD cushion springs, housing two (2) ½" thick flange retaining plates held by (4) 5/8" bolts with lock nuts, housing to be slotted to relieve contaminants. Greaseable trunnion mounts shall be 2-3/4" and have a .344" wall thickness
- Yes \_\_\_\_\_ No \_\_\_\_\_
- e. Actuating Cylinders shall be 3-1/2" bore x 10" stroke with 2" nitrated piston rods, ½" hoses and piping (supported with poly clamps) to be externally mounted for easy access. Green in-line pressure valve shall be supplied and set a 400 PSI
- Yes \_\_\_\_\_ No \_\_\_\_\_
- f. Circle shall be 1" solid one piece with infinite plowing positions (no notches), minimum cut out for power reverse cylinder travel for maximum circle bearing surface
- Yes \_\_\_\_\_ No \_\_\_\_\_

- g. Clamps shall be 20.5" long x 7" deep, shaped contour of the circle with 3/8" thick UHMW wear plates

Yes \_\_\_\_\_ No \_\_\_\_\_

- h. Reverse Cylinder and Hardware; (2) 4" dual-acting cylinders containing 1/2" hose ports and having 2" hard nitrated rods with 3" OD - 2" ID anchor pivots, 2" hardened removable pivot pins (greaseable at each end). Cross over relief valve, set at 1800 PSI to protect reversing cylinders from shock impacts

Yes \_\_\_\_\_ No \_\_\_\_\_

- i. Mounting legs shall have H-Bar style construction with 1" x 4" bar stock legs with 3/4" x 4 rear knee support, attached to the truck using 3/4" grade 8 bolts and nuts that are electronically plated for corrosion resistance

Yes \_\_\_\_\_ No \_\_\_\_\_

- j. Drag Blade Paint shall be shot-blasted and powder coat painted with minimum curing time of 25 minutes, at cure temperature of no less than 400 degrees. Color shall be TGIC polyester black with the outer 12" each end

Yes \_\_\_\_\_ No \_\_\_\_\_