#### DEKALB COUNTY HIGHWAY DEPARTMENT

#### BOBCAT COMPACT TRACK LOADER w/ATTACHMENTS and TRAILER

Sealed proposals for the purchase of one (1) new 2014 Bobcat Compact Track Loader, Attachments and Trailer will be received by the Highway Committee of the DeKalb County Board until 10:00AM, Thursday, June 5th, 2014 at the office of the DeKalb County Engineer, 1826 Barber Greene Road, DeKalb, Illinois, 60115 and at that time publicly opened and read.

The dealer may submit a bid for one or more models that are equal to or exceed the following specifications. A copy of the specifications or literature for each model should be included with each bid. Only bids from authorized dealers will be considered. Each bidder should state warranty coverage and estimated time of model availability. The dealer shall submit a total bid for furnishing a Compact Track Loader, Attachments and Trailer as per specifications.

The Board reserves the right to reject any and all bids and to waive any technicalities.

The bids shall not include taxes for which we are exempt.

One 2002 Bobcat T200 Compact Track Loader shall be traded in with a 1998 74" Combination Bucket, 1998 16" Planer, 2007 80" Industrial Grapple and 1998 Cronkhite 4700EWA Trailer. These items are available for inspection at the Highway Department Garage by calling (815) 756-9513.

Total cost one new Compact Track Loader w/Attachme	ents and Trailer
Trade allowance on 2002 Bobcat T200 Skid Loader w/A	Attachments and Trailer
Net cost one new Compact Track Loader w/Attachme	ents and Trailer
Proposal submitted by:	
Name -	
Address _	
Signature	

COMPACT TRACK LOADER

# Vertical Lift Arm Path Specifications for 2570 lbs. Rated Operating Capacity

## **GENERAL**

The Compact Track Loader and Attachments to be furnished shall be new, current year manufacture. A used or demonstrator model will not be considered. Machine modifications to meet the operational and capacity requirements of this specification shall be limited to the manufacturer's published standard and optional equipment. All operating specifications are based on current SAE standards and shall be the basis for determining compliance with specified requirements. Equipment shall meet all OSHA and EPA requirements in effect on the date of bid opening and shall be finished with lead free paint.

Rated Operating Capacity 2570 lbs. (roc sae 35% tip)

Rated Tipping Load 7343 lbs.

Machine Operating Weight 9440 lbs.

Two-Speed Low 6.1 mph High 10.7 mph

Lift Breakout Force 6400 lbs.

Tilt Breakout Force 5885 lbs.

Push Force 6400 lbs.

Angle of Departure 31°

Carry Position 8.6"

Dump Angle at Maximum Height 42°

Dump Height w/Standard Bucket 96.3"

Dump Reach at Maximum Height 34.2"

Ground Clearance 8.1"

Height to Bucket Hinge Pin 124"

Height without Operator Cab 81.3"

Length without Attachment 108.4"

Length with Standard Bucket 136.8"

Operating Height 158.5"

Rollback at Carry Position 31°

Turning Radius with Standard Bucket 87.7"

Length of Track on Ground 59"

Overall Width 17.7" Tracks 78"

Bucket Width 80"

Cab Mounted Magnetic Strobe Light

Horn

Back up Audible Alarm

12 Months Warranty, unlimited hours

Parts and service manuals for machine shall be provided at time of delivery.

## **ENGINE/ELECTRICAL**

4 cylinder, turbo charged liquid-cooled diesel maximum 74 HP at 2600 RPM.

Loader engine shall a have minimum torque of 206 lbs-ft at 1800 RPM.

Engine shall meet Tier 4 compliance without the aid of a diesel particulate filter (DPF).

Engine coolant shall include propylene glycol anti-freeze with freeze protection to -34°F

Engine shutdown shall be provided as standard equipment and shall monitor engine coolant temperature, engine oil pressure and engine RPM to help prevent engine damage.

Turbo-Charger is approved as Spark Arrestor, dual element air cleaner and Intake Air Heater cold weather assist must be provided as standard equipment.

Cooling air shall be drawn from above the loader uprights to provide clean, cool air.

Air cleaner, dry replaceable cartridge with safety element.

Battery shall be 12 volt with a minimum of 950 cold-cranking amps.

Alternator shall be a minimum 90 amp.

Starter shall be 12 volt; 4.02 HP, direct drive.

Starting aid should be automatically activated intake air heater.

**Engine Block Heater** 

#### **DRIVE SYSTEM**

Shall have a fully hydrostatic track drive. Two-Speed Low 6.1 mph High 10.7 mph

Transmission shall be infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic motors.

Hydrostatic piston pumps shall be belt driven from the engine. Drive belt shall not require any adjustments.

Undercarriage shall be solid mounted to loader main frame.

Shall use triple flange forged steel rollers. Shall use single flange forged steel idlers.

Steel rollers and idlers shall be permanently sealed and lubricated requiring no routine maintenance.

Shall use austempered ductile iron sprockets.

Track tension shall be adjusted by adding grease to the tensioning cylinder.

Tracks: 17.7" rubber tracks. Rubber track shall have steel cables and embeds.

Parking brake shall be spring applied, pressure release multi-disk brake.

## **HYDRAULIC SYSTEM**

Pump Type – gear type capable of providing 23 GPM standard for bucket, lift arm and attachment operation

System pressure at the quick couplers shall be 3500 PSI

High Flow Hydraulics – hydraulic system capable of providing 30.5 GPM for high flow hydraulic attachment operation.

Variable Flow Auxiliary Hydraulics and Attachment Control Kit shall be standard equipment and shall include flush-face style quick couplers. Shall include dual direction detent.

A feature for draining pressure from the auxiliary hydraulics circuit shall be provided by pressing and holding the quick couplers.

Control Valve – three spool, open center, series type. Lift spool shall include a detent position for lift arm float function. Front auxiliary hydraulic spool shall include a detent function in both forward and reverse directions.

Hydraulic oil cooler shall be standard equipment

Hydraulic system shutdown shall be provided as standard equipment and shall monitor hydraulic oil temperature and hydrostatic charge pressure.

Cylinders shall be double-acting type. Dual tilt cylinders shall have cushioning feature on dump and roll back.

Cylinders shall meet the following minimum specifications:

Lift - #2 cylinders with bore diameter 3", rod diameter 1.75", stroke 24.93"

Tilt - #2 cylinders with bore diameter 3", rod diameter 1.50", stroke 13.97"

Hydraulic Bucket Positioning. Shall include on/off switch inside operator cab.

Hydraulic Attachment quick attach mounting system. Must work/interface on all Existing Dekalb County Highway Attachments including: Angle Broom, Pallet Forks, Buckets, Breaker, Tilt Tach, Sweeper Broom.

#### **OPERATOR CONTROLS**

Lift, Tilt, Drive Functions operated by Deluxe/Programmable Selectable Joystick Controls

Vehicle Steering – forward, reverse, travel speed and steering controlled by left-hand joystick

Hydraulic Functions – lift and tilt functions controlled by right-hand joystick. Standard front auxiliary hydraulics controlled by electrical switches located on the right-hand joystick.

Engine Speed- controlled by hand lever and foot accelerator pedal

Parking Brake – mechanical disk, finger-operated rocker switch on center control panel and Spring Applied Pressure Release multi-disk brake for optional Two-speed

Engine starting and shutdown functions shall be controlled electrically with the Keyless start system

Keyless start system as part of the deluxe instrument panel

Glass Pressurized cab enclosure with Heat, Air Conditioned, and Windshield Wiper Cab with heater and air conditioning shall be available without changing the loader profile

Air Ride Seat with 3 point Seat Belt Arm rest shall be standard equipment.

Front door shall be a one piece design and curved.

One Additional ½" Polycarbonate (special application safety kit) Front Door.

AM/FM/WB heavy duty Radio and Speakers

Dome Light

12 Volt Accessory Port

Sound Reduction Kit.

## **CAPACITIES**

27.5 gallon Fuel Tank3.1 gallon Engine Coolant2.7 gallons Hydraulic Reservoir11.9 gallons Hydraulic/Hydrostatic System

## **LOADER INSTRUMENTATION**

The loader conditions shall be monitored by a combination of gauges, warning lights, and indicator lights in the operator's line of sight that monitor the following functions. The system should alert the operator of monitored loader malfunctions by way of an audible alarm and visual warning lights.

Attachment Control Device, light
BICS Functions, light
Engine Air Filter, light & alarm
Engine Coolant Temp - gauge, light & alarm
Engine Oil Pressure, light & alarm
Fuel Level – gauge, light & alarm
General Warning/Shutdown, light
Glow Plugs, light
Hour meter, gauge
Hydraulic Filter Condition, light & alarm
Hydraulic Oil Temp, light & alarm
Hydrostatic Charge Pressure, light & alarm
Seat Belt, light
System Voltage, light & alarm
Two-Speed High Range, light

Air filter restriction indicator

Engine & Hydraulics Systems Shutdown feature, this system stops the engine when any of the following are in shutdown condition: engine oil pressure, engine coolant temperature, engine speed too high, hydraulic oil temperature, and hydrostatic charge pressure.

#### LOADER CONDITION MONITOR/INSTRUMENTATION

The Deluxe Instrument Panel monitors the following loader conditions and functions:

Gauges – Engine Coolant Temperature, Fuel, Hour meter

**Indicators** – Attachment Control Device, BICS Functions, Glow Plugs, Seat Belt, Two-speed High Range

Warning Lights – Engine Air Filter, Engine Coolant Temperature, Engine Oil Pressure, Fuel Level, General Warning/Shutdown, Hydrostatic Charge Pressure, Hydraulic Filter, Hydraulic Oil Temperature, Glow Plugs, System Voltage

A liquid-crystal display in the operator's line of sight will provide the visual warnings as well as constantly displaying battery condition, engine oil pressure, and engine RPM, hydrostatic charge pressure and hydraulic oil temperature.

The system will also be capable of storing service history of malfunctions of the loader for later retrieval by use of a diagnostic instrument. Basic items such as loader serial number and hours as well as instantaneous readouts on current loader conditions will be other functions of the diagnostic instrument.

Ability to monitor real time readouts of these six items: engine oil pressure, engine coolant temperature, hydrostatic charge pressure, hydraulic oil temperature, system voltage, engine speed in English or Metric units.

The Deluxe Instrument Panel shall have password protection and keyless start. The load is started with a password entered on the keypad. The loader shall have an assigned password that can be changed by the owner as well as up to eight user passwords.

The Deluxe Instrument Panel shall have a High Flow and Tow-speed (High Range) Lockout Feature that only the holder of the owner password can activate or deactivate.

The Deluxe Instrument Panel shall have an on-line library of attachment instructions. The library indicates which buttons on the control handles perform the various functions for the attachments.

The Deluxe Instrument Panel shall have a multi-language display capability. This will allow the operator to select from several languages: English, Spanish, French, German, Italian, Dutch and Latin American Spanish.

## **ATTACHMENTS**

## **GENERAL**

All attachments must be mounted on a quick-change mechanism. No attachments will be considered unless it can be removed or mounted by an experienced operator in two minutes or less.

The quick-change mechanism will incorporate two handles that drive spring-loaded, wear compensating wedges into the attachment ensuring a tight attachment fit-up.

Backhoe operation must be possible with the lift arms in the down position.

A remote attachment control device shall be available for specified attachments to start the loader and operate the attachment from outside the operator control area.

A single control unit must be provided which will control all available attachments. Must work/interface on all Existing Dekalb County Highway Attachments including:

Angle Broom, Pallet Forks, Buckets, Breaker, Tilt Tach, Sweeper Broom

Parts and service manuals for all new purchased attachments shall be provided at time of delivery.

## **Specifications for 80" Heavy Duty Industrial Grapple**

Operating Weight – Minimum 1100 lbs

- 2- Hydraulic Cylinders
- 2- Grapple Arms

Bolt on Bucket Edge

Bob-Tach mounting system

## **Specifications for 18" High Flow Planer**

Operating Weight - Minimum

1475 lbs

18" Combination Fast Cut Asphalt Drum

Cutting Depth 0-6"

Finger Tip Controls from Steering Control Joysticks in Loader

2 Independent Hydraulic Adjusted Skis

Hydraulic Side Shift Function of Drum

Bit Removal Tool

Oscillation of Planer Free to Rotate 15 degrees

Oscillation can be placed in a Locked Position if desired

## Specifications for 80" Combination (clam shell) Bucket with Teeth

Operating Weight – Minimum 1125 lbs

2 – Hydraulic Cylinders

Bolt on Replaceable Cutting Edges

Serrated Grapple Edges on side of bucket

8 Teeth on Bucket Edge with replaceable caps

## **TRAILER**

Cronkhite 3400

#### **GENERAL**

The Trailer to be furnished shall be new, current year manufacture. A used or demonstrator model will not be considered. Trailer modifications to meet the operational and capacity requirements of this specification shall be limited to the manufacturer's published standard and optional equipment.

All operating specifications are based on current SAE standards and shall be the basis for determining compliance with specified requirements. Equipment shall meet all OSHA and EPA requirements in effect on the date of bid opening and shall be finished with lead free paint.

Heavy Duty Structural Steel Framing with Heavy Duty Diamond Plate Steel Fenders

Stake Pocket Tie Downs

2" Oak Hardwood Flooring

12,000 lbs payload capacity

Tandem Heavy Duty Drop Axles with EZ Lube Grease Hubs

Leaf Type Slipper Suspension with Equalizers

ST235/80R16 "E" Rating Tires

79" x 17.5' –Tilt Deck (14 ½' flat deck with 3' beavertail)

Electric All Wheel Forward Self-Adjusting Brakes

ICC Approved Lighting with Steel Conduit for Wiring

Adjustable Hitch

20,000 lbs Pintle Eye Hitch

Safety Chains with Hooks

10,000 lbs Drop Leg Jack

Yellow Paint

D-Rings Mounted Center Floor: 1 Front, 1 Back

Chain Basket in Tongue

#### **INSPECTION**

Materials or equipment purchased are subject to inspection and approval at the county's destination. The county reserves the right to reject and refuse acceptance of items which are not in accordance with the instructions, specifications, drawings or date of sellers warranty (expressed or implied). Rejected materials or equipment shall be removed by, or at the expense of the seller promptly after rejection.

	Make & Model of Track Loader bidding	Take & Model of Track Loader bluding	Make & Model of Track Loader bidding

Make & Model of Attachments bidding	
Grapple	
HF Planer	
Combo Bucket	
Make & Model of Trailer bidding	
List any exceptions to specifications below:	

DELIVERY DATE: 90 days