

**BID SPECIFICATIONS
FOR
5.50 CY WHEEL LOADER
VOLVO L150 H
\$326,765.00 (INCLUDING OPTIONS) TIER 4**

GENERAL

These specifications shall be construed as the minimum acceptable standards for a 5.50-yard wheel loader. Should the manufacturer's current published data or specifications exceed these standards, the manufacturer's standards shall be considered minimum and shall be furnished. All integral parts not specifically mentioned in the scope of these specifications that are necessary to provide a complete working unit shall be furnished. Additionally, the machine offered for bid shall include all standard manufacturer's equipment. The wheel loader must be a new current production model and shall meet all EPA and other applicable standards at the time of manufacturer.

The use of specific names and numbers in the specification is not intended to restrict the bidder or any seller or manufacturer, but is intended solely for the purpose of indicating the type, size and quality of equipment considered best adapted to the uses of counties participating in this joint bid.

BID SUBMITTAL FORM

Each bidder must submit his or her bid on the Bid Submittal Form included in the Invitation to Bid package. All written warranties to be submitted shall be attached to the Bid Submittal Form.

BID PRICE

The bid price shall include all destination charges, delivery charges, title fees, rebates, and all other applicable costs and refunds.

MANUALS

Each unit shall be provided with one (1) copy of the operator's manual, one (1) copy of the repair manual and one (1) copy of the current parts manual. Units will not be accepted for delivery until the manuals as outlined above are received by the purchaser.

REPLACEMENT PARTS AVAILABILITY

Parts must be available for 5 years or 7,500 hours of use for the piece of equipment bid. If replacement parts are not delivered within three (3) working days of an order being placed, the bidder will deliver an equivalent machine for the county to use at no cost to the county until such time as the parts are delivered to the county so it can affect repairs on its machine.

FILTERS

The cost of all filters required to perform scheduled maintenance as outlined in the manufacturer's service schedule and to meet warranty requirements shall be included in the base bid price of the machine for the period of three years or 3600 hours. The filters shall be furnished with each machine purchased or at the option of the purchasing county may be picked up at the dealership as needed. Assume 1200 hours of annual use to determine filter requirements.

WARRANTY

Bidders shall submit a copy of the manufacturer's standard warranty and a 3-year, 3600 hour power train warranty along with a complete explanation of the warranty with their bid. Warranty shall include service response time of maximum of 36 hours within notification by county.

Yes ___ No ___
Page #_____
or
Attachment_____

DUMP CLEARANCE

The wheel loader dump clearance shall be no less than 9'8" at full height and 45 degree dump angle.

Yes ___ No ___
Page #_____

GENERAL OPERATING SPECIFICATIONS AND DIMENSIONS

-Full turn static tipping load shall be at least 32,000 lbs. Machine shall be equipped with ROPS cab and a minimum 5.50 cubic yard General Purpose bucket with bolt-on cutting edge & teeth; without optional counterweight or tire ballast.

Yes ___ No ___
Page #_____

-Breakout force shall not be less than 39,000 lbs. with the minimum 5.50 cubic yard General Purpose bucket.

Yes ___ No ___
Page #_____

-Machine width over tires shall not be less than 9'8" for excellent side-to-side stability when equipped with 26.5R25 XHLA MXL3 tires.

Yes ___ No ___
Page #_____

-An electrical disconnect switch shall be standard.

Yes ___ No ___
Page #_____

-Machine ground clearance shall not be less than 1' 6".

Yes ___ No ___
Page #_____

BRAKES

-Machine shall have oil cooled multiple disc-type, adjustment-free service brakes, which are inboard mounted and sealed from water, mud and dust.

Yes ___ No ___
Page #_____

-Machine shall have two brake pedals. Activation switch allows left brake pedal to switch between a brake/neutralizer or brake only function.

Yes ___ No ___
Page #_____

-Machine shall have audible alarm and warning light to alert the operator if the service brake actuating pressure drops below a safe operating level. If service brake actuating pressure drops below a safe operating level, the secondary brake shall be

applied automatically.

Yes ___ No ___
Page # _____

-Service brake actuation shall be of independent front and rear hydraulic circuits providing effective braking in the event of partial system malfunction.

Yes ___ No ___
Page # _____

-Service brakes shall have a sealed brake wear indicator with an external port that allows brake disc wear measurement without disassembling the axle. Inspection shall be performed without direct contact with the braking system, which eliminates risk of contamination.

Yes ___ No ___
Page # _____

-Brakes shall meet current regulations for MSHA and OSHA including primary, secondary and parking brake requirements.

Yes ___ No ___
Page # _____

STEERING/HITCH

-Machine shall have center-point articulation with an articulation angle of at least $\pm 37^\circ$.

Yes ___ No ___
Page # _____

-Machine shall have full hydraulic load sensing steering circuit.

Yes ___ No ___
Page # _____

-Articulation joint shall have double tapered roller bearings in the upper and lower hitch for extended life.

Yes ___ No ___
Page # _____

OIL SAMPLES

Oil sample analysis shall be provided, at no cost to the county, through the standard and extended warranty periods. Oil sample kits are to be provided and are to include a sample gun. Oil sampling ports shall be standard for quick and clean access to various machine oils (such as hydraulic, engine oil, transmission).

Yes ___ No ___
Page # _____

FRONT AND REAR FRAMES/STRUCTURES

-Loader linkage shall be Z-bar type.

Yes ___ No ___
Page # _____

-Machine front frame shall utilize vertical plates perpendicular to the axle housing and differential, acting as a cross member to absorb loads and distribute stress away from the front axle.

Yes ___ No ___
Page # _____

-Rear frame shall be of box-section modular design to absorb shock loads and resist twisting and bending.

Yes ___ No ___
Page # _____

-Machine shall be equipped with a rear towing and retrieval connection.

Yes ___ No ___

Page # _____

-Machine shall have lifting/tie down eyes for transportation.

Yes ___ No ___

Page # _____

-Machine shall be equipped with outside toolbox for easy accessibility.

Yes ___ No ___

Page # _____

-Machine shall have two maintenance free 1400 CCA batteries.

Yes ___ No ___

Page# _____

ENGINE AND RELATED COMPONENTS

-Engine shall be fully equipped, six cylinder, four stroke diesel type with all necessary operating accessories.

Yes ___ No ___

Page # _____

-Engine shall have individual injection pumps and valves.

Yes ___ No ___

Page # _____

-Engine shall meet or exceed current U.S. EPA Tier IV emissions levels.

Yes ___ No ___

Page # _____

-Engine shall have a total displacement of not less than 11.1 liters (677 cubic inches).

Yes ___ No ___

Page # _____

-Engine shall develop at least 265 net HP at no more than 1800 RPM. Standard engine equipment for rating shall include fan, air cleaner, water pump, lubrication oil pump, fuel pump, muffler and alternator.

Yes ___ No ___

Page # _____

-Engine shall develop at least 38% torque rise.

Yes ___ No ___

Page # _____

-Engine shall develop at least 900 lb-ft maximum net torque at no less than 1400 RPM.

Yes ___ No ___

Page # _____

-Engine shall utilize only clean filtered air for combustion, not extra trapped or re-circulated exhaust gas from previous combustion.

Yes ___ No ___

Page # _____

-Engine shall be enclosed in a one-piece tilting hood that allows complete and unrestricted access to the engine and related components.

Yes ___ No ___

Page # _____

-Reverse flow cooling system, which draws air in from the back of the machine and exhausts out the side and top of the engine enclosure, shall be standard. Fan should have reversible direction.

Yes ___ No ___
Page # _____

-Grill and cooling cores should swing open for easy access.

Yes ___ No ___
Page # _____

-The cooling fan for the engine coolant, A/C system, hydraulic oil, and inlet air shall be hydraulically driven, electronically controlled, and temperature sensing. It shall also compensate for horsepower draw and adjust engine fuel setting to result in a constant net horsepower.

Yes ___ No ___
Page # _____

-The coolant level shall be able to be checked via a ground-level sight gauge.

Yes ___ No ___
Page # _____

-Machine shall be equipped with 24V electric system for starting and operating, with a minimum 80-amp alternator.

Yes ___ No ___
Page # _____

-Unit shall be equipped with a 12-volt, 25 amp converter for two-way radio.

Yes ___ No ___
Page # _____

GENERAL MACHINE CONFIGURATION

-Machine basic operating weight shall not be less than 53,000 lbs. Comparably equipped weight includes lubricants, coolant, full fuel tank, operator, General Purpose bucket with bolt-on cutting edge, 26.5-R25 tires and ROPS cab.

Yes ___ No ___
Page # _____

-Machine shall be equipped with only the standard counterweight that shall not exceed 2500 lbs.

Yes ___ No ___
Page # _____

-Machine shall be equipped with a minimum 5.50 cubic yard ISO/SAE heaped General Purpose bucket with bolt-on cutting edge.

Yes ___ No ___
Page # _____

-Machine shall have 26.5 R25 XHA MXL3 traction-type tires.

Yes ___ No ___
Page # _____

-Machine shall have four front and two rear working lights and two rear stop and taillights.

Yes ___ No ___
Page # _____

-Machine shall have front fenders and rear platform extensions.

Yes ___ No ___
Page # _____

-Machine shall have a back-up alarm.

Yes ___ No ___
Page # _____

OPERATOR'S STATION

-Integral ROPS and sound suppressed cab shall be standard and shall meet both current OSHA and MSHA standards for operator and spectator sound.

Yes ___ No ___
Page # _____

-Cab shall have pressurized and filtered air circulation system.

Yes ___ No ___
Page # _____

-Machine shall be equipped with a multilevel warning system, which will signal machine and component malfunctions. System should differentiate between major and minor malfunctions. Warning system shall record occurrences of periodic malfunctions.

Yes ___ No ___
Page # _____

-Steering wheel, gauge panel and transmission control lever shall be adjustable as a single unit.

Yes ___ No ___
Page # _____

-Instrument gauges shall include digital gear range indicator, engine coolant temperature, fuel level, hydraulic oil temperature, speedometer, and transmission oil temperature.

Yes ___ No ___
Page # _____

-Operator's seat shall be cloth-covered suspension-type with adjustments for height, weight, fore/aft and suspension dampening, and adjustable armrests on left and right.

Yes ___ No ___
Page # _____

-Cab shall have internally-mounted rearview mirrors.

Yes ___ No ___
Page # _____

-Machine shall have sloped hood for improved rearward visibility to enhance operator confidence and improve work environment safety.

Yes ___ No ___
Page # _____

-Cab shall have air conditioner, heater and AM/FM radio.

Yes ___ No ___
Page # _____

TRANSMISSION/POWERTRAIN

-Transmission and other major power train components, such as the axles, shall be designed and manufactured by the equipment manufacturer.

Yes ___ No ___
Page # _____

-Automatic transmission shall be of planetary power shift design.

Yes ___ No ___
Page # _____

-Transmission shall be electronically controlled for smooth clutch modulation. Yes ___ No ___
Page # _____

-Transmission shall have a cooler bypass valve enabling faster warm-up in low ambient conditions – providing smoother shifts in cold weather. Yes ___ No ___
Page # _____

-Transmission shall automatically select gears above first. The operator shall be able to select the highest gear to which the transmission will automatically shift. Yes ___ No ___
Page # _____

-Machine shall have a transmission gear kick-down button capable of making fourth to third, third to second, and second to first gear shifts in automatic mode. Yes ___ No ___
Page # _____

-Both speed and direction changes shall be actuated by a single control lever mounted on the steering column. Yes ___ No ___
Page # _____

-Transmission shall offer full manual shifting for first, second, third and fourth gear. Yes ___ No ___
Page # _____

-Machine shall be able to achieve a 4th gear forward speed of at least 23 mph and a 4th gear reverse speed of at least 23 mph. Yes ___ No ___
Page # _____

-Final drives shall be of planetary design. Yes ___ No ___
Page # _____

-Transmission shall have a software feature that allows operator to vary shift points by adjusting an in-cab switch. Yes ___ No ___
Page # _____

-Machine shall provide a transmission neutralizer that also incorporates downshifting logic and is adjustable. Yes ___ No ___
Page # _____

-Rear axle shall not have less than 25° total oscillation. Yes ___ No ___
Page # _____

-Wheel loader shall be equipped with a crankcase guard. Yes ___ No ___

HYDRAULICS

-Hydraulic pressure taps shall be provided for checking pressure in the hydraulic implements and steering systems.

Yes ____ No ____

Page # _____

-Steering hydraulic system shall have a dedicated pump and be independent of the implement hydraulics.

Yes ____ No ____

Page # _____

-Hydraulic cycle time shall be no more than 10 seconds, measured with a rated bucket load.

Yes ____ No ____

Page # _____

-Hydraulic pump output for the bucket shall be 80 gal/min. minimum.

Yes ____ No ____

Page # _____

-Locking devices shall be capable of temporarily disabling the levers, which control the hydraulics of the lever, which controls the transmission.

Yes ____ No ____

Page # _____

-Standard Ecology Drains on engine, transmission, and hydraulic oil shall allow clean draining of fluids with minimal spillage.

Yes ____ No ____

Page # _____

-Machine shall have a ground-level hydraulic sight gauge showing hydraulic fluid level.

Yes ____ No ____

Page # _____

OPTIONS

Bid must include the cost for each of the following options, itemized separately on the bid:

Command Control Steering Wheel, which shall accomplish full machine articulation With a +/- 70 degree turn of the wheel and need only 6 lb of steering effort. It shall Include the forward/neutral/reverse switch and the upshift/downshift button, allowing the left hand to shift and remain on the steering wheel at all times.

Yes ____ No ____

Page # _____

Beacon light, rotating or strobe

Yes ____ No ____

Page # _____

Ride Control to reduce jolting and bouncing during load and carry operations.

Yes ____ No ____

Page # _____

Additional 2 years of filters based on 1200 hours per year use

Yes ____ No ____

Page # _____

An extended power train warranty that covers an additional two (2) years or an additional 2400 hours, whichever occurs first.

Yes ____ No ____

Page # _____

NOTE: Award will be made on the basis of the total cost of the machine with all options included. However, a county may, at its discretion, deduct one or more of the above-referenced options from the machine, and in such event, the cost of the options as stated on the bid shall be deducted from the total cost of the machine. There shall be no other deductions and no additions made to the machine by the purchasing county or by the vendor.

OPTION COST SHEET FOR 5.50 CY WHEEL LOADER TIER 4

<u>Option</u>	<u>Option Price</u>
Command Control Steering	\$ <u>6,926.00</u>
Beacon light	\$ <u>285.00</u>
Ride Control	\$ <u>5,479.00</u>
Extended warranty	\$ <u>1,900.00</u>
Additional 2 years of filters	\$ <u>2,750.00</u>

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COUNTY JOINT BID PROGRAM PURCHASE PROCEDURES

Effective January 1, 2008

All purchases by counties pursuant to the County Joint Bid Program shall be made by (1) mailing or faxing the appropriate Purchase Order to the vendor who has been awarded the contract for the item to be ordered and (2) faxing a copy of the Purchase Order to the Association of County Commissions of Alabama (ACCA) office at 334-263-7678. Purchase Order Forms and all necessary information regarding the vendor and items available can be obtained at the ACCA website (www.alabamacounties.org).

Each purchase order shall be signed by the person authorized by the county to sign and shall include the County Joint Bid Program Item Number. A copy of the form submitted shall be retained by the county.

The county shall deal directly with the company representative for the vendor in making purchases under this program. The vendor shall complete all orders in compliance with its agreement under the program, and shall deal directly with each county in processing and completing their orders and in complying with service and warranty requirements. Road sign vendors should keep in mind that they are required to deliver all items to the location identified by the county ordering them within thirty (30) calendar days from the date of order, and the cost of any items not delivered within this time period will be reduced in price by 10%.

It is important to remember that under Code of Alabama 1975, § 41-16-50(b), all purchases made pursuant to this program shall be subject to the terms and conditions of Alabama's Competitive Bid Law. Therefore, counties are only authorized to purchase the specific items awarded under the program according to the bid specifications and must comply with these procedures in placing all orders.

There can be no deletions or additions to items purchased under this program, except as specifically provided for in the bid specifications. Optional equipment authorized under the bid specifications on certain heavy equipment orders may be deleted by the county at the time of purchase, and in that event, the cost of that item as provided by the vendor shall be deducted from the total cost of the item.

**COUNTY JOINT BID PROGRAM
5.50 CY WHEEL LOADER TIER 4
PURCHASE ORDER FORM**

***This form must be mailed or faxed to the Vendor with
Copy faxed to the ACCA Office at 334-263-7678***

Date of Order: _____ County Purchase Order No. _____

County: _____ County Contact Person: _____

County Address: _____

County Phone Number: _____

County Fax Number: _____

E-mail Address: _____

Equipment Model or Item Name and Number: VOLVO L150 H

Number of items ordered: _____ Price per item: _____

Vendor: Cowin Equipment Company Inc. Company Contact: John Edwards

Vendor address: 3120 Hayneville Road
Montgomery, AL 36108

Deliver to the Attention of: _____

Delivery Address: _____

Requested delivery date: _____

Name of person making purchase request: _____

Title: _____

Authorized County Signature: _____

Initial confirming form sent to vendor: _____

Initial confirming form sent to ACCA: _____