



REQUEST FOR BID
 Date: 3/26/10
 Bid #10-0169

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 RETURN BY OPENING TIME TO:
 Purchasing Division
 RM 100 City Hall
 411 West 1st Street
 Duluth, MN 55802

Aerial Lift Bucket Truck

Buyer: Dennis Sears
 Phone: 218-730-5003
 Fax: 218-730-5922

BID OPENING, RM 100 AT 2:00 PM ON Monday, April 19, 2010

Note: All bids must be written, signed, and transmitted in a sealed envelope, plainly marked with the bid number, subject matter, and opening date. The City of Duluth reserves the right to split award where there is substantial savings to the city, waive informalities and to reject any and all bids. Bidder should state in proposal if bid is based on acceptance of total order. Sales tax is not to be included in the unit price. Bidder to state freight charges if, proposal is F.O.B. shipping point, freight not allowed. Low bid will not be the only consideration for award of bid. All pages must be signed or initialed by authorized bidder's representative as indicated at the bottom of the page(s) of the request for bid forms.

RETURN BID IN DUPLICATE WITH DUPLICATE DESCRIPTIVE LITERATURE
 BID RESULTS WILL BE POSTED TO THE WEB SITE SHORTLY AFTER BID OPENING
 City bid information on website: [www.duluthmn.gov/purchasing/bid information.cfm](http://www.duluthmn.gov/purchasing/bid%20information.cfm)

Designated F.O.B. Point

Tax: Federal Excise Tax Exemption
 Account No. 41-74-0056 K

Item No.	Qty	U/OM	Description	Unit Price	Total Price
01	1	ea	Aerial Bucket Truck per attached specifications/requirements		

Vendor E-mail Address _____ Freight Charges N/A

Name _____
 Addr _____

Total Bid Price _____
 (To include any additional pages)

Payment Terms _____

By: _____

F.O.B. Point N/A

(print title)

Delivery Date N/A

(signature) (tele#)

Aerial Device Specifications;

Description

1. Articulating Overcenter Aerial Device with an insulating lower boom and insulating upper boom with ISO grip system. Behind the Cab installation.
 - A. Ground to bottom platform height 54 – 56 Feet.
 - B. Working height minimum 59 feet
 - C. Maximum reach to edge of platform with upper boom Overcenter: 44 – 46 feet.
 - D. Maximum reach to edge of platform with upper boom Non-Overcenter and lower boom at 125 degrees: 41 to 43 feet at approximately 25 feet platform height.
 - E. Side by Side boom configuration: Travel height 12 to 13 feet on a chassis with approximately 40" frame height.
 - F. Lower boom articulation: 0 to 125 degrees (35 degrees beyond vertical) Boom cylinder to be equipped with integral holding valves which lock boom in place in the event of a hydraulic line failure. Boom cylinder to have a cushion valve for controlled movement into position at maximum lower boom articulation.
 - G. Upper boom articulation: 270 degrees in relation to lower boom. Boom cylinder to be equipped with integral holding valves to lock boom in place in the event of hydraulic line failure or loss of power.
 - H. Pedestal-Subbase: Fabricated from a 16 inch outside diameter x ½ inch wall steel tube welded into a fabricated steel subbase. Rotation bearing support ring to be 1-5/8 inches thick.
 - I. Lower Boom: Fabricated 12 x 12 x ¼ inch steel tube. Length of lower boom is 254 inches from centerline of lower pivot to centerline of outer pivot.
 - J. Lower Boom Fiberglass Insulator: Filament wound fiberglass insulator with 11-3/8 inch square x 5/8 wall thickness, located in the lower end of lower boom. Provides 15 inch clear isolation gap.
 - K. Upper Boom Fiberglass Insulator: Filament wound fiberglass with 10 inch inside diameter contains insulated conduit for routing of hydraulic lines and fully contains upper boom leveling system. End of boom shaft to have ring for attaching fall protection system lanyard.
 - L. Rotation: Continuous rotation to be provided by worm gear drive with extended shaft for manual rotation driving a shear ball bearing rotation gear. Rotation to be fully adjustable. Bearing attachment bolts to be easily accessed from outside of pedestal and inside of turntable.
 - M. Platform: Molded fiberglass one-man, side mounted, fixed mounting. Platform to be rated at minimum 400 pounds without liner.
 - N. Mechanical Platform Leveling System: To include a positive parallelogram system of fiberglass insulating rods and roller chain. Adjustment of leveling system to be made with turnbuckles located inside the cover on the lower boom and by adjusting studs accessible from the lower end of the upper boom. Platform level adjustment to be easily accessible from external location on lower pivot.

- O. Platform Tilting System: Mechanical pin type to allow for easy removal of water or debris from the platform.
- P. Hydraulic System: Open center hydraulic system functioning at 6.5 gpm. Minimum. And a 3100 psi.. 25 gallon hydraulic oil reservoir with suction strainer, return line filter and sectional control valves and plumbing.
- Q. ISO Grip System: System to include the following boom tip components that can provide an additional layer of secondary electrical protection. 1. Control Handle: An insulating single handle controller incorporating high electrical resistance components that is dielectrically tested to 40 Kv AC with no more than 400 microamperes of leakage. The controls handle to be green in color to differentiate it from other non-tested controllers. The handle is to include an interlock guard that reduces the potential for inadvertent boom operation. 2 Auxiliary Control Covers: Non-tested blue silicon covers for auxiliary controls. 3. Boom Tip Covers: Non-tested non-metallic boom tip covers.
- R. Hydraulic Tool Circuit: Single tool circuit at boom tip; including (1) one set of Bruning HTMA quick disconnect couplings. Circuit to provide 5.0-6.0 gpm. Tool system relief pressure to be set at 2000 psi. System to operate open center tools.
- S. Upper Boom Storage Support: Cradle and tie down strap installed for horizontal stow units.
- T. Outrigger/Boom Interlock System: To prevent boom from being unstowed until outriggers have been deployed.
- U. Outrigger/Unit Selector Control: To be located near the outrigger controls to allow operator to divert oil from machine circuit for outrigger operation.
- V. Outrigger Motion Alarm: Provides audible alarm anytime the outrigger controls are operated.
- W. Unit to have an installed back-up alarm.
- X. ANSI A92.2 Flashover Protection Required.
- Y. Unit to include two Parts and Operation Manuals.

Additional Description Aerial Unit

1. Unit to be painted white.
2. Manual upper boom stow securing system
3. Single one man side mounted fiberglass platform with shaft-mounted controls. Platform to be approximately 24x24x 39 inches high.
4. One (1) platform step to be located on the side of the platform nearest the elbow in the stowed position.
5. Vinyl platform cover.
6. Dual Set of Hydraulic tool circuits at platform.
7. 12 volt DC electric powered secondary stowage system. Slip ring required.
8. 12 Volt start/stop throttle module required. Slip ring required.
9. Primary and Secondary Outriggers required.
10. Category C 46KV and below certification required.
11. Fall Protection system to include one body harness and decelerating type lanyard.
12. Simultaneous operation of boom and tool circuit required.
13. MV-22 Hydraulic Oil.

14. Standard pump for PTO.
15. Hot Shift PTO for Automatic Transmission.
16. Hydraulic Tools:
 - A. 20" Chainsaw with quick couplers.
 - B. Hydraulic Pole saw with quick couplers.
 - C. Long Reach Hydraulic Chainsaw with quick couplers.

Body

1. Steel platform and flatbed body with approximately 48" wide x 50" high x 93" long thru tool box.
2. Curbside and street side light channels.
3. 3 marker rear light bracket.
4. Expanded metal Cab Guard required. To include cab guard mounting kit, front support for the cab guard and access step and grab handle installed on curbside rear of cab guard.
5. Double Step to be installed one each side rear of truck. With U shaped grab handles.
6. Cab Guard access ladder with grab handle required.
7. Platform rest required.
8. Lower Boom rest weldment required.
9. Approximately 19"x19"x2" treated wood outrigger pads and storage required.
10. 2 rubber wheel chocks and storage required.
11. Mud flaps to be installed.
12. 5lb Fire extinguisher and Triangular reflector kit to be provided.

Electrical Accessories

1. Rear mounted and installed secondary stowage switch required.
2. Outrigger interlock system required.
3. Lights and reflectors installed in accordance with FMVSS #108. LED lights required.
4. Amber strobe lights Cab Guard installed 2 (two) required.
5. Back up alarm installed.
6. Pin type 6 way trailer receptacle installed at rear of vehicle.
7. Electric trailer brake controller installed.

Details

1. Entire Unit to be painted white. (underneath area to be painted black)
2. Unit to be Dielectric and stability tested according to ANSI specifications.
3. English safety and instructional decals required.

4. Vehicle Height Placard to be installed in cab.
5. Bid to include all installation of aerial device.

Chassis

1. 2011 International model 4300 with set back axle. Or Equivalent unit appropriate for the proper installation of bid aerial device
2. Chassis color – white.
3. Chassis cab to axle 108” or appropriate dimensions required for bid aerial device.
4. GVWR 33,000lbs.
5. 12,000lb front axle rating
6. 21,000lb rear axle rating.
7. 11R22.5 Front and Rear Tires.
8. Engine horsepower: ***Please State*** _____
9. Allison RDS -3500 Automatic Transmission.
10. 07BDA Navistar Exhaust-(right horizontal-behind cab horizontal) or equivalent.
11. 12VZA – International PTO Throttle wiring or equivalent.
12. International heavy duty taillight wiring or equivalent. Transmission dipstick relocated to RH side of transmission.
13. Air Brakes.
14. 4x2 drive train.
15. Conventional Cab.

Miscellaneous

1. Minimum Warranty One (1) year parts and labor.
2. Warranty on structural integrity of the Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables to be warranted for as long as original purchaser owns the product.
3. Bidder is to supply a self-directed computer based training program. This program will provide basic instruction in the safe operation of this aerial device. This program will also include and explain ANSI and OSHA requirements related to the proper use and operation of this unit.
4. Delivery 180 to 220 days from receipt of order.
5. FOB Duluth MN.
6. Optional Warranties: ***Please state terms and conditions for optional/extended warranties.***