



## BID INVITATION

## STANDARD CONDITIONS

## M-04-175H

1. **ACCEPTANCE AND REJECTION:** The Arkansas State Highway and Transportation Department (AHTD) reserves the right to reject any or all bids, to accept bids in whole or in part (unless otherwise indicated by bidder), to waive any informalities in bids received, to accept bids on materials or equipment with variations from specifications where efficiency of operation will not be impaired, and to award bids to best serve the interest of the State.
2. **PRICES:** Unless otherwise stated in the Bid Invitation, the following will apply: (1) unit prices shall be bid, (2) prices should be stated in units of quantity specified (feet, each, lbs., etc.), (3) prices must be F.O.B. destination specified in bid, (4) prices must be firm and not subject to escalation, (5) bid must be firm for acceptance for 30 days from bid opening date. In case of errors in extension, unit prices shall govern. Discounts from bid price will not be considered in making awards.
3. **BID BONDS AND PERFORMANCE BONDS:** If required, a **Bid Bond** in the form of a cashier's check, certified check, or surety bond issued by a surety company, in an amount stated in the Bid Invitation, must accompany bid. **Personal and company checks are not acceptable as Bid Bonds.** Failure to submit a Bid Bond as required will cause a bid to be rejected. The Bid Bond will be forfeited as liquidated damages if the successful bidder fails to provide a required Performance Bond within the period stipulated by AHTD or fails to honor their bid. Cashier's checks and certified checks submitted as Bid Bonds will be returned to unsuccessful bidders; surety bonds will be retained. The successful bidder will be required to furnish a **Performance Bond** in an amount stated in the Bid Invitation and in the form of a cashier's check, certified check, or surety bond issued by a surety company, unless otherwise stated in the Bid Invitation, as a guarantee of delivery of goods/services in accordance with the specifications and within the time established in the bid. **Personal and company checks are not acceptable as Performance Bonds.** In some cases, a cashier's check or certified check submitted as a Bid Bond will be held as the Performance Bond of the successful bidder. Cashier's checks or certified checks submitted as Performance Bonds will be refunded shortly after payment has been made to the successful bidder for completion of all terms of the bid; surety bonds will be retained. Surety bonds must be issued by a surety company authorized to do business in Arkansas, and must be signed by a Resident Local Agent licensed by the Arkansas State Insurance Commissioner to represent that surety company. Resident Agent's Power-of-Attorney must accompany the surety bond. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). In such cases, the company issuing the surety bond must comply with all stipulations herein and must be named in the U. S. Treasury listing of companies holding Certificates of Authority as acceptable sureties on Federal Bonds and as acceptable reinsuring companies. Any excess between the face amount of the bond and the underwriting limitation of the bonding company shall be protected by reinsurance provided by an acceptable reinsuring company.
4. **TAXES:** The AHTD is not exempt from Arkansas State Sales and Use Taxes, or local option city/county sales taxes, when applicable, and bidders are responsible to the State Revenue Department for such taxes. These taxes should not be included in bid prices, but where required by law, will be paid by the AHTD as an addition thereto, and should be added to the billing to the AHTD. The AHTD is exempt from Federal Excise Taxes on all commodities except motor fuels; and excise taxes should not be included in bid prices except for motor fuels. Where applicable, tax exemption certificates will be furnished by the AHTD.
5. **"ALL OR NONE" BIDS:** Bidders who wish to bid "All or None" on two or more items shall so stipulate on the face of bid sheet; otherwise, bid may be awarded on an individual item basis.
6. **SPECIFICATIONS:** Complete specifications should be attached for any substitution or alternate offered, or where amplification is necessary. Bidder's name must be placed on all attachments to the bid.
7. **EXCEPTIONS TO SPECIFICATIONS:** Any exceptions to the bid specifications must be stated in the bid. Any exceptions to manufacturer's published literature must be stated in the bid, or it will be assumed that bidder is bidding exactly as stated in the literature.
8. **BRAND NAME REFERENCES:** All brand name references in bid specifications refer to that commodity or its equivalent, unless otherwise stated in Bid Invitation. Bidder should state brand or trade name of item being bid, if such name exists.
9. **FREIGHT:** All freight charges should be included in bid price. Any change in common carrier rates authorized by the Interstate Commerce Commission will be adjusted if such change occurs after the bid opening date. Receipted common carrier bills that reflect ICC authorized rate changes must be furnished.
10. **SAMPLES AND LITERATURE:** Samples or technical literature must be provided within 14 days of AHTD request unless AHTD extends time. Failure to provide samples or literature within this period may cause bid to be rejected. When required, samples of items must be furnished free of charge, prior to or after the opening of bids, and, if not destroyed, will be returned upon request at the bidder's expense. Each individual sample must be labeled with bidder's name and item number. Request for return of samples must be made within 10 days following submission of sample. Samples from successful bidders will be retained for comparison with items actually furnished.
11. **GUARANTY:** Unless otherwise indicated in Bid Invitation, it is understood and agreed that any item offered or shipped on this bid shall be newly manufactured, latest model and design, and in first class condition; and that all containers shall be new, suitable for storage or shipment and in compliance with all applicable laws relating to construction, packaging, labeling and registration.
12. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the AHTD, as soon as possible, of the reason for any delay and the expected delivery date. The AHTD has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.
13. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by AHTD after delivery. Default in promised delivery or failure to meet specifications authorizes the AHTD to cancel award or any portion of same, to reasonably purchase commodities or services elsewhere and to charge full increase, if any, in cost and handling to defaulting vendor. Applicable bonds may be forfeited.
14. **ETHICS:** "It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement of understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business." (Arkansas Code, Annotated, Section 19-11-708).

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT**

**SPECIFICATION 04-64-4104**

**FOR**

**ARTICULATED HYDRAULIC BOOM MOWER  
WITH TREE LIMB CUTTER ATTACHMENT  
MOUNTED ON FOUR WHEEL DRIVE TRACTOR**

1. **General:** This specification is intended to cover a mid-mounted, articulated, hydraulic powered, boom mounted, multiple saw blade type tree limb cutting attachment completely installed on an industrial or utility type four wheel drive tractor.
2. **Tractor:** Industrial or utility type four wheel drive tractor with liquid cooled diesel engine, Power Take-Off, hydraulic system, three point hitch and fully enclosed ROPS type cab complete with heat and air conditioning.
  - A. **PTO Power:** Minimum of 90 horsepower at rated RPM.
  - B. **Engine:** Liquid cooled diesel equipped with 12 volt electrical system including starter, battery, alternator and ammeter or charge indicator light. Shall be equipped with approved dry type air cleaner, oil and fuel filters with replaceable elements, tachometer, electric hour meter and all necessary gauges including temperature gauge, oil pressure gauge or warning light and fuel gauge. Shall have vertical exhaust muffler with rain cap or curved exhaust pipe. Cooling system shall have anti-freeze protection to -20° F, or lower. All other equipment necessary for efficient operation shall be furnished.
  - C. **Transmission:** Synchronized power shift transmission with forward and reverse shuttle. Transmission shall be equipped with an additional creeper gear set. Normal configuration shall provide a minimum of sixteen (16) forward speeds and sixteen (16) reverse speeds with the creeper gear set providing additional speeds as slow as 0.25 mph. Shall have travel speed of no less than 16 mph in high range at governed RPM. The forward/reverse shuttle control shall allow the operator to change directions without using the foot-operated clutch pedal.
  - D. **Front Axle:** Mechanical front wheel drive axle providing all wheel drive capability. Shall be equipped with differential lock or limited slip differential.
  - E. **Rear Final Drive:** Double reduction with planetary gears mounted inboard on axles.
  - F. **Rear Differential Lock:** Mechanical or electro-hydraulic engagement.
  - G. **Steering:** Hydrostatic power steering.
  - H. **Brakes:** Wet disc type.
  - I. **Power Take Off:** 540 RPM independent type with control separate from transmission. Control shall be easily reached from operator's seat. PTO shaft shall be protected by a safety shield.
  - J. **Hydraulics:** Hydraulic pump for tractor hydraulics shall have a minimum capacity of 18 gpm at approximately 2,500 psi. Hydraulic pump for operating hydraulic driven cutter shall be a front mounted pump, driven from front of engine crankshaft, with a minimum capacity of 50 gpm at approximately 2,500 psi. Hydraulic oil reservoir for cutter shall have a minimum capacity of 60 gallons. Reservoir to be mounted on left side of tractor to help act as a counterweight to the boom assembly and cutter attachment.
  - K. **3-Point Lift Capacity:** Minimum of 4,700 pounds at 24" behind lift arms.
  - L. **Tread Width:** Front and rear tread width shall be adjustable, capable of tread widths from 65" to 72".
  - M. **Front Wheels and Tires:** Shall have 24" diameter front wheels. Tires shall be no less than 12.4 x 24, minimum 6 ply rating, R1 or R4 tread. (If an alternate tire size is required in order to match the specified rear tire, it must be approved by AHTD prior to delivery.)
  - N. **Rear Wheels and Tires:** Shall have 30" diameter wheels with no less than 18.4 x 30, 8 PR - Type R1 or R4 tires. Valve shall be the type to allow liquid ballast to be added. Left rear tire shall be filled to 90% capacity with a solution of CaCl<sub>2</sub>. Left rear wheel shall have a 1,000 pound minimum wheel weight.

- O. **Cab:** Fully enclosed ROPS cab equipped with air conditioning, heater-defroster unit, front and rear windshield wipers, inside rear view mirror, floor mat, adjustable suspension seat equipped with arm rests, and seat belt. Cab shall have either a hardened polycarbonate right hand window or a polycarbonate screen designed to protect the existing cab window. (If a protective polycarbonate screen is used, a method shall be provided to clean the cab glass.) Windshield and all other cab windows shall be tinted safety glass.
- P. **Backup Alarm:** Shall be equipped with a backup alarm meeting the requirements of SAE J994.
3. **Mower:**
- A. **General:** Shall be a boom mounted, hydraulically powered, multiple saw blade type tree limb cutter mounted on tractor specified above. Shall have a minimum reach of 21' from center line of tractor to outer edge of cutter attachment in horizontal position. This unit shall be designed to receive, in lieu of the tree limb cutter attachment, a rotary boom mower, a flail boom mower, a side mounted rotary mower or a ditch cleaning attachment.
- B. **Main Frame:** The main frame shall mount between the front and rear axles of the tractor. It shall be braced to the rear axle housing.
- C. **Boom:** The boom shall be mounted to the main frame on the right side of the tractor. Shall be a two section articulated boom with an overall length of approximately 20'. The boom shall support the limb cutter attachment and provide vertical and horizontal movements. The cutter shall be attached to the boom arm in such a manner to allow angular movement between the cutter attachment and the boom of not less than 220°. The boom shall pivot either 90° forward or 90° rearward permitting unit to be carried in the travel position. Shall have a maneuvering cylinder for controlling movement of cutter attachment, lift cylinder for main boom, secondary boom cylinder and cutter head angle cylinder.
- D. **Boom Rest:** Shall be equipped with either a boom rest or a boom lock to secure boom when in the traveling position.
- E. **Tree Limb Cutter Attachment:** Shall utilize multiple saw blades to provide a minimum cutting swath of 90" and have the capability of cutting brush and limbs up to a maximum of no less than 4".
- (1) **Powertrain:** Shall be hydraulically powered by a 38 horsepower minimum hydraulic motor with power transferring from the motor to the blades by a minimum of three (3) high performance Micro-V belts.
- (2) **Cutting Head:** The main channel shall be constructed from no less than 3/16" thick formed steel. End plates shall be constructed from no less than 3/8" thick steel. Shall have a rear shield constructed from 10 gauge minimum formed steel.
- (3) **Spindles:** Shall have a minimum of four (4) blade spindles with each spindle shaft mounted in tapered roller bearings enclosed in a heavy housing. Each shaft shall have an anti-wrap guard to protect seals from debris. Shafts shall be greasable and grease pressure relief fittings shall be used to prevent blowout of shaft seals.
- (4) **Blades:** Shall have a minimum of four (4) circular saw blades, each with a minimum diameter of 26". Blades shall be made of no less than 3/16" thick steel and each blade shall have a minimum of sixty (60) teeth.
- (5) **Extra Blades:** One (1) extra set of blades shall be furnished with each unit. These are in addition to the set provided on the cutter.
- (6) **Belt Guard:** Shall have a hinged belt guard with quick release fasteners to provide access to the belt tensioner.
- F. **Controls:** All cylinders shall be actuated by means of electro-hydraulic control valves with single lever joystick control within easy reach of the operator seated in the operator position. The cutter control valve shall be a solenoid operated remote control valve. Shall be equipped with a safety switch which will prevent the engine from starting if the blades are engaged.
4. **Color:** Units shall be painted Arkansas State Highway & Transportation Department Omaha Orange, Sherwin-Williams No. F1E 4143 Kem Transport Enamel, or equal.
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5. Warranty: Units purchased under this specification shall be warranted against defects in material and workmanship for a minimum period of twelve (12) months (365 days) from date unit is placed in operation by AHTD.
  - A. Warranty shall include all parts, labor and transportation costs to the location of equipment.
  - B. If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done.
  - C. It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
  - D. Recent prior failure to provide warranty-work, parts, replacement parts or service, in a timely manner, for equipment from the same manufacturer or dealer shall be grounds for the rejection of any submitted bid, or for the denial of any otherwise qualified low bidder, whether such failure is attributable to the manufacturer or the dealer of the equipment. For the purposes of this paragraph "timely manner" means a period of time not exceeding thirty (30) calendar days to provide requested warranty-work, parts, replacement parts, or service. For the purposes of this paragraph "manufacturer" means the original manufacturer of the equipment and its successor or successors, regardless of number, and whether acquired by sale, merger, or otherwise. For the purposes of this paragraph "replacement part" means a part redesigned by a manufacturer to correct a design or engineering defect and which replacement part is capable of providing dependable performance in normal operation conditions for its normal service life without failure. Such bid or bids may be rejected by the Department until such failure or failures have been remedied to the satisfaction of the Department and until such manufacturer or dealer is providing such warranty-work, parts, replacement parts, and service in a timely manner.
6. Manuals: The successful bidder shall furnish an Operator's Instruction Manual with each unit delivered and one (1) copy each of Shop Repair Manual and Parts Book (for tractor, boom assembly and tree limb cutter attachment) to each FOB point. In addition, one (1) copy each of Operator's Instruction Manual, Shop Repair Manual, and Parts Book (for tractor, boom assembly and tree limb cutter attachment) shall be furnished to Equipment & Procurement Division, P.O. Box 2261, Little Rock, AR 72203 (11302 W. Baseline Road, Little Rock, AR 72209, if shipping UPS, FedEx, etc.).

The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD ROM, Floppy Disks, etc.) in lieu of printed manuals.

7. Current Model: Units furnished under this specification shall be the latest improved model in current production, as offered to commercial trade, built for the U.S. market, and shall be of quality workmanship and material. Machines manufactured for foreign markets will not be accepted. All equipment offered under this specification shall be new. Used, reconditioned, shopworn, demonstrator, prototype or discontinued models are not acceptable. Manufacturers of the units supplied must have been in the business of producing operational units for at least two years. The model furnished must have been in production for a minimum of one year, or be the latest version of a previous model. Bidder/s may be required to submit documentation substantiating the aforementioned requirements. A list of user references may also be required.
  8. Training: The successful bidder shall furnish qualified personnel to instruct AHTD operators and service technicians on operation and maintenance of units purchased under this specification.

In addition, the successful bidder shall furnish information on any factory service schools which would be available for AHTD service technicians.
  9. Units shall be assembled, adjusted and made ready for continuous operation at time of delivery.

All parts, accessories and tools necessary for satisfactory operation of this unit shall be furnished whether or not they are specifically mentioned in this specification (including Standard Equipment as furnished by manufacturer as shown on printed literature and specifications - unless specifically excluded by this specification).
  10. Bidder shall maintain a representative inventory of replacement parts and service facility for servicing equipment bid on.
  11. The Arkansas State Highway & Transportation Department reserves the right to require a demonstration, under actual working conditions, of tractor/mower bid under this specification before award is made.
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