

**ARKANSAS STATE HIGHWAY COMMISSION
AHTD-EQUIPMENT AND PROCUREMENT DIVISION
BID INVITATION**

Contract Number: H-17-338H

BID OPENING LOCATION:
AHTD Equipment and
Procurement Division
11302 West Baseline Road
Little Rock, AR 72209

MAIL TO:
AHTD Equipment and
Procurement Division
P.O. Box 2261
Little Rock, AR 72203

DELIVER TO:
AHTD Equipment and
Procurement Division
11302 West Baseline Road
Little Rock, AR 72209

Bid Opening Date: June 27, 2017 Time: 11:00 a.m.

Sealed bids for furnishing the commodities and/or services described below, subject to the Standard Bid Conditions of this Bid Invitation will be received at the above-noted mail and delivery locations until the above-noted bid opening date and time, and then publicly opened at the above-noted bid opening location. **Bids must be submitted on this form, with attachments when appropriate, or bids will be rejected. Late bids and unsigned bids will not be considered.**

In compliance with this Bid Invitation and subject to all the Conditions thereof, the undersigned offers and agrees to furnish any and all items upon which prices are quoted, at the price set opposite each item.

Company Name: _____

Name (Type or Print): _____

Address: _____

Title: _____

Phone: _____ Fax: _____

City: _____ State: _____ Zip: _____

E-Mail: _____

Federal Tax ID or Social Security No.: _____

Signature: _____
Signature must be legible, original (not photocopied) and in ink.
Unsigned bids will be rejected.

Hydraulic Excavator

The Arkansas Highway and Transportation Department (hereafter called the AHTD) will receive bids for a **Hydraulic Excavator, Track Mounted, Diesel, 48,000 Pound Class.**
Bid prices shall include delivery of all **Equipment** to the AHTD at the F.O.B. location(s) shown on attached Bid Sheet.

Contract may be renewed or extended upon mutual agreement of the parties, but shall not exceed limitations allowed by Arkansas State Procurement Law.

All bidders should complete and return the Eligible Bidder Certification (Attachment A) and Disclosure Form (see Page 2 of Standard Bid Conditions – Item 18) issued with this bid. A current copy of the DFA Illegal Immigrant Contractor Disclosure Certification (see Page 1 of Standard Bid Conditions – Item 17) should also be submitted with bid.

Literature Submittals – Item A2 of Bid Specifications shall supersede Item #11 of Standard Bid Conditions.

Bid Bond in the amount of \$1,000 required of all bidders at time of bid opening or bid will be rejected. **Personal and company checks are not acceptable as Bid Bonds.** See Condition 4 on page 1 of Standard Bid Conditions.

Performance Bond in the amount of 5% of the total awarded to the respective bidders must be furnished within 10 days after receipt of notice of intent to award as a guarantee of delivery in accordance with the specifications and within the time established in the bid. **Personal and company checks are not acceptable as Performance Bonds.** See Condition 4 on page 1 of Standard Bid Conditions.

Bidder shall specify guaranteed delivery date for all vehicles/equipment in the space provided under each item number for which a price is being submitted. Successful bidder shall furnish Warranty Data for each vehicle/equipment delivered. The Warranty Data shall contain all necessary information such as motor and/or serial numbers and shall be signed by the selling dealer at the time vehicle/equipment is delivered to the Highway Department. Certificate of Origin, Federal Excise Tax Exemption Certificates, Odometer Disclosure Statement and five (5) copies of the Invoice for each vehicle/equipment to be furnished to Equipment & Procurement Division, P.O. Box 2261, Little Rock, AR 72203.

The successful bidder will be required to complete delivery within **180** days after award.

Bids and Specifications are available on-line by going to the AHTD Web Site – www.arkansashighways.com and clicking on “Commodities and Services Bids/Contracts Information”. Tabulations will also be available at this site after award of bid/contract. If you have any questions, call this office at 501-569-2667.

64-7153 & 64-7154

**ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARKANSAS
AHTD-EQUIPMENT AND PROCUREMENT DIVISION**

BID SHEET

Contract No.: H-17-338H

BIDDER: _____

1. **1** – Hydraulic Excavator, Track Mounted, Diesel, 48,000 Pound Class w/Hydraulic Thumb, Excavating and Ditching Buckets. To meet AHTD Spec. **17-225A-135.**

FOB: **1 ea. - AHTD – District 2 Headquarters, 4900 Highway 65 South, Pine Bluff, AR 71611**

Bid Price (Do not include any Local, State or Federal Taxes)

Hydraulic Excavator proposed as meeting specifications:

Make _____ Model _____ Warranty _____ Each \$ _____

2. **1** – Hydraulic Excavator, Track Mounted, Diesel, 48,000 Pound Class w/Hydraulic Bucket Tilt, Excavating and Ditching Buckets. To meet AHTD Spec. **17-225-135.**

FOB: **1 ea. - AHTD – District 8 Headquarters, 372 Aspen Lane, Russellville, AR 72801**

Bid Price (Do not include any Local, State or Federal Taxes)

Hydraulic Excavator proposed as meeting specifications:

Make _____ Model _____ Warranty _____ Each \$ _____

Guaranteed Delivery Date _____

Additional Units may be purchased at the same pricing and conditions through _____
(Date)

BID TOTAL \$ _____

STANDARD BID CONDITIONS

1. **GENERAL:** Any special terms and conditions included in the invitation for bid override these standard terms and conditions. The standard terms and conditions and any special terms and conditions become part of any contract entered into if any or all parts of the bid are accepted by the Arkansas State Highway and Transportation Department (AHTD).
2. **ACCEPTANCE AND REJECTION:** 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.
3. **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.
4. **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. When a bidder claims and can show clear and convincing evidence that a material mistake was made in the bid and was not the bid intended, the bidder may be permitted to withdraw their bid prior to award without forfeiture of bid bond. 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). These bonds shall not only serve to guarantee the completion of the work, but also to guarantee the excellence of both workmanship and material until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled. 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. Annual Bid and Performance Bonds on file with E & P Division must have sufficient unencumbered funds to meet current bonding requirements, or the bid will be rejected, unless the balance is submitted as set forth above, prior to bid opening.
5. **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.
6. **"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.
7. **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.
8. **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.
9. **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.
10. **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.

11. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of AHTD request, and free demonstrations within 30 days, unless AHTD extends time. Failure to provide as requested within this period may cause bid to be rejected. Samples, literature and demonstrations must be substantially the same as the item(s) being bid, unless otherwise agreed to by AHTD. Samples that are not destroyed will be returned upon request at bidders expense. Samples from successful bidders may be retained for comparison with items actually furnished.
12. **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.
13. **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.
14. **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.
15. **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).
16. **NOTICE OF NONDISCRIMINATION:** The Arkansas State Highway Commission through the AHTD complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, the AHTD does not discriminate on the basis of race, sex, color, age, national origin, religion (not applicable as a protected group under the Federal Motor Carrier Safety Administration Title VI Program), disability, Limited English Proficiency (LEP), or low-income status in the admission, access to and treatment in the AHTD's programs and activities, as well as the hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the AHTD's nondiscrimination policies may be directed to Joanna P. McFadden Section Head – EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501)569-2298, (Voice/TTY 711), or the following email address: joanna.mcfadden@ahtd.ar.gov. Free language assistance for Limited English Proficient individuals is available upon request. This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.
17. **PROHIBITION OF EMPLOYMENT OF ILLEGAL IMMIGRANTS:** Pursuant to Arkansas Code Annotated 19-11-105, all bidders must certify prior to award of a contract that they **do not** employ or contract with any illegal immigrant(s) in its contract with the state. Bidders shall certify online at <https://www.ark.org/dfa/immigrant/index.php>.
18. **DISCLOSURE:** Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that order, **shall** be a material breach of the terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy **shall** be subject to all legal remedies available to the agency.

ATTACHMENT A

ELIGIBLE BIDDER CERTIFICATION

The Bidder represents and warrants for itself, its employees and its subcontractors and certifies they:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this Bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph two (2) of this Certification;
4. Have not within a one-year period preceding this application/Bid had one or more public transactions (Federal, State, or local) terminated for cause or default; and

The Bidder represents, warrants and acknowledges the understanding that restrictions placed on the employment of labor or on the scale of pay for the work on a contract will be the requirements of the Fair Labor Standards Act (Federal Wage-Hour Law) of 1938, 28 USC §201 et seq., and other applicable labor laws.

The person executing this Certification further represents, warrants and affirms the truthfulness and accuracy of the contents of the statements submitted on or with this Certification and understands that the provisions of 31 USC §3801 et seq. are applicable thereto.

BIDDER NAME

BY: _____

Signature

TITLE: _____

CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM

Failure to complete all of the following information may result in a delay in obtaining a contract, lease, purchase agreement, or grant award with any Arkansas State Agency.

SUBCONTRACTOR: _____ SUBCONTRACTOR NAME: _____

Yes No

IS THIS FOR:

TAXPAYER ID NAME: _____ Goods? Services? Both?

YOUR LAST NAME: _____ FIRST NAME: _____ M.I.: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____ COUNTY: _____

AS A CONDITION OF OBTAINING, EXTENDING, AMENDING, OR RENEWING A CONTRACT, LEASE, PURCHASE AGREEMENT, OR GRANT AWARD WITH ANY ARKANSAS STATE AGENCY, THE FOLLOWING INFORMATION MUST BE DISCLOSED:

FOR INDIVIDUALS*

Indicate below if: you, your spouse or the brother, sister, parent, or child of you or your spouse is a current or former: member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee:

Position Held	Mark (✓)		Name of Position of Job Held <small>(senator, representative, name of board/ commission, data entry, etc.)</small>	For How Long?		What is the person(s) name and how are they related to you? <small>(i.e., Jane Q. Public, spouse, John Q. Public, Jr., child, etc.)</small>	
	Current	Former		From MM/YY	To MM/YY	Person's Name(s)	Relation
General Assembly							
Constitutional Officer							
State Board or Commission Member							
State Employee							

None of the above applies

FOR AN ENTITY (BUSINESS)*

Indicate below If any of the following persons, current or former, hold any position of control or hold any ownership interest of 10% or greater in the entity: member of the General Assembly, Constitutional Officer, State Board or Commission Member, State Employee, or the spouse, brother, sister, parent, or child of a member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee. Position of control means the power to direct the purchasing policies or influence the management of the entity.

Position Held	Mark (✓)		Name of Position of Job Held <small>(senator, representative, name of board/ commission, data entry, etc.)</small>	For How Long?		What is the person(s) name and what is his/her % of ownership interest and/or what is his/her position of control?		
	Current	Former		From MM/YY	To MM/YY	Person's Name(s)	Ownership Interest (%)	Position of Control
General Assembly								
Constitutional Officer								
State Board or Commission Member								
State Employee								

None of the above applies

Contract and Grant Disclosure and Certification Form

Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the agency.

As an additional condition of obtaining, extending, amending, or renewing a contract with a state agency I agree as follows:

1. Prior to entering into any agreement with any subcontractor, prior or subsequent to the contract date, I will require the subcontractor to complete a **CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM**. Subcontractor shall mean any person or entity with whom I enter an agreement whereby I assign or otherwise delegate to the person or entity, for consideration, all, or any part, of the performance required of me under the terms of my contract with the state agency.

2. I will include the following language as a part of any agreement with a subcontractor:

Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this subcontract. The party who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the contractor.

3. No later than ten (10) days after entering into any agreement with a subcontractor, whether prior or subsequent to the contract date, I will mail a copy of the **CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM** completed by the subcontractor and a statement containing the dollar amount of the subcontract to the state agency.

Signature _____	Title _____	Date _____
Vendor Contact Person _____	Title _____	Phone No. _____

Agency Use Only				
Agency Number _____	Agency Name _____	Agency Contact Person _____	Contact Phone No. _____	Contract or Grant No. _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIFICATION 17-225A-135

FOR

HYDRAULIC EXCAVATOR
TRACK MOUNTED WITH HYDRAULIC THUMB
42" EXCAVATING BUCKET
AND 60" DITCHING BUCKET
WO/BUCKET TILT

A. General Conditions:

1. **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 and must have recently sold similar units to domestic governmental agencies. 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.
2. **Literature:** Manufacturers literature, verifying adherence of proposed unit to each line item addressed in this specification, shall be submitted with the bid. If any literature and/or specifications of items conflict with AHTD specifications, the conflict(s) shall be specifically noted, corrected and submitted with the bid.
3. Any deviations from specifications and requirements herein must be clearly pointed out by bidder. Otherwise it will be considered that equipment offered is in strict compliance with these specifications and requirements, and successful bidder will be held responsible therefor. Deviations must be explained in detail on an attached sheet. However, no implication is made by the Arkansas State Highway and Transportation Department that deviations will be acceptable.
4. **Manuals:** The successful bidder shall furnish one (1) Operator's Instruction Manual with each unit delivered and one (1) copy each of Shop Repair Manual and Parts Book to each FOB point.

The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD, DVD, USB Drive, etc.) in lieu of printed manuals.
5. **Training:** The successful bidder shall furnish qualified personnel to instruct AHTD operators and service technicians on operation and maintenance of machine.

In addition, the successful bidder shall furnish information on any factory service schools which would be available for AHTD service technicians.
6. Shall be assembled, adjusted and made ready for continuous operation at time of delivery.
7. 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 regularly furnished by manufacturer as shown on printed literature and specifications - unless specifically excluded by this specification).
8. **Parts Inventory & Service Facilities:** The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
9. **Demonstration:** The Arkansas State Highway & Transportation Department reserves the right to require a demonstration, under actual working conditions, of equipment bid under this specification before award is made. The demonstration would be performed (free of any charge) by the bidder or an authorized representative at a mutually acceptable location. If requested, the bidder should be prepared to demonstrate the equipment within thirty (30) days after notification. Failure of the bidder to perform a satisfactory demonstration within the specified time may be grounds for rejection of the bid.
10. **Cooperative Purchasing:** Other tax-supported entities* in Arkansas (cities, counties, state agencies, school districts, etc.) may purchase from this Contract on an individual basis under the same specifications and conditions, and at the pricing set forth by each vendor, all at the discretion of each vendor in each case. Prices could be reduced by a vendor for minor alterations in conditions (changing order quantities, deleting options, etc.) as agreed by both parties, but could not be raised above the contract bid price except for any additional freight charges. Vendors would not be required to sell to any such entity under this contract, and those entities would not be obligated to purchase from the contract.

Each entity wishing to purchase from the contract must make contact directly with the appropriate vendor(s). The Highway Department shall remain "out of the loop" for such transactions: all contact, orders, invoices, payments, etc. regarding such transactions must take place exclusively between the tax-supported entity and the vendor. The Department shall be held harmless of any and all liability arising from such transactions.

* Tax-supported entities are defined as those receiving more than half of total funding from appropriated tax funds.

B. Unit Specifications

1. **General**: This specification is intended to cover a hydraulically operated excavating machine consisting of an upperstructure with power unit, control cab and hydraulically operated boom, arm and tool assembly, all mounted on a track type undercarriage. Machine furnished must be a current model built for the U.S. market. Machines manufactured for foreign markets will not be accepted.
2. **Engine**: Liquid cooled, turbocharged diesel with a minimum piston displacement of 4.4 liters developing no less than 150 net horsepower at rated RPM. Shall have 24 volt electric system and include starter, battery and alternator. Shall have lube oil and fuel filters, approved type air cleaner, muffler, electric hour meter, fuel tank of sufficient capacity to allow a minimum of eight (8) hours of continuous operation, fuel gauge and all other accessories or equipment necessary for efficient operation. Cooling system shall have anti-freeze protection to -20° F, or lower.
3. **Hydraulic System**: Variable flow hydraulic system for power to boom, arm, attachments, swing and travel circuits. Shall have one or more variable displacement axial piston pumps of size, type and capacity to perform all required operations allowing simultaneous operation of swing, travel, boom functions and operation of hydraulic attachment requiring a minimum of 40 GPM flow. Hydraulic cylinders shall be double acting type. All circuits shall have safety relief valves to prevent overloading. Hydraulic system and reservoir shall have a minimum oil capacity of 60 gallons. Hydraulic system shall be equipped with a filtration system with replaceable filter elements of adequate capacity.
4. **Hydraulic Lines and Valves**: Hydraulic lines and valves necessary for the operation of a hydraulic thumb and hydraulic forestry mulching attachment shall be provided. Lines shall include a pressure, return and case drain for the forestry mulching attachment and all lines and valves necessary for the operation of a hydraulic thumb. Lines shall be equipped with shutoff valves and have protective metal covers on the dipperstick section.
5. **Controls**: Hydraulic joystick type controls for hoist, crowd, bucket and swing functions. Shall be self-centering type that will automatically stop machine movements and hold boom when controls are released. Controls shall be configured in accordance with SAE Recommended Practice as set forth in SAE J1177. Shall be equipped with an electronic flow control device that allows the operator to select the hydraulic flow required for the attachment being utilized.
6. **Travel**: The machine shall be driven by two hydraulic motors, one on each track assembly. Shall have a minimum of two speeds and be designed to operate independent of each other for steering purposes. Steering shall have left, right and counter-rotating ability. Steering shall be controlled by foot pedals or removable hand levers. Pushing one pedal/lever forward and the other backwards will make the machine counter-rotate. Travel motors and hydraulic lines shall be enclosed within the width of the track frame.
7. **Undercarriage**: Idlers and rollers shall be sealed and lubricated type. Track tension adjustment shall be hydraulic type.
 - A. **Rollers**: The undercarriage shall have a minimum of eight (8) track rollers and a minimum of two (2) carrier rollers per side.
 - B. **Tracks**: Track shoes shall have a nominal width of 32". There shall be no less than 49 track shoes per side. Track length shall be no less than 14' 7". Track gauge shall be 7' 10". Overall track width shall not exceed 10' 6".
8. **Travel Brakes**: Spring applied, hydraulically released disc parking brake built into each drive motor.
9. **Boom and Arm**: Shall be hydraulically actuated assembly designed for use with machine furnished. Unit shall meet the following minimum requirements without the addition of the bucket tilting device specified in Paragraph 9.
 - A. **Digging Radius At Ground Level**: 31' 10", minimum.
 - B. **Digging Depth**: 21' 9", minimum.
 - C. **Dumping Height**: 21' 4", minimum.
 - D. **Arm Crowd Force**: 21,800 pounds, minimum.
 - E. **Bucket Digging Force**: 28,000 pounds, minimum.

- F. Bucket Pivot: The bucket cylinder and linkage shall have the capability to operate the bucket through a minimum arc of 165°.
10. Lifting Capacity: Manufacturer's rated lifting capacity over the side at ground level in accordance with SAE J1097.
- 15' radius – 13,000 pounds, minimum
 - 20' radius – 8,400 pounds, minimum
 - 25' radius – 6,000 pounds, minimum
11. Swing System: Turntable shall be ball bearing type which will allow 360° continuous swing. Shall be driven by a hydraulic motor connected to a planetary reduction unit. Swing system shall meet the requirements of SAE J1371.
12. Cab: Fully enclosed pressurized cab meeting the requirements of SAE J1040 and SAE J1043 for Rollover Protective Structure and Falling Object Protective Structure. Cab shall be equipped with laminated polycarbonate windshield and windows per manufacturer's recommendations for forestry mulching attachment, air conditioning, heater-defroster unit, front windshield wiper with washer, AM/FM radio, headliner, floor mat, adjustable suspension seat equipped with arm rests, and seat belt. Front window to be removable type. All controls shall be easily accessible to operator including engine start, stop and throttle controls and gauges or indicators.
13. Rear View Camera: Unit shall be equipped with a factory installed rear view camera and in-cab mounted screen.
14. Travel Alarm: Shall be equipped with a travel alarm meeting the requirements of SAE J1446.
15. Work Lights: Shall be equipped with a minimum of one (1) sealed beam headlight mounted on the boom and one (1) sealed beam headlight mounted on the upperstructure.
16. Attachments: The attachments listed below shall be furnished with the machine including any pins, bolts or accessories necessary for their hook-up to the machine.
- A. Hydraulic Thumb: Unit shall be equipped with an all steel hydraulic thumb attachment with a minimum of three (3) tines to provide the capability of grasping, holding and dumping various types of brush and debris. Thumb shall be designed to hydraulically fold and store on the dipperstick when not in use. Shall be fully installed and be complete with all components necessary for proper mounting and operation of the attachment.
- B. Buckets: The following buckets shall be furnished.
- (1) One (1) Heavy Duty Excavating Bucket w/Teeth, no less than 42" wide; minimum SAE capacity 1.0 cubic yard.
 - (2) One (1) Ditch Cleaning/Grading Bucket, no less than 60" wide, equipped with a bolt-on cutting edge; minimum SAE capacity 1.0 cubic yard.
17. Vandalism Protection: Shall be equipped with vandalism protection including the following items as a minimum:
- Locking cab door and locking filler caps for the fuel tank, hydraulic tank and radiator. Filler caps located behind locking panels are acceptable in lieu of individual locking caps.
 - Lockable engine enclosure.
 - Lockable battery box cover(s) if batteries are not mounted inside lockable engine enclosure.
 - All lockable panels and compartments shall be equipped with an integrated locking system, or padlocks. All locks shall be keyed alike.
18. Travel Height: Shall not exceed 10' 9" with bucket installed and boom assembly in traveling position.
19. Weight: Complete unit (undercarriage, upperstructure, counterweight, boom assembly with bucket tilting device, and heavy duty excavating bucket) shall have a minimum weight of 48,000 pounds.
20. Color: Manufacturer's standard.
21. 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. If any warranty literature submitted with the bid conflicts with AHTD warranty requirements, the conflict(s) shall be specifically noted, corrected and included with the bid or the conflict(s) will be considered an exception to warranty specifications and the bid rejected.
- E. 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.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIFICATION 17-225-135

FOR

HYDRAULIC EXCAVATOR
TRACK MOUNTED WITH MECHANICAL THUMB
42" EXCAVATING BUCKET
AND 60" DITCHING BUCKET
W/BUCKET TILT

A. General Conditions:

1. **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 and must have recently sold similar units to domestic governmental agencies. 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.
2. **Literature:** Manufacturers literature, verifying adherence of proposed unit to each line item addressed in this specification, shall be submitted with the bid. If any literature and/or specifications of items conflict with AHTD specifications, the conflict(s) shall be specifically noted, corrected and submitted with the bid.
3. Any deviations from specifications and requirements herein must be clearly pointed out by bidder. Otherwise it will be considered that equipment offered is in strict compliance with these specifications and requirements, and successful bidder will be held responsible therefor. Deviations must be explained in detail on an attached sheet. However, no implication is made by the Arkansas State Highway and Transportation Department that deviations will be acceptable.
4. **Manuals:** The successful bidder shall furnish one (1) Operator's Instruction Manual with each unit delivered and one (1) copy each of Shop Repair Manual and Parts Book to each FOB point.

The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD, DVD, USB Drive, etc.) in lieu of printed manuals.
5. **Training:** The successful bidder shall furnish qualified personnel to instruct AHTD operators and service technicians on operation and maintenance of machine.

In addition, the successful bidder shall furnish information on any factory service schools which would be available for AHTD service technicians.
6. Shall be assembled, adjusted and made ready for continuous operation at time of delivery.
7. 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 regularly furnished by manufacturer as shown on printed literature and specifications - unless specifically excluded by this specification).
8. **Parts Inventory & Service Facilities:** The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
9. **Demonstration:** The Arkansas State Highway & Transportation Department reserves the right to require a demonstration, under actual working conditions, of equipment bid under this specification before award is made. The demonstration would be performed (free of any charge) by the bidder or an authorized representative at a mutually acceptable location. If requested, the bidder should be prepared to demonstrate the equipment within thirty (30) days after notification. Failure of the bidder to perform a satisfactory demonstration within the specified time may be grounds for rejection of the bid.
10. **Cooperative Purchasing:** Other tax-supported entities* in Arkansas (cities, counties, state agencies, school districts, etc.) may purchase from this Contract on an individual basis under the same specifications and conditions, and at the pricing set forth by each vendor, all at the discretion of each vendor in each case. Prices could be reduced by a vendor for minor alterations in conditions (changing order quantities, deleting options, etc.) as agreed by both parties, but could not be raised above the contract bid price except for any additional freight charges. Vendors would not be required to sell to any such entity under this contract, and those entities would not be obligated to purchase from the contract.

Each entity wishing to purchase from the contract must make contact directly with the appropriate vendor(s). The Highway Department shall remain "out of the loop" for such transactions: all contact, orders, invoices, payments, etc. regarding such transactions must take place exclusively between the tax-supported entity and the vendor. The Department shall be held harmless of any and all liability arising from such transactions.

* Tax-supported entities are defined as those receiving more than half of total funding from appropriated tax funds.

B. Unit Specifications

1. **General**: This specification is intended to cover a hydraulically operated excavating machine consisting of an upperstructure with power unit, control cab and hydraulically operated boom, arm and tool assembly, all mounted on a track type undercarriage. Machine furnished must be a current model built for the U.S. market. Machines manufactured for foreign markets will not be accepted.
2. **Engine**: Liquid cooled, turbocharged diesel with a minimum piston displacement of 4.4 liters developing no less than 150 net horsepower at rated RPM. Shall have 24 volt electric system and include starter, battery and alternator. Shall have lube oil and fuel filters, approved type air cleaner, muffler, electric hour meter, fuel tank of sufficient capacity to allow a minimum of eight (8) hours of continuous operation, fuel gauge and all other accessories or equipment necessary for efficient operation. Cooling system shall have anti-freeze protection to -20° F, or lower.
3. **Hydraulic System**: Variable flow hydraulic system for power to boom, arm, attachments, swing and travel circuits. Shall have one or more variable displacement axial piston pumps of size, type and capacity to perform all required operations allowing simultaneous operation of swing, travel, boom functions and operation of hydraulic attachment requiring a minimum of 40 GPM flow. Hydraulic cylinders shall be double acting type. All circuits shall have safety relief valves to prevent overloading. Hydraulic system and reservoir shall have a minimum oil capacity of 60 gallons. Hydraulic system shall be equipped with a filtration system with replaceable filter elements of adequate capacity.
4. **Hydraulic Lines and Valves**: Hydraulic lines and valves necessary for the operation of a bucket tilting device and hydraulic forestry mulching attachment shall be provided. Lines shall include a pressure; return and case drain for the forestry mulching attachment and all lines and valves necessary for the operation of a bucket tilting device. Lines shall be equipped with shutoff valves and have protective metal covers on the dipperstick section.
5. **Controls**: Hydraulic joystick type controls for hoist, crowd, bucket and swing functions. Shall be self-centering type that will automatically stop machine movements and hold boom when controls are released. Controls shall be configured in accordance with SAE Recommended Practice as set forth in SAE J1177. Shall be equipped with an electronic flow control device that allows the operator to select the hydraulic flow required for the attachment being utilized.
6. **Travel**: The machine shall be driven by two hydraulic motors, one on each track assembly. Shall have a minimum of two speeds and be designed to operate independent of each other for steering purposes. Steering shall have left, right and counter-rotating ability. Steering shall be controlled by foot pedals or removable hand levers. Pushing one pedal/lever forward and the other backwards will make the machine counter-rotate. Travel motors and hydraulic lines shall be enclosed within the width of the track frame.
7. **Undercarriage**: Idlers and rollers shall be sealed and lubricated type. Track tension adjustment shall be hydraulic type.
 - A. **Rollers**: The undercarriage shall have a minimum of eight (8) track rollers and a minimum of two (2) carrier rollers per side.
 - B. **Tracks**: Track shoes shall have a nominal width of 32". There shall be no less than 49 track shoes per side. Track length shall be no less than 14' 7". Track gauge shall be 7' 10". Overall track width shall not exceed 10' 6".
8. **Travel Brakes**: Spring applied, hydraulically released disc parking brake built into each drive motor.
9. **Boom and Arm**: Shall be hydraulically actuated assembly designed for use with machine furnished. Unit shall meet the following minimum requirements without the addition of the bucket tilting device specified in Paragraph 9.
 - A. **Digging Radius At Ground Level**: 31' 10", minimum.
 - B. **Digging Depth**: 21' 9", minimum.
 - C. **Dumping Height**: 21' 4", minimum.
 - D. **Arm Crowd Force**: 21,800 pounds, minimum.
 - E. **Bucket Digging Force**: 28,000 pounds, minimum.

- F. Bucket Pivot: The bucket cylinder and linkage shall have the capability to operate the bucket through a minimum arc of 165°.
10. Bucket Tilt: Shall be equipped with a tilting device mounted between the arm and the attachment which hydraulically rotates buckets or other attachments up to no less than 130° (no less than 65° to each side from center). Shall be designed so that there are no hydraulic cylinders or other external moving parts. Tilting device shall incorporate a mechanical quick coupler system to facilitate tool changes. All hydraulic controls and lines required for operation of unit shall be included.
11. Lifting Capacity: Manufacturer's rated lifting capacity over the side at ground level in accordance with SAE J1097.
- 15' radius – 13,000 pounds, minimum
 - 20' radius – 8,400 pounds, minimum
 - 25' radius – 6,000 pounds, minimum
12. Swing System: Turntable shall be ball bearing type which will allow 360° continuous swing. Shall be driven by a hydraulic motor connected to a planetary reduction unit. Swing system shall meet the requirements of SAE J1371.
13. Cab: Fully enclosed pressurized cab meeting the requirements of SAE J1040 and SAE J1043 for Rollover Protective Structure and Falling Object Protective Structure. Cab shall be equipped with laminated polycarbonate windshield and windows per manufacturer's recommendations for forestry mulching attachment, air conditioning, heater-defroster unit, front windshield wiper with washer, AM/FM radio, headliner, floor mat, adjustable suspension seat equipped with arm rests, and seat belt. Front window to be removable type. All controls shall be easily accessible to operator including engine start, stop and throttle controls and gauges or indicators.
14. Rear View Camera: Unit shall be equipped with a factory installed rear view camera and in-cab mounted screen.
15. Travel Alarm: Shall be equipped with a travel alarm meeting the requirements of SAE J1446.
16. Work Lights: Shall be equipped with a minimum of one (1) sealed beam headlight mounted on the boom and one (1) sealed beam headlight mounted on the upperstructure.
17. Attachments: The attachments listed below shall be furnished with the machine including any pins, bolts or accessories necessary for their hook-up to the machine.
- A. Mechanical Thumb: Unit shall be equipped with an all steel mechanical thumb attachment with a minimum of three (3) tines to provide the capability of grasping, holding and dumping various types of brush and debris. Thumb shall have a minimum of three (3) working positions and be designed to fold and store on the dipperstick when not in use. Shall be fully installed and be complete with all components necessary for proper mounting and operation of the attachment.
- B. Buckets: The following buckets shall be furnished.
- (1) One (1) Heavy Duty Excavating Bucket w/Teeth, no less than 42" wide; minimum SAE capacity 1.0 cubic yard.
 - (2) One (1) Ditch Cleaning/Grading Bucket, no less than 60" wide, equipped with a bolt-on cutting edge; minimum SAE capacity 1.0 cubic yard.
18. Vandalism Protection: Shall be equipped with vandalism protection including the following items as a minimum:
- Locking cab door and locking filler caps for the fuel tank, hydraulic tank and radiator. Filler caps located behind locking panels are acceptable in lieu of individual locking caps.
 - Lockable engine enclosure.
 - Lockable battery box cover(s) if batteries are not mounted inside lockable engine enclosure.
 - All lockable panels and compartments shall be equipped with an integrated locking system, or padlocks. All locks shall be keyed alike.
19. Travel Height: Shall not exceed 10' 9" with bucket installed and boom assembly in traveling position.
20. Weight: Complete unit (undercarriage, upperstructure, counterweight, boom assembly with bucket tilting device, and heavy duty excavating bucket) shall have a minimum weight of 48,000 pounds.
21. Color: Manufacturer's standard.

22. 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. If any warranty literature submitted with the bid conflicts with AHTD warranty requirements, the conflict(s) shall be specifically noted, corrected and included with the bid or the conflict(s) will be considered an exception to warranty specifications and the bid rejected.
 - E. 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.