

**ARKANSAS STATE HIGHWAY COMMISSION
ARDOT-EQUIPMENT AND PROCUREMENT DIVISION**

BID SHEET

Contract No.: H-19-221H

BIDDER: _____

1. **1.- Cab & Chassis, 19,500 GVWR, 84" CA, Automatic Transmission, Diesel Engine, w/Auger/Core/Rotary Type Boring Machine to meet ARDOT Spec. 18-85-064**

FOB: 1 ea. ARDOT Equipment & Procurement 11302 Baseline Rd, Little Rock, AR 72209

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

1 each – Unit Price \$ _____ Amount \$ _____

Guaranteed Delivery Date _____

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

Bid Total \$ _____

ADDITIONAL INFORMATION

Auger/Core/Rotary Type Boring Machine proposed as meeting specifications:

Make: _____ Model: _____

Warranty: _____ Each \$ _____

Attachments must be priced individually but bid will be awarded by the unit price of the complete unit.

ARDOT - 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 Department of Transportation (ARDOT).
2. **ACCEPTANCE AND REJECTION:** ARDOT 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 ARDOT 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 that is authorized to do business in the State of Arkansas and that is listed on the current United States Department of the Treasury Listing of Approved Sureties. **Surety bonds must be executed by a resident or non-resident agent who is licensed by the Arkansas State Insurance Commissioner to represent the surety company executing the bond, and the resident or non-resident agent shall file with the bond the power of attorney of the agent to act on behalf of the bonding company.** 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 ARDOT 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 ARDOT as an addition thereto, and should be added to the billing to the ARDOT. The ARDOT 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 ARDOT.
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. Received 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 ARDOT request, and free demonstrations within 30 days, unless ARDOT 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 ARDOT. 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 ARDOT, as soon as possible, of the reason for any delay and the expected delivery date. The ARDOT 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 ARDOT after delivery. Default in promised delivery or failure to meet specifications authorizes the ARDOT 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 ARDOT, complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, ARDOT 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 ARDOT's programs and activities, as well as the ARDOT's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the ARDOT'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 thus 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 NAME:

Yes No

IS THIS FOR:

Goods? Services? Both?

TAXPAYER ID NAME:

FIRST NAME:

M.I.:

ADDRESS:

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 (senator, representative, name of board/ commission, data entry, etc.)	For How Long?		What is the person(s) name and how are they related to you? (i.e., Jane Q. Public, spouse, John Q. Public, Jr., child, etc.)	Relation
	Current	Former		From MM/YY	To MM/YY		
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 (senator, representative, name of board/ commission, data entry, etc.)	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. _____

ILLEGAL IMMIGRANT CERTIFICATION

Pursuant to Arkansas Code Annotated § 19-11-105, Contractor(s) **shall** certify with OSP that they do not employ or contract with illegal immigrants.

By signing below, the Contractor agrees and certifies that they do not employ illegal immigrants and will not employ illegal immigrants during the remaining aggregate term of the contract.

Bid Number/Contract Number	H-19-221H
AASIS Number	N/A
Description	Cab & Chassis, 19,500#GVWR
Contractor name	

Contractor Signature: _____
Signature must be hand written, in ink

Date: _____

RESTRICTION OF BOYCOTT OF ISRAEL CERTIFICATION

Pursuant to Arkansas Code Annotated § 25-1-503, a public entity **shall not** enter into a contract valued at \$1,000 or greater with a company unless the contract includes a written certification that the person or company is not currently engaged in, and agrees for the duration of the contract not to engage in, a boycott of Israel.

By signing below, the Contractor agrees and certifies that they do not boycott Israel and will not boycott Israel during the remaining aggregate term of the contract.

If a company does boycott Israel, see Arkansas Code Annotated § 25-1-503.

Bid Number/Contract Number	H-19-221H
Description of product or service	Cab & Chassis, 19,500#GVWR
Contractor name	

Contractor Signature: _____
Signature must be hand written, in ink

Date: _____

ARKANSAS DEPARTMENT OF TRANSPORTATION
SPECIFICATION 18-85-064
FOR
BORING AND SUBSURFACE EXPLORATION
DRILL MACHINE WITH PERCUSSION HAMMER
MOUNTED ON FOUR WHEEL DRIVE CAB AND CHASSIS

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. Units 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) will 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 ARDOT 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 Department of Transportation that deviations will be acceptable.
4. **Drawings:** Professional quality drawings which depict the layout of the chassis will be provided with the bid.
5. **Manuals:** The successful bidder shall furnish two (2) copies each of the following literature for each unit delivered: Operator's Instruction Manual, Shop Repair Manual and Parts Book for drill unit and all components. The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD, DVD, USB Drive, etc.) in lieu of printed manuals.
6. Unit 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 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. The component parts of the unit shall be of proper size and design to safely withstand maximum stresses imposed by a capacity load.
9. **Parts Inventory & Service Facilities:** The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
10. **Training:** The successful bidder shall provide two days of training by qualified personnel to instruct ARDOT operators and service technicians on operation and maintenance of units purchased under this specification.
11. **Technical Support:** The manufacturer shall have a technical service and parts support group available through a toll free 800 number.
12. **Demonstration:** The Arkansas Department of Transportation 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.
13. **Delivery Requirements:** It will be the responsibility of the Successful Bidder to guarantee delivery of the cab & chassis as specified, including items or equipment installed by a third party contractor, within the quoted time.
14. **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 Arkansas Department of Transportation 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. **Intended Use:** This equipment shall be used for soil sampling, pavement soundings and subsurface exploration work utilizing cone penetrometer (CPT). The drill machine shall be capable of performing auger borings in unconsolidated formations with continuous flight augers. The drill shall have the capability of productively using currently popular geoexploration methods and techniques including Shelby tube, continuous tube sampling and cone penetrometer testing. The drill shall be capable of coring pavement or rotary drilling and rock coring applications.
2. **General:** This specification is intended to cover a combination auger/core/rotary type boring machine completely mounted on a 4 x 4 truck chassis and ready for use. The drill shall be a self-contained unit having a single engine power source. The power shall be appropriately directed to the hydraulic system and hydraulically-driven drill head. A drill frame with hydraulic feed cylinder(s) shall be supplied. The assembled drill with its complement of auxiliary equipment shall be so arranged that work may be carried on with optimum efficiency and a minimum of manual labor. All parts, materials and workmanship shall be of the highest quality recognized by the trade. The drill unit shall be thoroughly field tested and ready for immediate and continuous operation at time of delivery. The equipment proposed must be a current model under standard production, being produced in quantity for national distribution. The manufacturer must have a minimum of three years production experience designing and manufacturing this type of equipment. The drill shall have been in production for at least two years. Dealer or vendor modifications to a non-conforming model for the express purpose of meeting minimum specification requirements will not be acceptable. Parts and accessories shall be stocked and readily available from the successful vendor. The drill unit shall be furnished with all standard equipment advertised whether or not specifically called for here, except where optional or conflicting equipment is specified. The equipment shall meet the following specifications.
3. **Carrier:** The cab and chassis furnished shall meet the following minimum requirements:
 - a. **GVWR:** No less than 19,500 pounds.
 - b. **Wheelbase:** Minimum of 180".
 - c. **Cab to Axle:** 84", nominal.
 - d. **Engine:** Liquid cooled turbocharged diesel with a minimum piston displacement of 6.7 liters developing no less than 320 SAE gross horsepower at rated RPM and no less than 650 lb. ft. SAE gross torque. Shall be equipped with air cleaner, no less than two (2) maintenance free batteries with a minimum rating each of 750 cold cranking amps at 0° F, full flow oil filter, fuel filter and not less than 200 amp alternator. Engine shall be equipped with a block heater which will operate on 120 volts AC.
 - e. **Engine Shutdown:** For this application the engine idle shutdown limits shall be turned off.
 - f. **Cooling:** Heavy duty cooling system with anti-freeze protection to -20° F, or lower.
 - g. **Transmission:** Automatic, with a minimum of six (6) forward speeds. Transmission shall be equipped with PTO provision and include an auxiliary transmission oil cooler.
 - h. **Transfer Case:** Minimum of two (2) speed ranges.
 - i. **Steering:** Hydraulic actuated power steering as regularly offered by manufacturer.
 - j. **Front Axle:** Hypoid type with a ratio of 4.44 or 4.88 to 1. (Alternate ratio may be provided if approved by ARDOT prior to delivery.) Shall be equipped with automatic or manual locking hubs, or axle disconnect system. Capacity of front axle and springs shall be as recommended by manufacturer for vehicle to meet or exceed GVWR specified above.
 - k. **Rear Axle:** Hypoid type, full floating, with a ratio of 4.44 or 4.88 to 1. (Alternate ratio may be provided if approved by ARDOT prior to delivery.) Capacity of rear axle and springs shall be as recommended by manufacturer for vehicle to meet or exceed GVWR specified above. Rear springs shall consist of both main and auxiliary or overloads.

- l. **Brakes:** Power front and rear disc with four wheel anti-lock. Parking brake as regularly furnished by manufacturer.
 - m. **Cab:** Four (4) Door Extended Type Cab complete with insulation and all standard interior trim, dual electric intermittent windshield wipers, right and left sun visors, factory installed electronic AM/FM radio, floor covering consisting of manufacturer's standard materials and colors for model and trim level provided, factory installed fresh air heater defroster unit, key lock on doors, inside rear view mirror, rear view camera and right and left side trailer tow type exterior mirrors with extended or extendible arms. Mirror heads to measure no less than 6" x 9".
 - n. **Seating:** Two (2) three (3) person seating capacity bench seats. Front seat to be cloth split bench style with fold-down center arm rest. Rear seat upholstery to consist of manufacturer's standard materials and colors for model and trim level provided. Seat belts shall be provided for all seating positions.
 - o. **Air Conditioning:** Shall be equipped with factory installed air conditioning and include tinted glass.
 - p. **Tilt Steering Column:** Factory installed.
 - q. **Speed Control:** Factory installed automatic cruise control.
 - r. **Wheels:** Seven (7) 19.5" steel disc with no less than 6.0" rim section. Rear wheels to be dual.
 - s. **Tires:** Seven (7) **On/Off-Road** or **All Terrain** tubeless radials no less than LT235/70R19.5 or LT235/80R19.5, F load range (duals on rear).
 - t. **Fuel Tank(s):** Minimum fuel capacity of 40 gallons. Fuel fill hose assembly furnished with fuel tank(s) shall be a minimum of 36" in length to allow attachment to an aftermarket body.
 - u. **Front Tow Hooks:** Two (2), minimum
 - v. **Lights:** Dual beam headlights, parking lights, self canceling directional turn signals with hazard flasher switch, back up lights, front side marker lights and front cab clearance and identification lamps. Rear lights to consist of stop and tail lights in addition to directional signals.
 - w. **Equipment:** Shock absorbers, jack and lug wrench, emergency triangle and fire extinguisher.
 - x. **Keys:** Minimum of four (4) ignition/door keys per vehicle.
 - y. **Backup Alarm:** Shall be equipped with an electric backup alarm meeting the requirements of SAE J994 with a minimum sound level output of 97 decibels.
 - z. **Winch:** The cab & chassis shall be equipped with a front-mounted 12 Volt DC electric winch assembly with a single line minimum rated pull capacity of 15,000 pounds. Shall have a three stage planetary gear train with free spool capability and automatic mechanical brake. Winch controls shall be mounted inside truck cab. The winch shall be equipped with a roller type fairlead, a minimum of 90' of no less than 7/16" steel wire rope and a safety hook. The winch shall be mounted in a custom built front bumper. The bumper shall be designed to be an integral component of the winch system described above. The custom built bumper shall be designed to replace the factory bumper and fit the contours of the chassis body.
 - aa. **Color:** Cab & Chassis shall be Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal. Front bumper, grill, mirrors and wheels as regularly furnished by manufacturer.
4. **Drill Unit:**
- a. **Drill Platform:** The drill platform shall be constructed from structural steel members and 10 gauge safety tread deck plate. An auger/tool storage box shall be provided on the passenger and driver side below the platform deck ahead of the rear wheels. Clearance lights with guards shall be included. The platform width shall not exceed 96 inches. The platform shall be designed for a cab and chassis having an 84" CA. It shall include a rack constructed of structural steel tubing and expanded metal placed in a position that will protect the rear window and cab of the truck.
 - b. **Suspension Protection:** Unit shall be equipped with a system to protect the chassis suspension from damage when extracting tools from the hole. The system shall be hydraulically operated and designed to transfer pressure created during tool extraction to the ground.
 - c. **Water Tank:** Water tank(s) shall have a minimum capacity of no less than 100 gallon. If more than one tank is used they shall be plumbed together to allow water to freely move between tanks. The tank shall include inlet, discharge and drain ports, as well as plumbing to the mud pump.
 - d. **Drill Power Unit:** The power unit shall be self-contained, electric starting, liquid cooled, heavy-duty, four cycle industrial type diesel engine developing a minimum 57 gross horsepower. The unit shall be equipped with a heavy-duty dry type air cleaner and a replaceable full flow oil filter. The unit shall have a 12-volt electric starting

system consisting of a starter, alternator, and regulator. The unit shall have a keyed ignition switch on the drill control panel and an electrically controlled engine throttle.

When coupled with the drill unit, the engine shall have sufficient power to meet all requirements listed elsewhere in this specification. Fuel for the drill shall come from the truck fuel tank.

- e. **Rotary Drive:** The rotary drive system shall be hydraulic having infinitely variable speed capability ranging from 0 rpm to no more than 740 rpm in either forward and reverse directions. The drill spindle torque shall be no less than 3,990 foot-pounds. The drill shall be equipped with a heavy-duty 1-5/8 inch hexagon drive universal joint. An adapter shall also be provided to allow the use of augers with 1-1/8" hex. A hydraulic cylinder shall be used to swing the rotary drive head into and out of the work area.
5. **Vertical Drive:** This assembly shall have the following features:
- a. The vertical drive shall consist of at least one (1) hydraulic feed cylinder having a point of thrust centered upon the axis of the drill spindle.
 - b. The vertical drive shall have an overall stroke or travel of no less than 78".
 - c. The vertical drive shall have a maximum downward force of no less than 36,000 pounds and a maximum upward or retract force of no less than 48,000 pounds.
 - e. The vertical drive shall have replaceable nylatron (or approved equal) wear plates between the metal slide surfaces.
 - f. The vertical drive shall also be equipped with a Cone Penetrometer Test (CPT) valve kit to control the head feed rate in the downward direction when performing CPT and shall be adjustable to keep the feed rate within the specified parameters for CPT.
 - g. Hydraulic gauges shall be provided on the control panel at the right (passenger's side) rear of the drill to indicate in pounds per square inch (psi) the head feed pressure, hydraulic system pressure, and hydraulic hold-back pressure.
 - h. Hydraulic controls shall be furnished for varying the feed rate, down pressure and hold-back pressure.
9. **Hydraulic System:** This system shall have a heavy-duty engine driven hydraulic pump with a capacity of not less than 40 GPM at 4,000 PSI. Shall be equipped with a hydraulic oil cooler with a thermostatically controlled fan and a filtration system with replaceable filter elements of adequate capacity for system furnished. The hydraulic oil reservoir shall have a minimum capacity of 30 gallons and shall be equipped with a vented filler cap, magnetic drain plug, and level indicator sights.
10. **Driller's Control Panel:** All controls and gauges needed for the various drilling operations shall be placed in such a manner as to be easily accessible and convenient for the drill operator while permitting a view of the drilling operation at all times. The driller's control panel shall be mounted on the right rear of the drill platform and shall be housed in a waterproof metal housing with a locking cover.
- The drillers control panel shall include the following instrumentation and controls at a minimum:
- a. Keyed ignition switch and starter switch.
 - b. Push-button emergency engine shut-off switch.
 - c. Electric engine throttle.
 - e. Gauges: Hour meter, tachometer, engine oil pressure, engine coolant temperature and volt meter.
 - f. Hydraulic gauges for systems pressure, pull-down pressure and hold-back pressure.
 - g. Feed rate, feed pull-down and feed hold-back pressure controls.
 - i. Hydraulic controls for all standard and provided optional components.
 - j. Digital diagnostic display.
11. **Safety And Emergency Shut-Down System:** Push-button emergency shut-off switches shall be located on the control panel and on the front of the drill. An emergency shut-down pull cable shall be mounted on the right side of the drill frame. When any emergency shut-off mechanism is activated, all power to the hydraulic drive motors and pumps shall be diverted and immediately shut down. This shall cause all drive head rotation to cease and come to an abrupt stop immediately after a safety mechanism is activated.
12. **Sliding Base (In-Out):** A sliding base shall be furnished for moving the drill in and out so that the drill spindle can be positioned to facilitate alignment of core barrels, augers and CPT rods and to provide clearance from the hole for

removing pavement cores, handling augers and other down-hole tooling. With the slide base extended, the center of the auger drive shall be at least 15 inches from the rear of the truck to provide ample working room. The in-out slide base shall have at least 15 inches of travel and be hydraulically operated. The in-out slide base shall have a replaceable nylatron (or approved equal) wear plate between the metal slide surfaces.

13. **Sliding Base (Sideways):** A sliding base shall be furnished for moving the drill to either side so that the drill spindle can be positioned to facilitate alignment of core barrels, augers and CPT rods. The sideways slide base shall be hydraulically operated and have at least 7 degrees of lateral travel from centerline, in both direction. The sideways slide base shall have nylatron (or approved equal) wear plate between the metal slide surface.
14. **Mud Pump Assembly:** The mud or water pump shall be a progressing cavity type pump (2L4 or equal) and shall have an infinitely adjustable output of 0 to no less than 18 gallons per minute at normal operating RPM. Power for the mud pump shall be supplied by a hydraulic motor operated from the drill hydraulic system. Provisions shall be made for drainage of the mud pump and lines.
15. **Hydraulic Extruder:** A hydraulic extruder shall be mounted to the right side of the drill platform. This extruder shall be used to extrude samples from the liners when the direct push sampling technique is used. The extruder shall have a hydraulic control valve mounted to the top of it with a hand control that can be pushed one way to extrude a sample and the other way to retract the piston back into the housing. All tools, parts, and adapters necessary to extrude all different size sample liners shall be included.
16. **Rotary Percussion Hammer:** A percussion hammer system shall be furnished for the purpose of direct push sampling. The percussion hammer should have a percussion rate of at least 32 Hz, a minimum forward torque of 500 ft-lb, a minimum reverse torque of 600 ft-lb, and shall have a rotation speed of 0 to 230 RPMs. The total weight of the power cell should be 90 pounds. It shall be mounted as to not interfere with any rotary drilling operations. The hammer shall have a field removable power cell and shall be capable of bi-directional rotation. A nitrogen charge kit shall be provided along with the hammer so that it can be serviced and maintained in the field.
17. **Drill Tools:** All drill tools and accessories shall be of the highest quality according to the standards of the drill tool industry.

Shall be complete with:

1. 4 ea. – Spring assisted swivel pull sub with machined NWJ threads. No thread substitute.
2. 10 ea. – 2.25 inch Outside Diameter Direct Push Probe Rod (Length = 60")
3. 1 ea. – 2.25 in. O.D. Direct Push Probe Rod (24")
4. 2 ea. – 2.25 in. O.D. Direct Push Probe Rod (6")
5. 5 ea. – Heavy Duty Drive Cap for 2.25 in. O.D. Direct Push Probe Rod (Threadless) Rated for the correct hydraulic percussion hammer series.
6. 2 ea. – Drive Head for 2.25" O.D. Probe Rod. Threaded on both ends. Top thread for pull cap to thread on and bottom thread to 2.25 in. Probe Rod.
7. 2 ea. – H.D. Pull Cap for 2.25 in. O.D. Probe Rod
8. 1 ea. – RG Handle with highest series rating (Pull down handle to grip pull cap and rod when extracting rod from ground using rig pullback.)
9. 1 ea. – 1.25 in. O.D. Lightweight Center Rod (60")
10. 1 ea. – 1.25 in. O.D. Lightweight Center Rod (36")
11. 1 ea. – Drive Cap for 1.25 in. O.D. Lightweight Center Rod
12. 2 ea. – Bottom Plug for 1.25 in O.D. Lightweight Center Rod (Threaded)
13. 1 ea. – 1.5 in I.D. Cutting Shoe (Standard Shank) for 2.25 in O.D. Probe Rod
14. 2 ea. – 1.5 in I.D. Cutting Shoe (Extended Shank = 2.375 in O.D.) for 2.25 in O.D. Probe Rod
15. 1 ea. – 1.5 in O.D. Closed Piston Point (Slides inside cutting shoe when not wanting to sample.)
16. 1 ea. – 1.35 in I.D. Cutting Shoe (Extended Shank = 2.3 in O.D.) for 2.25 in O.D. Probe Rod
17. 1 ea. – 1.35 in O.D. Closed Piston Point (Slides inside cutting shoe when not wanting to sample.)
18. 1 ea. – 1.25 in I.D. Cutting Shoe (Extended Shank = 2.375 in O.D.) for 2.25 in O.D. Probe Rod
19. 1 ea. – Liner Core Catcher for 2.25 in O.D. Probe Rod (100 pack)
20. 2 ea. – 2.25 in O.D. Sample Tube (Length = 60")
21. 4 ea. – PVC Liner (Box of 66) (1.75 in. O.D. & 1.5 in. I.D.) (Length = 60") for 2.25 in. O.D. Sample Tube

22. 4 ea. – Vinyl End Caps for 1.75 in. O.D. PVC Liner (66 Pair per Box)
 23. 2 ea. – Liner Cutter for 1.75 in. O.D. PVC Liners
 24. 1 ea. – Sampler Drive Head (Threaded on bottom for 3.5 in. O.D. & 3.25 in. I.D. Sample Tube and on top for 2.25 in. O.D. probe rod box)
 25. 1 ea. – 1.25 in. O.D. Center Rod Spacer for 3.5 in. O.D. Sample Tube
 26. 1 ea. – 3.5 in. O.D. & 3.25 in. I.D. Sample Sheath (Length = 60")
 27. 2 ea. – Core Catcher for 3.5 in. O.D. & 3.25 in. I.D. Sample Tube
 28. 1 ea. – Core Catcher Bypass Ring for 3.5 in. O.D. Sample Tube
 29. 1 ea. – 3.25 in. O.D. Closed Piston Point (Slides inside cutting head when not wanting to sample.)
 30. 2 ea. – Cutting Shoe for 3.5 in. O.D. & 3.25 in. I.D. Sample Tube
 31. 1 ea. – Cutting Shoe Wrench
 32. 2 ea. – PVC Liner (Box of 18) (3.135 in. O.D. & 3.015 in. I.D.) (Length = 60") for 3.5 in. O.D. Sample Tube
 33. 1 ea. – Liner Cutter for 3.135 in. O.D. PVC Liners
 34. 2 ea. – Vinyl End Caps for 3.135 in. O.D. PVC Liner (18 Pair per Box)
 35. 1 ea. – Hydraulic Extruder Adapter to fit 3.5 in. O.D. & 3.25 in. I.D. Sample Tube
 36. 1 ea. – Hydraulic Extruder Plunger to push samples out of 3.5 in. O.D. & 3.25 in. I.D. Sample Tube
 37. 1 ea. – Rod Wiper Holder (Stationary)
 38. 2 ea. – Rod Wiper 3.5 in. I.D.
 39. 2 ea. – Rod Wiper 2.25 in. I.D.
 40. 1 ea. – Extension Rod Handle
 41. 1 ea. – Extension Rod SS (Length = 60")
 42. 1 ea. – Nylon Brush for 2.25 in. O.D. Rod
 43. 1 ea. – Nylon Brush for 3.5 in. O.D. & 3.25 in. I.D. Rod
 44. 2 ea. – Adapter Sub NWJ Box x Pin.
 45. 1 ea. – Concrete Coring Bit Extension
 46. 1 ea. – Auger Anchoring System for Cone Penetrometer Testing
18. Color: Manufacturer's standard color is acceptable. All exposed hydraulic cylinder piston rods shall be covered to prevent over spray during painting.
- E. Warranty:
1. Cab and chassis shall have truck manufacturer's regular warranty. Warranty data shall be furnished with each unit. The Warranty Data shall contain all necessary information such serial numbers and shall be signed by the selling dealer at the time vehicle is delivered to the ARDOT.
 2. The drill unit and other incidental equipment purchased under this specification shall be warranted against defective material and workmanship for a minimum period of twelve (12) months (365 Days) from date unit is placed in operation by ARDOT. In addition, manufacturer's standard warranty period on components that exceeds the 12 months warranty shall remain in effect.
 3. Warranty shall include all parts, labor and transportation costs to the location of equipment.
 4. If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done.
 5. It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
 6. If any warranty literature submitted with the bid conflicts with ARDOT 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.
 7. 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 operating 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.

G. Certificate of Origin and Invoice:

1. The successful bidder shall furnish a Certificate of Origin, Federal Excise Tax Exemption Certificate, Odometer Disclosure Statement and one (1) copie of the Invoice 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.).