ARKANSAS STATE HIGHWAY COMMISSION ARDOT-EQUIPMENT AND PROCUREMENT DIVISION BID INVITATION

Contract Number:	Н-18-288Н			ARDOT Equipment and ARDOT Equipment and ARDOT Equipment			
Bid Opening Date:	June 5, 2018	_Time:	11:00 a.m.	Procurement Division 11302 West Baseline Road Little Rock, AR 72209	Procurement Division P.O. Box 2261 Little Rock, AR 72203	Procurement Division 11302 West Baseline Road Little Rock, AR 72209	
mail and delivery loo	cations until the above-noted bid	l opening	date and time, and	ject to the Standard Bid Conditions of then publicly opened at the above-not bids and unsigned bids will not be or	ed bid opening location. Bid		
n compliance with the price set opposite each		III the Con	ditions thereof, the u	undersigned offers and agrees to furnis	h any and all items upon whic	ch prices are quoted, at the	
Company Name:				Name (Type or Print):_			
Address:				Title:			
				Phone:	Fax:		
City:	State:		Zip:	E-Mail:			
Federal Tax ID or	Social Security No.:				original (not photocopied) and	d in ink.	

Cab & Chassis

Bid prices shall include any applicable labor cost as well as delivery of all Equipment to ARDOT 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) and Restriction of Boycott of Israel Certification 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. These forms are kept on file and remain current for one year from date of submission. Forms do not need to be submitted again, during that time, unless there is a status change.

Literature Submittals – Item B2 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

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 Department of Transportation. 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 ARDOT Web Site – www.ardot.gov 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.

64-8216, 64-8221

00-25, 00-26, 01-04, 01-09

ARKANSAS STATE HIGHWAY COMMISSION ARDOT-EQUIPMENT AND PROCUREMENT DIVISION

BID SHEET

	tract No.: H-18-288H BIDDER:
1.	1 Cab & Chassis, 19,000 GVWR, 84" CA, Automatic Transmission, Diesel Engine, w/Standard Height Service Body, Sign Compartment, Boom Lift and 80 CFM PTO Driven Underbody Air Compressor to meet ARDOT Spec. 18-43-023
	FOB: 1 ea. ARDOT District 5 Headquarters, 1673 Batesville Boulevard, Batesville, AR 73501
	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)

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ARKANSAS STATE HIGHWAY COMMISSION ARDOT-EQUIPMENT AND PROCUREMENT DIVISION

BID SHEET

	tract No.: H-18-288H e 2 of 2	BIDDER:		
2.	1 Sign Truck Crew Cab & Chassis, w/Service Body, Sign Storage Comp to meet ARDOT Spec. 18-43A-0	artment, and 80 CFM PTO Drive	atic Transmission, Diesel Engine, en Underbody Air Compressor	
	FOB: 1 ea. ARDOT District 10 He	adquarters, 2510 West Kingshi	ghway, Paragould, AR 72450	
	Bid Price (Do not include any Loca			
	1 ea	nch – Unit Price \$	Amount \$	
	Guaranteed Delivery Date			
	Additional Units may be purchase	d at the same pricing and		
	conditions through(Date)		
			Rid Total \$	

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).
- 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.
- 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. 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 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.

DIDDED NAME
BIDDER NAME
BY:
Signature
TITI E.

CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM

Failure to complete all of t	he following i	nformation	may result in a delay in obtaining a	contract, l	ease, purch	se agreement, or grant award with any Arkansas State Agency.	
SUBCONTRACTOR:	SUBCONTRAC	TOR NAME:					
☐ Yes ☐ No			IS THIS FOR				
			IS THIS FOR:				
TAXPAYER ID NAME:			☐ Goods? ☐ S	Services?	□ B	th?	
YOUR LAST NAME:			FIRST NAME:			M.I.:	
TOOK BIOT WINE						******	
ADDRESS:							
CITY:			STATE:		ZIP CODE:	COUNTY:	
						CONTRACT, LEASE, PURCHASE AGREEMENT, OR GR	ANT AWARD
WITH ANY ARKAN	SAS STAT	E AGENO	CY, THE FOLLOWING INFO	<u>DRMATI</u>	ON MUS	T BE DISCLOSED:	
				FOR II	NDIVIE	UALS*	
	•		er, sister, parent, or child of you o	r your spo	use is a cur	ent or former: member of the General Assembly, Constitutional Office	er, State Board or
Commission Member, or	State Emplo	yee:	T		1		
Position Held	Marl	(✓)	Name of Position of Job Held	eld For How Long?		What is the person(s) name and how are they related to v (i.e., Jane Q. Public, spouse, John Q. Public, Jr., child, et	
rosition riela	Current	Former	(senator, representative, name of board/ commission, data entry, etc.)	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 a	applies				l l		•
	••						
			FOR	AN EI	YTITY	BUSINESS)*	
ndicate below If any of t	he following	persons, ci	urrent or former, hold any positio	n of contro	ol or hold a	y ownership interest of 10% or greater in the entity: member of the G	General Assembly,
	_					ter, parent, or child of a member of the General Assembly, Constitutio	· ·
	or State Emr	Jovee Pos	sition of control means the nower	to direct t	he purchas	ng policies or influence the management of the entity.	

Position Held	Mark	(✓)	Name of Position of Job Held	For Hov	w 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		(senator, representative, name of board/ commission, data entry, etc.)	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 Pe	erson	Title		Phone No.
Agency Use Only				
Agency Number	Agency Name	Agency Contact Person	Contact Phone No.	Contract or Grant No.

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	
Description of product or service	
Contractor name	
Contractor Signature:	Date:
Signature must be hand written, in ink	

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT SPECIFICATION 18-43-023

FOR

CAB AND CHASSIS 19,000 POUND GVWR WITH ARTICULATING TELESCOPIC AERIAL LIFT SERVICE BODY AND SIGN STORAGE COMPARTMENT

A. General Conditions:

- 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. <u>Literature</u>: 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. <u>Manuals</u>: 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. In addition, one (1) copy each of Operator's Instruction Manual, Shop Repair Manual, and Parts Book shall be furnished to Equipment & Procurement Division, P.O. Box 2261, Little Rock, AR 72203 (11302 W. Baseline Road, Little Rock, AR 72209, if shipping UPS, FedEx, etc.).
 - The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD ROM, Floppy Disks, etc.) in lieu of printed manuals.
- 5. <u>Training</u>: Factory trained personnel shall instruct Arkansas Department of Transportation personnel in the operation and maintenance of sweepers furnished under this specification.
- 6. Units shall be assembled, adjusted and made ready for continuous operation at time of delivery.
 - All parts, accessories and tools necessary for satisfactory operation of this unit shall be furnished whether or not they are specifically mentioned in these specifications (including standard equipment as regularly furnished by manufacturer as shown on printed literature and specifications unless specifically excluded by this specification).
- 7. <u>Parts Inventory & Service Facilities</u>: The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
- 8. <u>Demonstration</u>: 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.
- 9. 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.

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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. <u>Unit Specifications</u>:

1. <u>General</u>: This specification is intended to cover a sign storage compartment, service body, PTO driven underdeck mounted air compressor and a pedestal mount, two section, hydraulic operated, telescoping boom and work platform, with a minimum working height of 40', completely mounted on a truck chassis and ready for use.

2. Cab & Chassis:

- a. GVWR: No less than 19,000 pounds.
- b. Wheelbase: Minimum of 150", maximum of 170".
- c. Cab to Axle: 84", nominal.
- d. <u>Engine</u>: Liquid cooled turbocharged diesel with a minimum piston displacement of 6.7 liters developing no less than 300 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 160 amp alternator. Engine shall be equipped with a block heater which will operate on 120 volts AC.
- e. <u>Cooling</u>: Heavy duty cooling system with anti-freeze protection to -20° F, or lower.
- f. <u>Transmission</u>: Automatic, with a minimum of six (6) forward speeds. Transmission shall be equipped with PTO provision and include an auxiliary transmission oil cooler.
- g. Steering: Hydraulic actuated power steering as regularly offered by manufacturer.
- h. Front Axle: I-beam or solid type axle. Capacity of front axle and springs shall be as recommended by manufacturer for vehicle to meet or exceed GVWR specified above.
- i. <u>Rear Axle</u>: Hypoid type, full floating, with a ratio of 4.44 or 4.88 to 1. 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.
- j. <u>Brakes</u>: Power front and rear disc with four wheel anti-lock. Parking brake as regularly furnished by manufacturer.
- k. <u>Cab</u>: Conventional 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, 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".
- 1. <u>Seating</u>: May consist of a split bench seat with three (3) person seating or a driver's high back bucket seat and two (2) person passenger 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.
- m. Air Conditioning: Shall be equipped with factory installed air conditioning and include tinted glass.
- n. <u>Tilt Steering Column</u>: Factory installed.
- o. <u>Speed Control</u>: Automatic speed control (may be dealer installed, but of same manufacturer as vehicle).
- p. Wheels: Seven (7) 19.5" steel disc with no less than 6.0" rim section. Rear wheels to be dual.
- q. <u>Tires</u>: Seven (7), no less than 225/70R19.5 F load range, all season tubeless radials (duals on rear).

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- r. <u>Fuel Tank(s)</u>: 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.
- s. Front Tow Hooks: Two (2), minimum
- t. <u>Lights</u>: 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.
- u. Equipment: Front bumper, front and rear shock absorbers, jack and lug wrench.
- v. <u>Keys</u>: Minimum of three (3) ignition/door keys per vehicle.
- w. <u>Backup Alarm</u>: Shall be equipped with an electric backup alarm meeting the requirements of SAE J994 with a minimum sound level output of 97 decibels.
- 3. <u>Sign Storage Compartment</u>: Shall have a sign storage compartment mounted between service body and cab of truck. Sign storage compartment to be built and installed using the attached drawings as a guide. Doors shall have flush type handles and locks keyed alike. The actual overall width of the compartment shall be the width of the service body.
- 4. <u>Service Body</u>: Shall be standard height service body normally designed to mount on a cab and chassis with dual rear tires and 60" CA measurement.
 - a. <u>Construction</u>: Electrically welded all steel construction with edges rolled or folded. Body shall have longitudinal members and cross members welded for floor support. Body floor shall be constructed of no less than 12 gauge safety tread plate.

b. <u>Dimensions</u>:

- (1) Body Length: 107" 110".
- (2) Body Width: 93" 96".
- (3) Body Height: 39.5", minimum.
- (4) <u>Body Floor To Compartment Top</u>: 24.75" minimum.
- (5) Compartment Depth: 18", minimum.
- (6) Floor Width: 50" 55".
- c. <u>Compartments</u>: Each side of the body shall have a minimum of one (1) vertical compartment in front of the rear wheels, one (1) horizontal compartment over the rear wheels and a minimum of one (1) vertical compartment behind the rear wheels. Vertical compartments shall be full height and have adjustable shelves. Each horizontal compartment shall have an adjustable shelf and dividers. All doors shall be protected from weather and have double panels with flush type handles and locks keyed alike. Doors shall have rubber seals to keep out water and dust.
- d. <u>Bumper</u>: Rear of body shall have a combination bumper and tail shelf which extends no less than 1" past the work platform when boom is cradled. Shall have smooth plate entryway steps in side of tail shelf on curbside with grip strut step underneath. An arch type grab handle approximately 10 1/2" wide x 27" high shall be installed on the rear of the tail shelf and a 12" minimum grab handle shall be installed on the curbside rear of the body.
- e. <u>Mud Flaps</u>: Shall have mud flaps no less than 24" wide and 1/4" thick, without advertising, mounted behind rear wheels.
- f. <u>Lights</u>: Recess combination stop and tail lights in addition to directional signals and backup lights to meet ICC regulations.

5. Aerial Lift:

- a. <u>Pedestal</u>: Shall be mounted in bed of truck directly behind sign storage compartment to allow for full use of body space. Shall have a hydraulic motor driven rotator providing 360° continuous rotation.
- b. <u>Boom</u>: Shall be pedestal mount, telescoping type with a minimum of two (2) sections. Horizontal reach from centerline of rotation shall be no less than 21'. Height from ground to bottom of work platform at full extension

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- shall be no less than 35'. Shall have a total boom travel of no less than 80° above horizontal to no less than 6° below horizontal. Shall have a support at rear of truck to cradle the boom with an additional support to rest the work platform during road travel.
- c. <u>Controls</u>: Shall have two (2) sets of elevation, extension and rotation controls. One set to be mounted at end of boom and one set of controls mounted on pedestal with the capability of over-riding boom controls if necessary. Controls shall be full pressure, full feathering type with single handle (joy-stick) control on the boom. Shall have engine start and stop controls at the platform.
- d. <u>Platform</u>: Shall be end hung type equipped with a hydraulic leveling system. Shall also be equipped with hydraulic rotator providing a minimum of 180° rotation to allow the platform to be placed on either side of the boom. Shall be constructed of metal with approximate dimensions of 24" x 24" x 41". Shall have a side access opening equipped with a gate or safety chain and be rated for a load of no less than 300 pounds. A safety belt with lanyard to secure belt to platform shall be provided.
- e. <u>Stabilization</u>: Shall be accomplished by means of torsion bar and counterweight as required by manufacturer. Unit shall be tested and certification shall be furnished that unit can be operated on level ground with the platform loaded to 150% of rated capacity, and on a 5° slope with the platform loaded to 133% of rated capacity, without lifting any tire from ground.
- f. Outriggers: In addition to the normal stabilization specified above, the unit shall have individually controlled, hydraulically powered, "A" type outriggers located at front area of service body and mounted at or behind the pedestal. The outriggers may intrude into the front compartment on each side of the service body, if necessary. Outriggers which extend vertically, or "out and down" outriggers are not acceptable. Outriggers to be equipped with pivoting type pads.
- g. <u>Hydraulic System</u>: Shall have elevation cylinder, hydraulically actuated telescoping boom and hydraulically actuated boom rotator. All cylinders shall be double acting. Hydraulic system shall have by-pass valve to prevent overloading and shall have safety device whereby load will remain suspended in case of power or pressure failure.
- h. <u>Hydraulic Pump</u>: Shall be PTO driven from the gearbox of the underdeck mounted air compressor and be of adequate capacity to operate all functions of the aerial lift.
- 6. <u>Color</u>: Cab & Chassis, Service Body and Aerial Lift shall be Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal. Front bumper, grill, mirrors and wheels as regularly furnished by manufacturer.

7. <u>Air Compressor</u>:

- a. <u>General</u>: A PTO driven Underdeck Mounted Air Compressors with incidentals shall be installed and ready for continuous operation. Successful bidder shall be experienced in the installation of air compressors and similar equipment and shall be approved by the manufacturer for installation of the underdeck mounted air compressor and incidentals furnished.
- b. <u>Compressor</u>: Positive displacement, single stage, oil flooded rotary screw type compressor driven by a drive shaft attached to a transmission mounted power take-off unit. The air compressor furnished shall produce a minimum of 80 cubic feet of free air per minute at no less than 100 psi.
- c. <u>Air Intake Filter</u>: Remote mount two-stage, heavy duty, dry type air filter/s shall be provided for the air compressor.
- d. <u>Air Receiver</u>: Shall be ASME approved for no less than 200 psi working pressure and be of adequate capacity for use with 80 cfm minimum air compressor. Receiver shall have an ASME approved pressure relief valve and be equipped with a fill cap, oil level sight gauge, 3/4" minimum service valve, 25 micron minimum spin-on air compressor oil filter with safety by-pass feature, and an air/oil separator. Air receiver shall be designed for under deck remote mounting and be installed on the curb side of the chassis, under the sign storage compartment. Air receiver shall be mounted in a manner that allows the oil level sight gauge to be inspected without crawling beneath the truck.
- e. <u>Heat Exchanger</u>: Compressor cooling system shall allow rated air delivery and pressure operation continuously in ambient temperatures up to no less than 125° F. Cooler shall be mounted in a sheet metal enclosure with a suction type fan assembly. A fan temperature switch shall be provided to regulate compressor cooling.

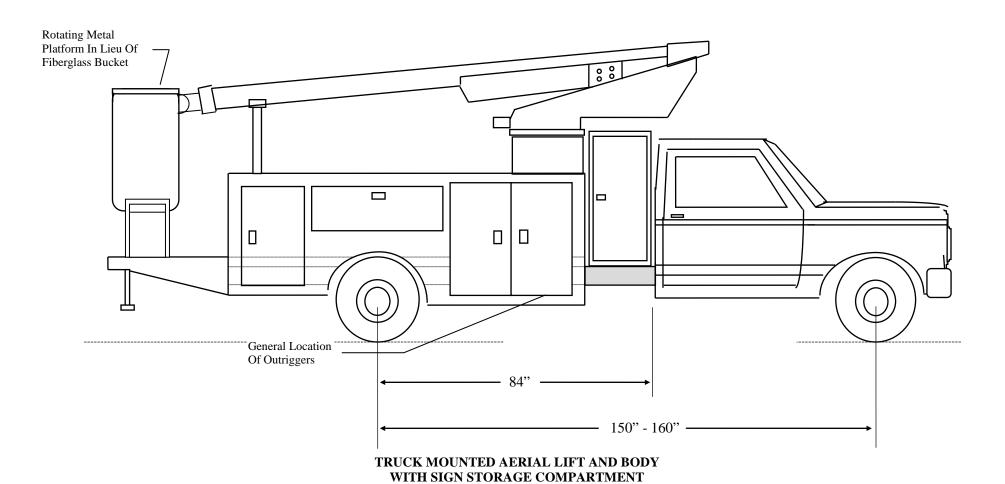
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- f. <u>Protective Circuit</u>: Compressor shall automatically shut down in case of high compressor temperature or over pressurization. An automatic blow down valve and minimum pressure orifice shall also be provided.
- g. <u>Instrument Panel</u>: Shall be conveniently located in the cab and be equipped with a compressor hour meter, air pressure gauge, compressor oil temperature gauge and over-temperature/over-pressure reset switch.
- h. Inlet Control Valve: Shall automatically modulate output from 0 to 100% in response to air demand.
- i. <u>Speed Control</u>: Shall be designed to suit engine make/type/model and fuel delivery system. Speed control for electronically controlled engines shall allow modulation of engine speed to match air demand.
- j. <u>Safety Switches</u>: Unit shall be installed so that emergency brake must be applied to activate air compressor and shall include an interlock to prevent compressor from operating when transmission is in gear.
- k. <u>Power Take-Off</u>: Shall be "hot shift", multi-gear type equipped with high grade needle or roller bearings. Shall have a pilot light to indicate when PTO is engaged.
- 1. <u>Drive Line</u>: Minimum 2-1/2" Dana 1310 series, or equal, driveline with universal joint, yoke and companion flange.
- m. <u>Air Lines</u>: Minimum 3/4" NPT air discharge lines shall be furnished and installed to provide outlets at the upper and lower curb side rear edges of the body. An additional 1/2" NPT outlet shall be provided at the lower curb side rear for use of an air drill or impact wrench. Outlets shall be capped or plugged when delivered to AHTD. (Appropriate quick disconnects will be installed by AHTD personnel.)

8. Warranty:

- a. 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 as motor and/or serial numbers and shall be signed by the selling dealer at the time vehicle is delivered to the Highway Department.
- b. Aerial lift, service body, sigh storage compartment 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 AHTD. In addition, manufacturer's standard warranty period on components that exceeds the 12 months warranty shall remain in effect.
 - (1) Warranty shall include all parts, labor and transportation costs to the location of equipment.
 - (2) If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done.
 - (3) It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
- c. 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.
- d. Recent prior failure to provide warranty-work, parts, replacement parts or service, in a timely manner, for equipment from the same manufacturer or dealer shall be grounds for the rejection of any submitted bid, or for the denial of any otherwise qualified low bidder, whether such failure is attributable to the manufacturer or the dealer of the equipment. For the purposes of this paragraph "timely manner" means a period of time not exceeding thirty (30) calendar days to provide requested warranty-work, parts, replacement parts, or service. For the purposes of this paragraph "manufacturer" means the original manufacturer of the equipment and its successor or successors, regardless of number, and whether acquired by sale, merger, or otherwise. For the purposes of this paragraph "replacement part" means a part redesigned by a manufacturer to correct a design or engineering defect and which replacement part is capable of providing dependable performance in normal operation conditions for its normal service life without failure. Such bid or bids may be rejected by the Department until such failure or failures have been remedied to the satisfaction of the Department and until such manufacturer or dealer is providing such warranty-work, parts, replacement parts, and service in a timely manner.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT SPECIFICATION 14-186-023

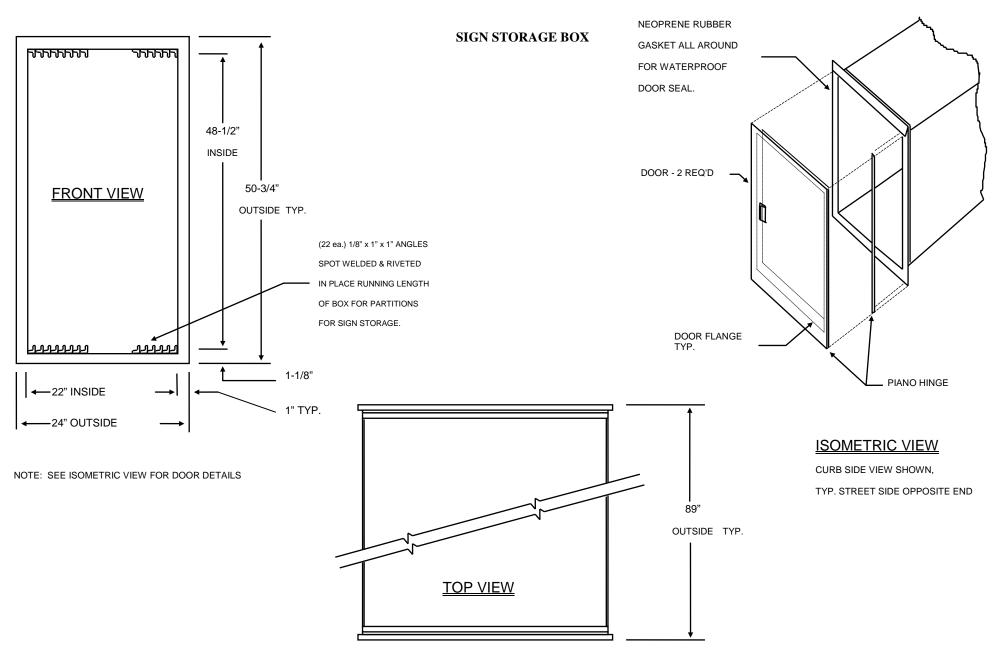


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ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIFICATION 18-43A-023

FOR

CREW CAB AND CHASSIS 25,500 POUND GVWR WITH ARTICULATING TELESCOPIC AERIAL LIFT SERVICE BODY AND SIGN STORAGE COMPARTMENT

A. General Conditions:

- 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. <u>Literature</u>: 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. <u>Manuals</u>: 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. In addition, one (1) copy each of Operator's Instruction Manual, Shop Repair Manual, and Parts Book shall be furnished to Equipment & Procurement Division, P.O. Box 2261, Little Rock, AR 72203 (11302 W. Baseline Road, Little Rock, AR 72209, if shipping UPS, FedEx, etc.).
 - The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD ROM, Floppy Disks, etc.) in lieu of printed manuals.
- 5. <u>Training</u>: Factory trained personnel shall instruct Arkansas Department of Transportation personnel in the operation and maintenance of sweepers furnished under this specification.
- 6. Units shall be assembled, adjusted and made ready for continuous operation at time of delivery.
 - All parts, accessories and tools necessary for satisfactory operation of this unit shall be furnished whether or not they are specifically mentioned in these specifications (including standard equipment as regularly furnished by manufacturer as shown on printed literature and specifications unless specifically excluded by this specification).
- 7. Parts Inventory & Service Facilities: The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
- 8. <u>Demonstration</u>: 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.
- 9. 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.

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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. <u>Unit Specifications</u>:

- 1. <u>General</u>: This specification is intended to cover a sign storage compartment, service body, and a pedestal mount, two section, hydraulic operated, telescoping boom and work platform, with a minimum working height of 34', completely mounted on a truck chassis and ready for use.
- 2. <u>Sign Storage Compartment</u>: Shall have a sign storage compartment mounted between service body and cab of truck. Sign storage compartment to be built and installed using the attached drawings as a guide. Doors shall have heavy duty handles and locks keyed alike. The actual overall width of the compartment shall be the width of the service body.
- Service Body: Shall be standard height service body normally designed to mount on a cab and chassis with dual rear tires and 60" CA measurement.
 - a. <u>Construction</u>: Electrically welded all steel construction with edges rolled or folded. Body shall have longitudinal
 members and cross members welded for floor support. Body floor shall be constructed of no less than 12 gauge
 safety tread plate.

b. Dimensions:

- (1) Body Length: 108" 110".
- (2) <u>Body Width</u>: 93" 96". (Alternate width may be provided if required for compatibility with overall width of chassis furnished.)
- (3) Body Height: 39 1/2", minimum.
- (4) Body Floor To Compartment Top: 25 ½" minimum.
- (5) Compartment Depth: 18", minimum.
- (6) Floor Width: 50" 55". (Alternate width may be provided if required for compatibility with overall width of chassis furnished.)
- c. <u>Compartments</u>: Each side of the body shall have a minimum of one (1) vertical compartment in front of the rear wheels, one (1) horizontal compartment over the rear wheels and a minimum of one (1) vertical compartment behind the rear wheels. Vertical compartments shall be full height and have adjustable shelves. Each horizontal compartment shall have an adjustable shelf and dividers. All doors shall be protected from weather and have double panels with flush type handles and locks keyed alike. Doors shall have rubber seals to keep out water and dust.
- d. <u>Bumper</u>: Rear of body shall have a combination bumper and tail shelf which extends no less than 1" past the work platform when boom is cradled.
- e. <u>Mud Flaps</u>: Shall have mud flaps no less than 24" wide and 1/4" thick, without advertising, mounted behind rear wheels.
- f. <u>Lights</u>: Combination tail and directional lights and backup lights to meet ICC regulations.

4. Aerial Lift:

- a. <u>Pedestal</u>: Shall be mounted in bed of truck directly behind sign storage compartment to allow for full use of body space. Shall have a hydraulic motor driven rotator providing 360° continuous rotation.
- b. <u>Boom</u>: Shall be pedestal mount, telescoping type with a minimum of two (2) sections. Horizontal reach from centerline of rotation shall be no less than 21'. Height from ground to bottom of work platform at full extension shall be no less than 29'. Shall have a total boom travel of no less than 80° above horizontal to no less than 6° below horizontal. Shall have a support at rear of truck to cradle the boom with an additional support to rest the work platform during road travel.
- c. <u>Controls</u>: Shall have two (2) sets of elevation, extension and rotation controls. One set to be mounted at end of boom and one set of controls mounted on pedestal with the capability of over-riding boom controls if necessary. Controls shall be full pressure, full feathering type with single handle (joy-stick) control on the boom. Shall have engine start and stop controls at the platform.

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- d. <u>Platform</u>: Shall be end hung type equipped with a hydraulic leveling system. Shall also be equipped with hydraulic rotator providing a minimum of 180° rotation to allow the platform to be placed on either side of the boom. Shall be constructed of metal with approximate dimensions of 24" x 24" x 41". Shall have a side access opening equipped with a gate or safety chain and be rated for a load of no less than 300 pounds. A safety belt with lanyard to secure belt to platform shall be provided.
- e. <u>Stabilization</u>: Shall be accomplished by means of torsion bar and counterweight as required by manufacturer. Unit shall be tested and certification shall be furnished that unit can be operated on level ground with the platform loaded to 150% of rated capacity, and on a 5° slope with the platform loaded to 133% of rated capacity, without lifting any tire from ground.
- f. Outriggers: In addition to the normal stabilization specified above, the unit shall have individually controlled, hydraulically powered, "A" type outriggers located at front area of service body and mounted at or behind the pedestal. The outriggers may intrude into the front compartment on each side of the service body, if necessary. Outriggers which extend vertically, or "out and down" outriggers are not acceptable. Outriggers to be equipped with pivoting type pads.
- g. <u>Hydraulic System</u>: Shall have elevation cylinder, hydraulically actuated telescoping boom and hydraulically actuated boom rotator. All cylinders shall be double acting. Hydraulic system shall have by-pass valve to prevent overloading and shall have safety device whereby load will remain suspended in case of power or pressure failure.
- h. <u>Hydraulic Pump</u>: Shall be PTO driven from the gearbox of the underdeck mounted air compressor and be of adequate capacity to operate all functions of the aerial lift.
- 5. <u>Color</u>: Cab & Chassis, Service Body and Aerial Lift shall be Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal. Front bumper, grill, mirrors and wheels as regularly furnished by manufacturer.

6. Air Compressor:

- a. <u>General</u>: A PTO driven Underdeck Mounted Air Compressors with incidentals shall be installed and ready for continuous operation. Successful bidder shall be experienced in the installation of air compressors and similar equipment and shall be approved by the manufacturer for installation of the underdeck mounted air compressor and incidentals furnished.
- b. <u>Compressor</u>: Positive displacement, single stage, oil flooded rotary screw type compressor driven by a drive shaft attached to a transmission mounted power take-off unit. The air compressor furnished shall produce a minimum of 80 cubic feet of free air per minute at no less than 100 psi.
- c. <u>Air Intake Filter</u>: Remote mount two-stage, heavy duty, dry type air filter/s shall be provided for the air compressor.
- d. <u>Air Receiver</u>: Shall be ASME approved for no less than 200 psi working pressure and be of adequate capacity for use with 80 cfm minimum air compressor. Receiver shall have an ASME approved pressure relief valve and be equipped with a fill cap, oil level sight gauge, 3/4" minimum service valve, 25 micron minimum spin-on air compressor oil filter with safety by-pass feature, and an air/oil separator. Air receiver shall be designed for under deck remote mounting and be installed on the curb side of the chassis, under the sign storage compartment. Air receiver shall be mounted in a manner that allows the oil level sight gauge to be inspected without crawling beneath the truck.
- e. <u>Heat Exchanger</u>: Compressor cooling system shall allow rated air delivery and pressure operation continuously in ambient temperatures up to no less than 125° F. Cooler shall be mounted in a sheet metal enclosure with a suction type fan assembly. A fan temperature switch shall be provided to regulate compressor cooling.
- f. <u>Protective Circuit</u>: Compressor shall automatically shut down in case of high compressor temperature or over pressurization. An automatic blow down valve and minimum pressure orifice shall also be provided.
- g. <u>Instrument Panel</u>: Shall be conveniently located in the cab and be equipped with a compressor hour meter, air pressure gauge, compressor oil temperature gauge and over-temperature/over-pressure reset switch.
- h. Inlet Control Valve: Shall automatically modulate output from 0 to 100% in response to air demand.
- i. <u>Speed Control</u>: Shall be designed to suit engine make/type/model and fuel delivery system. Speed control for electronically controlled engines shall allow modulation of engine speed to match air demand.

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- j. <u>Safety Switches</u>: Unit shall be installed so that emergency brake must be applied to activate air compressor and shall include an interlock to prevent compressor from operating when transmission is in gear.
- k. <u>Power Take-Off</u>: Shall be "hot shift", multi-gear type equipped with high grade needle or roller bearings. Shall have a pilot light to indicate when PTO is engaged.
- 1. <u>Drive Line</u>: Minimum 2-1/2" Dana 1310 series, or equal, driveline with universal joint, yoke and companion flange.
- m. <u>Air Lines</u>: Minimum 3/4" NPT air discharge lines shall be furnished and installed to provide outlets at the upper and lower curb side rear edges of the body. An additional 1/2" NPT outlet shall be provided at the lower curb side rear for use of an air drill or impact wrench. Outlets shall be capped or plugged when delivered to AHTD. (Appropriate quick disconnects will be installed by AHTD personnel.)

7. Crew Cab & Chassis:

- a. GVWR: 25,500 pounds, minimum.
- b. Wheelbase: Minimum of 194", maximum of 212".
- 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 250 SAE gross horsepower at rated RPM and no less than 650 lb. ft. SAE gross torque. Shall have full flow oil filter(s), fuel filters, dry type air cleaner, 12 volt electrical equipment with no less than 160 amp alternator and maintenance free batteries as regularly furnished with engine specified. Engine shall be equipped with a block heater which will operate on 120 volts AC.
 - (1) <u>Exhaust System</u>: Horizontal exhaust. The exhaust system may need to provide clearance for PTO installation, depending on which side of the transmission the installer chooses to mount the PTO.
 - (2) <u>Engine Shutdown</u>: Engine safety shutdown system with manual or automatic override to include the following features: low oil pressure warning bell/buzzer plus shutdown, high coolant temperature warning bell/buzzer plus shutdown and low coolant level warning bell/buzzer plus light or shutdown.
 - (3) <u>Cooling System</u>: As recommended and regularly furnished by the manufacturer for use with the engine size specified above, with anti-freeze protection to -20° F, or lower.
 - (4) <u>Block Heater</u>: Engine shall be equipped with a block heater which will operate on 120 volts AC.
- e. <u>Transmission</u>: Automatic, with a minimum of six (6) forward speeds. Transmission shall be equipped with PTO provision and include an auxiliary transmission oil cooler.
- f. Steering: Hydraulic actuated power steering as regularly offered by manufacturer.
- g. Front Axle: I Beam Type with wet seals, outboard mounted drums and a minimum capacity of 8,000 pounds.
- h. <u>Rear Axle</u>: Single speed full-floating type with wet seals, outboard mounted drums and a minimum capacity of 17,500 pounds. Ratio provided shall achieve a maximum theoretical electronic governed speed of no less than 69 MPH and still provide acceptable startability and gradeability under loaded conditions for on/off highway applications.
- i. Springs: As required to meet GVWR and axle ratings specified above.
- j. <u>Air System</u>: Air compressor shall have a minimum capacity of 12.9 cfm and draw air through the engine air cleaner. Air system shall be equipped with a heated air dryer.
- k. <u>Brakes</u>: Factory installed full air operated two shoe type with automatic slack adjusters and dust shields on front and rear. Rear brakes shall have spring set parking brakes.
- 1. <u>Frame</u>: Section modulus and yield strength of frame material shall provide a minimum RBM of 600,000. If the aerial lift manufacturer requires a stronger frame or additional frame reinforcement, it shall be provided. It shall be the responsibility of the successful bidder to insure that any additional frame requirements which may be needed for proper installation of the aerial lift and body are provided (i.e. after frame length, frame reinforcement, clean CA or clear frame rails).
- m. Cab: Four (4) door Crew Cab, complete with insulation and all interior trim. Cab glass shall include windshield, roll-up windows in doors and rear cab glass as a minimum. Shall have key type locks on doors, factory

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installed fresh air heater-defroster unit, grab handle on each side, right and left sun shades and fitted rubber floor mats.

- (1) <u>Instruments</u>: Shall include the following as a minimum:
 - (a) Speedometer/odometer
 - (b) Electric tachometer
 - (c) Electric engine hour meter
 - (d) Ammeter or volt meter
 - (e) Oil pressure gauge
 - (f) Coolant temperature gauge
 - (g) Transmission oil temperature gauge or warning light
- (2) <u>Cruise Control</u>: Factory installed electronic cruise control.
- (3) Air Conditioning: Factory installed air conditioning. Shall include tinted glass all around.
- (4) Windshield Wipers: Dual electric intermittent windshield wipers with washers.
- (5) <u>Seats</u>: Five (5) person seating consisting of an air suspension driver's seat, a non-suspension front passenger's seat and a full width rear bench seat with three (3) person seating capacity. Shall include seat belts for all seating positions.
- (6) Radio: Factory installed electronic AM/FM radio.
- (7) <u>Mirrors</u>: Dual West Coast Sr. type mirrors no less than 7" x 16" with adjustable brackets and auxiliary convex mirrors.
- (8) Air Horn: Single or dual-trumpet air horn.
- n. Wheels: Seven (7) 19.5" hub piloted steel disc with no less than 7.50" rim section. Rear wheels to be dual.
- o. <u>Tires</u>: Six (6), no less than 245/70R19.5 G load range, tubeless steel belted radial; Two (2) Front and Four (4) Rear.
- p. Fuel Tank(s): Single or dual fuel tanks with instrument panel fuel gauge. Minimum fuel capacity of 50 gallons.
- q. Hood: Tilting fiberglass or composite hood and fenders.
- r. <u>Lights</u>: Shall be equipped with dual beam headlights, parking lights, clearance lights, automatic backup lights, directional turn signals with column mounted switch and hazard flasher switch. Rear signals to be wired for stop and tail lights in addition to directional signals.
- s. <u>Backup Alarm</u>: Shall be equipped with an electric backup alarm meeting the requirements of SAE J994 with a minimum sound level output of 97 decibels.
- 8. <u>Color</u>: Truck cab, aerial lift, service body and sign storage compartment shall be painted Sherwin Williams F8W2030 Frost White Acrylic Enamel, or approved equal. Front bumper, grill, mirrors and wheels as regularly furnished by manufacturer.

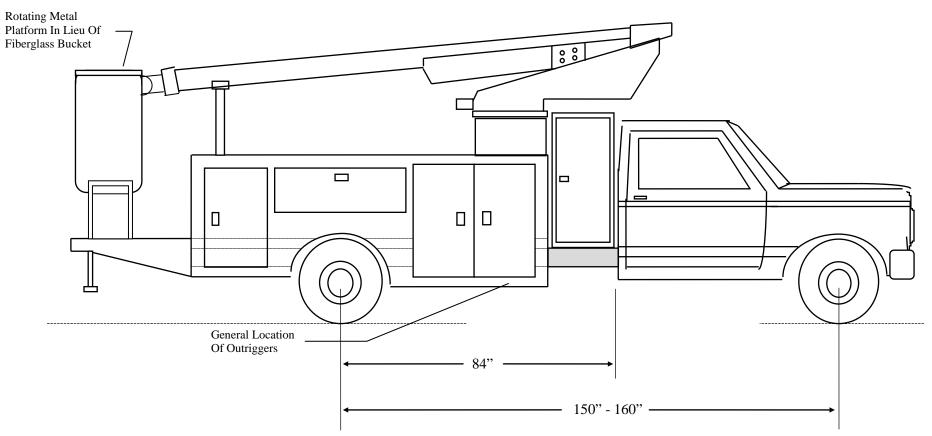
9. Warranty:

- a. 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 as motor and/or serial numbers and shall be signed by the selling dealer at the time vehicle is delivered to the Highway Department.
- b. Aerial lift, service body, sign storage compartment 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 AHTD. In addition, manufacturer's standard warranty period on components that exceeds the 12 months warranty shall remain in effect.
 - (1) Warranty shall include all parts, labor and transportation costs to the location of equipment.
 - (2) If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done.
 - (3) It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.

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- c. 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.
- d. Recent prior failure to provide warranty-work, parts, replacement parts or service, in a timely manner, for equipment from the same manufacturer or dealer shall be grounds for the rejection of any submitted bid, or for the denial of any otherwise qualified low bidder, whether such failure is attributable to the manufacturer or the dealer of the equipment. For the purposes of this paragraph "timely manner" means a period of time not exceeding thirty (30) calendar days to provide requested warranty-work, parts, replacement parts, or service. For the purposes of this paragraph "manufacturer" means the original manufacturer of the equipment and its successor or successors, regardless of number, and whether acquired by sale, merger, or otherwise. For the purposes of this paragraph "replacement part" means a part redesigned by a manufacturer to correct a design or engineering defect and which replacement part is capable of providing dependable performance in normal operation conditions for its normal service life without failure. Such bid or bids may be rejected by the Department until such failure or failures have been remedied to the satisfaction of the Department and until such manufacturer or dealer is providing such warranty-work, parts, replacement parts, and service in a timely manner.

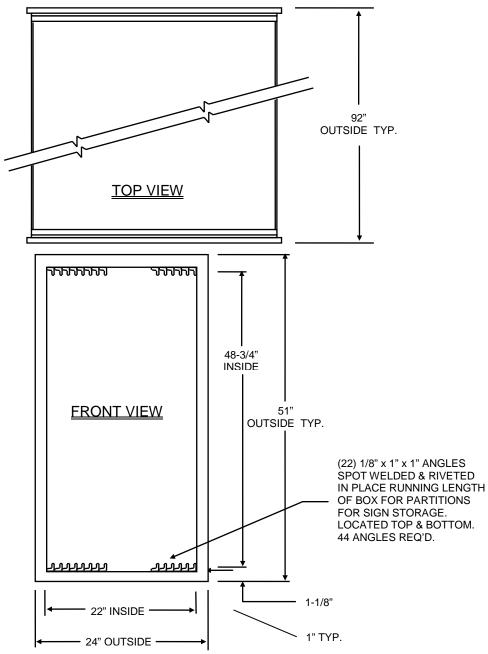
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT SPECIFICATION 09-64-9100



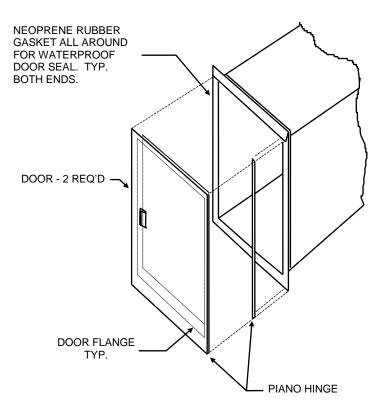
TRUCK MOUNTED AERIAL LIFT AND BODY WITH SIGN STORAGE COMPARTMENT

DRAWING NOT TO SCALE

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NOTE: SEE ISOMETRIC VIEW FOR DOOR DETAILS



ISOMETRIC VIEW CURB SIDE VIEW SHOWN, TYP. STREET SIDE OPPOSITE END

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SIGN STORAGE BOX

DRAWING NOT TO SCALE