

Roane County is inviting sealed bids for the good(s) and/or service(s) listed below, subject to the terms and conditions of the Invitation to Bid (ITB), the accompanying specifications, and the Roane County Purchasing Manual.

At the appointed time bids will be publicly opened in the office of the Roane County Purchasing Agent at the above address. Bids arriving in the Purchasing Department past the appointed date and time will be considered late and will not be opened.

**Deliver Bids To:**

ROANE COUNTY PURCHASING DEPARTMENT  
200 EAST RACE STREET, SUITE #3  
KINGSTON, TENNESSEE 37763

**Bid Number: 2016-14/177  
SCHOOL BUSES**

**Open Date & Time: February 11, 2016 at 2:00 p.m. (Eastern Time Zone)**

The Bid Envelope must show the Bid Number, Name & Opening Date.

**PURCHASING CONTACT INFORMATION**

Lynn Farnham, CPPO, CPPB  
Purchasing Agent  
Phone: 865-376-4317  
Fax: 865-376-4318  
Email: [lynn.farnham@roanecountytn.gov](mailto:lynn.farnham@roanecountytn.gov)

**GENERAL TERMS & CONDITIONS**

1. Attached are instructions and conditions for submitting a bid for Roane County Government. The objective of this bid is to select suppliers in such a manner as to provide for open and free competition and comparability.

## **BID PREPARATION & SUBMISSION**

1. Bidders are expected to examine any drawings, specifications, terms and conditions, general or special conditions, schedules and all instructions for the purpose of this bid. Failure to do so will be at the bidder's risk.
2. The total bottom line cost will be determined by multiplying each item bid price times the quantity requested and adding the extended dollar figures.
3. All bids shall be in accordance with the instructions to bidders and specifications included in this ITB. Specifications are intended to be open and non-restrictive.
4. All columns of the bid document must be completed in ink or typewritten. The bottom line total (sum of extended prices) must also be printed in ink or typewritten on the proposal form. No erasures shall be permitted. Errors may be crossed out and corrections printed in ink or typewritten and must be initialed in ink by the person signing the bid.
5. All bids must meet or exceed the enclosed specifications. Bidder must indicate the manufacturer's name and model number offered. If bidder fails to provide this information, and an award is made, then the bidder shall supply the item(s) as specified. All items supplied by the successful bidder shall be new and unused and meet all OSHA standards. Items delivered not meeting these requirements shall be subject to return and replaced at no additional cost to Roane County. Any exceptions to the specifications must be clearly noted, documented and have prior approval to be submitted as an approved alternate.
6. The use of the name of a manufacturer, brand, model or make used in describing an item does not restrict the bidder to that manufacturer. Others will be considered if they meet or exceed the items specified. When an alternate manufacturer, brand, model or make will be bid, five (5) days prior to the bid the bidder must submit documents to the Purchasing Agent, for evaluation of the product. Roane County will determine if the item does meet or exceed the item as specified.
7. It shall be the sole responsibility of the bidder to make certain that all bids in proper form are submitted to the Purchasing Department as described below.
8. Delivery charges are to be prepaid and included in the bid pricing.
9. All original forms must be signed by a person with authority to bind the bid. The bid must be sealed in an envelope that is labeled according to the directions stated below.
10. On the outside of the envelope/package mark the bid as follows:
  - Vendor Name & Address
  - Bid Number
  - Bid Date & Time
11. The bid must then be in a sealed envelope/package mailed or delivered to the following address:

Roane County Purchasing Department  
200 East Race Street, Suite #3  
Kingston, Tennessee 37763

**Please note that Roane County does not receive a guaranteed delivery time for express mail and/or packages. Please mail accordingly.**

12. Sealed written bids will be received at the time and place specified on the Invitation to Bid. Postmark on the Bid by this date will not suffice. Bid must be received on or before the date and time stated. Faxed bid documents will not be accepted.

### **LATE RECEIPT OF THE BID**

1. The bid and modifications or withdrawals thereof received after the time set for opening will not be considered, unless they are received before the award is made and it is determined by Roane County that failure to arrive on time was due solely to a delay in delivery for which the bidder has no responsibility. Roane County does not receive a guaranteed delivery time for express mail and/or packages. Please mail accordingly.
2. Bids must be in the Purchasing Department prior to 2:00 p.m. on the appointed date. Time will be determined by the clock in the Roane County Purchasing Department and once Purchasing Agent/or their designee determines the time is 2:00 p.m., no other bids will be accepted.

### **BID PERIOD**

1. Unless otherwise noted in the bid specifications, the contract will be awarded for the period of one (1) year from the date of bid opening. Roane County reserves the right to purchase additional items against this bid on an "as needed" basis if pricing remains the same. This does not apply to bids with options of renewal.

### **RESTRICTIVE OR AMBIGUOUS SPECIFICATIONS**

1. It is the responsibility of the bidder to review the entire Invitation to Bid document and to notify the Purchasing Agent if the Invitation to Bid is formulated in a manner that would unnecessarily restrict competition or if it is ambiguous in what is being requested.
2. Pursuant to TCA §12-4-126, questions regarding the specifications or bid procedures must be received by the Purchasing Agent and/or designer no less than ninety-six (96) hours before the bid opening date. No addenda will be issued within less than forty-eight (48) hours of the bid opening day, excluding weekends and legal holidays designated in §15-1-101 unless the bid opening is extended for a reasonable time as determined by the purchasing agent, which shall not be less than forty-eight (48) hours excluding weekends and legal holidays designated in §15-1-101, to allow for any necessary changes to the Invitation to Bid documents and to allow responders to resubmit their responses accordingly.
3. Any questions concerning this Invitation to Bid are to be faxed to the Purchasing Department. Questions will be answered via addenda. Information obtained from any office other than the Purchasing Office is not to be considered binding.

### **BID OPENING & AWARD**

1. Only the bottom line figure will be read at the bid opening. Bids will also be examined for compliance with specification and conditions outlined in the bid document.
2. Consideration will be given to all bids properly submitted. Bids will receive appropriate confidentiality before awarding. Upon award, bid documents and tabulations will be available for review. Errors discovered after public opening may not be corrected, and the bidder may be bound to honor bid as submitted. After investigation of the nature of the mistake, the Purchasing Agent may allow the bid to be withdrawn.

3. The contract will be awarded in writing to the most responsive bidder whose bid conforms best to the Invitation to Bid will be most advantageous to Roane County. It is the intent of Roane County to involve and utilize the best product/services at the best prices and provide small and minority firms, women's business enterprises and labor surplus area firms with increased opportunity to do business with the county. However, currently there are no set asides for small or minority firms.
4. Roane County reserves the right to accept or reject any or all bids and to waive informalities and minor irregularities in the bids received.
5. Roane County reserves the right to award the bid in its entirety or to divide the award in any way that will be more advantageous to the county.
6. Bid results will be posted on the County's website along with the bid tabulation.

### **PROTEST PROCEDURE**

1. If a prospective vendor does not agree with the bid award, they have the right to protest. Disputes arising from the award of this bid must be submitted in writing to the Roane County Purchasing Department no later than seven (7) days from date of bid award. The steps for dispute resolution may include:
  - A meeting with the Purchasing Agent, the requisitioning department's manager and representatives from the disputing party to discuss and resolve the complaint.
  - Information from the aforementioned meeting will be forwarded to the County Attorney for review.
  - A written decision letter stating the reasons for the decision will be prepared by the Purchasing Agent and submitted in writing to the protestor and all parties involved.
  - Purchases will not be allowed under this procurement until a final decision is rendered.
  - In the event that purchases must be made before a final decision is rendered, the emergency purchase procedures will be used.

### **APPROPRIATION**

1. In the event no funds are appropriated by Roane County for the goods or services in any fiscal year or insufficient funds exist to purchase the goods or services, then the contract shall expire upon the expenditure of previously appropriated funds or the end of the current fiscal year, whichever occurs first, with no further obligations owed to or by either party.

### **VENDOR QUALIFICATION**

1. Potential bidders must meet the following criteria:
  - Be able to provide a quality product as specified
  - Offer reasonable pricing
  - Provide dependable delivery of items ordered
  - Meet specifications and bid conditions
  - Demonstrate successful past performance
2. A potential bidder may be rejected for one or more of the following reason:
  - Inadequate or unacceptable product lines
  - Bidding remanufactured or reconditioned items
  - Bidding alternate to approved item without notice prior to bid opening
  - Documented unacceptable product

## **INSURANCE**

1. The contractor will maintain, at their expense adequate insurance coverage to protect them from claims arising under the Worker's Compensation Act, from claims for damages resulting from bodily injuries and damage to their property, for Bodily Injury and Property Damage Liability in the amount of no less than \$1,000,000, for Products and Completed Operations Liability of no less than \$1,000,000 and from claims for damage to any Roane County property. Additional insurance requirements may be listed any Special Terms & Conditions or in the Bid Specifications. This insurance company shall have a Best's rating of A or better. Any deviations from the above requirements must be disclosed in the bid submission.
2. The successful bidder shall furnish a Certificate of Insurance issued by their insurance company showing that Roane County as an additional insured. Carrier will assume full common liability of all shipments.

## **COMPLIANCE WITH ALL LAWS**

1. Contractor is assumed to be familiar with and agrees to observe and comply with all federal, state, and local laws, statutes, ordinances, and regulations in any manner affecting the provision of goods and/or services, and all instructions and prohibitive orders issued regarding this work and shall obtain all necessary permits.

## **GOVERNING LAW**

1. This contract shall be governed by the laws of the State of Tennessee, and all obligations of the parties are performable in Roane County, Tennessee. The Courts in Roane County shall have exclusive and concurrent jurisdiction of any disputes which arise hereunder.

## **BUSINESS LICENSES**

1. Bidders located in Tennessee are required to have a current business license issued by the State of Tennessee at the time the bids are submitted. Vendors located outside Tennessee are required to obtain a business license issued by the State of Tennessee.
2. A Business Tax & License Affidavit is required to be submitted with the bid.

## **INDEMNIFICATION/HOLD HARMLESS**

1. Contractor shall indemnify, defend, save and hold harmless all departments of Roane County Government and/or the Roane County Board of Education, its officers, agents and employees from all suits, claims, actions or damages of any nature brought because of, arising out of, or due to breach of the agreement by Contractor, its subcontractors, supplier, agents or employees or due to any negligent act or occurrence or any omission or commission of the contractor, its subcontractors, suppliers, agents or employees until the contract terminates.

## **VENDOR PERFORMANCE**

1. If the contractor fails in full or part to perform or comply with any provision of this Contract or the terms or conditions of any documents referenced and made a part hereof, Roane County may terminate this contract, in whole or in part, and may consider such failure or noncompliance a Breach of Contract. Contractors with poor performance will be notified at the time of such performance and be given opportunity to correct the problems. Documentation will be kept on file. Any contractor with continued poor performance will be removed from the potential vendor list for one year.
2. Roane County expressly retains all its rights and remedies provided by law in case of such breach, and no action by Roane County shall constitute a waiver of any such rights or remedies. In the event of termination for default, Roane County reserves the right to purchase its requirements elsewhere, with or without competitive bid.
3. Failure to deliver within the time specified or within a reasonable amount of time, or failure to make replacements of a rejected item immediately will constitute authority to purchase on the open market so as to replace the item(s) rejected and/or not received. On all such purchases, the Vendor agrees to promptly reimburse the county for excess costs incurred by such a purchase.
4. Reasons for product rejection may be any one of the following:
  - Quality
  - Price
  - Serviceability of item (damage)
  - Product does not meet bid specifications

## **BREACH OF CONTRACT**

1. A party shall be deemed to have breached the contract if any of the following occurs:
  - Failure to provide products or services that conform to contract requirements.
  - Failure to maintain/submit any report required hereunder.
  - Failure to perform in full or in part any of the other conditions of the contract.
  - Violation of any warranty.

## **CONTRACT TERMINATION FOR CAUSE**

1. If the contractor fails to properly perform its obligations under this contract in a timely or proper manner, or if the contractor violates any terms of this contract, the county shall have the right to terminate the contract and withhold payments in excess of fair compensation for completed services.
2. In the event the contract is terminated for due cause by the county, the county shall have the option of awarding the contract to the next lowest bidder or bidding again.

## **CONTRACT TERMINATION FOR CONVENIENCE**

1. The county may, by written notice to the contractor, terminate this contract without cause for any reason. Said termination shall not be deemed a Breach of Contract by the county. The county must give notice of termination to the vendor at least thirty (30) days prior to the effective date of termination. The contractor shall be entitled to receive compensation for satisfactory, authorized service completed as of the termination date, but in no event shall the county be liable to the contractor for compensation for any service which has not been rendered. Upon such termination, the vendor shall have no right to any actual general, special, incidental, consequential, or any other damages whatsoever of any description or amount.

## **BOOKS AND RECORDS**

1. The contractor shall maintain all books, documents, accounting records and other evidence pertaining to the goods and services provided under this contract and make such materials available at its offices at all reasonable times during the contract period and for three (3) years from the date of the final payment under this agreement for inspection by county or by any other governmental entity or agency participating in the funding of this agreement, or any authorized agents thereof; copies of said records to be furnished if requested. Such records shall include those books, documents and accounting records that represent the vendor's costs of manufacturing, acquiring or delivering the products and services governed by this agreement.

## **DELIVERY**

1. All items included in this Invitation to Bid is to be delivered with no evidence of damage. The successful bidder agrees to be responsible for damaged packaging and to replace any damaged components or equipment at no charge.
2. Roane County shall retain the right to reject any or all of a delivery that does not meet product specifications. Rejected items are to be picked up at the supplier's expense.

## **INSPECTION AND ACCEPTANCE**

1. Warranty periods shall not commence until Roane County inspects and formally accepts the goods and/or services. The terms, conditions and timing of acceptance shall be determined by Roane County. Roane County reserves the right to reject any or all items or services not in conformance with applicable specifications, and contractor assumes the costs associated with such nonconformance. Acceptance of goods or services does not constitute a waiver of latent or hidden defects or defects not readily detectable by a reasonable person under the circumstances.

## **INVOICES AND PAYMENTS**

1. Payment will be made within 30 days after receipt of invoice and/or delivery of items included in this Invitation to Bid, whichever is later.
2. Roane County Government is not subject to taxation. A tax exemption certificate will be provided upon request.

## **NONDISCRIMINATION AND NON-CONFLICT STATEMENT**

1. Contractor agrees that no person on the grounds of handicap, age, race, color, religion, sex or national origin, shall be excluded from participation in, or be denied benefits of, or be otherwise subjected to discrimination in the performance of this agreement, or in the employment practices of vendor. Contractor shall upon request show proof of such nondiscrimination, and shall post in conspicuous places available to all employees and applicants notices of non-discrimination. Contractor covenants that it complies with the Fair Wage and Hour Laws, the National Labor Relations Act, and other federal and state employment laws as applicable. Contractor covenants that it does not engage in any illegal employment practices.
2. Contractor covenants that it has no public or private interest, and shall not acquire directly or indirectly any interest; that would conflict in any manner with the provision of its goods or performance of its services. The contractor warrants that no part of the total contract amount provided herein shall be paid directly or indirectly to any officer or employee of Roane County as wages, compensation, or gifts in exchange for acting as officer, agent, employee, subcontractor or consultant to contractor in connection with any goods provided or work contemplated or performed relative to the agreement.
3. No employee or member of the Roane County's governing bodies shall participate in the selection or award of a contract if a conflict of interest, real or apparent, would be involved.
4. Officers, employees or officials of the Roane County Government shall neither solicit nor accept gratuities, favors or anything of more than nominal monetary value from vendors or parties to subcontracts.



**Bid Number: 2016-14/177 – SCHOOL BUSES**  
**VENDOR INFORMATION SHEET**

(Please fill out completely)

By completing and signing this form you certify that you are an authorized representative of the company for which you are submitting a bid/proposal and that you have the authority to legally bind your company. Further, by completing and signing this form you certify that you agree to all the terms and conditions of this bid/proposal.

1. Vendor Name \_\_\_\_\_

2. Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

3. Contact Person (Please Print) \_\_\_\_\_

4. Telephone Number \_\_\_\_\_ Fax Number \_\_\_\_\_

5. Vendor's e-mail address \_\_\_\_\_

6. Authorizing Signature \_\_\_\_\_

7. Title of Person Signing Bid \_\_\_\_\_

8. If addenda were issued, please acknowledge the receipt of: (please write "yes" if you received one)  
Addendum 1 \_\_\_\_\_ Addendum 2 \_\_\_\_\_ Addendum 3 \_\_\_\_\_ Addendum 4 \_\_\_\_\_

9. If applicable, please indicate below if discounts will be allowed for prompt payment or if there is not discount offered:  
\_\_\_\_\_ % Net 10 Days; \_\_\_\_\_ % Net 20 Days; \_\_\_\_\_ % Net 30 Days; \_\_\_\_\_ No Discount

**COOPERATIVE PURCHASING** - Vendors are to indicate if it is permissible for other governmental agencies in the State of Tennessee to purchase these items or services at the same price. Freight charges may be adjusted to reflect differences in delivery costs to other locations. Please indicate the approval of Cooperative Purchasing.

\_\_\_\_\_ Yes \_\_\_\_\_ No

**SCHOOL CONTRACTS ONLY**

**CRIMINAL HISTORY RECORDS CHECK** – Do you agree to comply with Public Chapter 587 of 2007 which requires all contractors to facilitate a criminal history check, including fingerprinting, conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation for each employee or subcontractor personnel before permitting the employee or subcontractor personnel to have contact with students or enter school grounds?

\_\_\_\_\_ Yes \_\_\_\_\_ No

**Bid Number: 2016-14/144 – SCHOOL BUSES  
NON –COLLUSION, INDEPENDENT PRICE DETERMINATION,  
NON-DISCRIMINATION, NON-DEBARMENT & LOBBYING AFFIDAVIT**

I do hereby certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud.

I understand that collusive pricing is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards and that no collusion with another firm was used in preparation of this bid.

I also certify that this firm does not discriminate against any employee or applicant for employment on the grounds of race, color, national origin or sex; and does not and will not maintain or provide for his employees any segregated facilities at any of its establishments, and further, that the firm does not and will not permit their employees to perform their services at any location under this contract where segregated facilities are maintained.

By submission of this bid, the bidder certifies that neither it or its principals is presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal or State department or agency.

I further certify that during the Invitation to Bid solicitation and/or during the performance of this contract that neither it nor its principals will participate in lobbying activities in conjunction with this project.

I agree to abide by all terms and conditions of this Invitation to Bid and certify that I am authorized to sign this affidavit for the vendor.

Please indicate which of the following apply to your company. This information is requested for information purposes only. Roane County currently has no policy that allows for set asides or preferences for woman owned or minority owned businesses.

African American Owned  
 Caucasian Owned  
 Native American Owned  
 Other Owned

Asian Owned  
 Hispanic Owned  
 Woman Owned

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**Bid Number: 2016-14/177 – SCHOOL BUSES  
BUSINESS TAX & LICENSE AFFIDAVIT**

**Please sign the affidavit below stating that your company does have a Business License and that your Business Taxes are current. Companies located outside the State of Tennessee are required to have a Business License in Tennessee.**

The undersigned states that he/she has legal authority to swear this on behalf of \_\_\_\_\_ (Vendor); and that Vendor is not in any manner in violation of *Tennessee Code Annotated, §5-14-108(l)* which provides that “no purchase shall be made or purchase order or contract of purchase issued for tangible personal property or services by county officials or employees, acting in their official capacity, from any firm or individual whose business tax or license is delinquent”.

Affiant affirms and warrants that Contractor's licenses are currently valid and all business taxes have been paid and are current as of the date of this affidavit. Contractor is licensed and pays business taxes in \_\_\_\_\_ County, Tennessee.

**VENDOR**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Witness: \_\_\_\_\_

Date: \_\_\_\_\_

**Bid Number: 2016-14/177 – SCHOOL BUSES  
ROANE COUNTY SCHOOLS  
TYPE D REAR CONTROL – 84 PASSENGERS**

**Specifications**

The school bus body (or bodies) furnished shall comply with all current Tennessee state and Federal Motor Vehicle Safety Standards in effect at time of bid. Additionally, Roane County Board of Education is requiring the following supplementary specifications. Any exceptions to these specifications should be concisely noted in the space provided. Equivalency of any exceptions to the items requested will be solely at the discretion of Roane County Board of Education. Buses are to be new.

Bidder's Name \_\_\_\_\_

Address \_\_\_\_\_

Make and Model of Bus Body \_\_\_\_\_

Passenger Capacity \_\_\_\_\_

Knee room \_\_\_\_\_

**Specifications Furnished. Fill in all spaces. Note and explain equivalents or exceptions.**

**TYPE D TRANSIT**

Bus type D capable of transporting 78 or 84 passengers with a GVWR not less than 33,000 lbs

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**ACCELERATOR CONTROLS**

Accelerator to be suspended from the firewall electrically operated and shall include a dash-mounted fast idle switch which automatically disengages when the transmission is shifted into neutral. Accelerator and brake pedal are to be adjustable, electrically activated, with a minimum 3" of fore & aft adjustment.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**AIR CLEANER**

Shall be Donaldson heavy duty replacement type shall be mounted outside the passenger compartment with proper ducting to provide adequate engine aspiration. Location of the air intake shall be above the radiator for cleanest possible air. The air cleaner shall be readily accessible for servicing. The air cleaner shall include an air restriction indicator located on inside dash panel. Indicator on filter

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**ALTERNATOR**

Shall be a Delco 28SI alternator minimum 12-volt of not less than 200 amps and provide at least 50% of the rated charge at engine idle. Mounting shall be heavy duty 2-leg type as specified in SAE-J-180.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**AXLE FRONT**

Shall be heavy-duty "I" beam design. Minimum 13,200 lb. axle capacity with reverse Elliott steering knuckles grease-able tie rod ends and 80" nominal track. Turning angle shall be minimum 45° to allow maximum maneuverability. Kingpins shall be minimum 1.794" diameter with sealed bushings and tapered roller thrust bearings. Gross axle weight rating dependent on optional equipment selected up to maximum allowable. Oil lube seals are required. Please state turning angle: \_\_\_\_\_.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**AXLE REAR**

Shall be a full-floating type and have a minimum gross weight capacity of 23,000 lbs. Axle shall equipped with oil lubricated wheel bearings and include a magnetic drain plug. Ratio to be determined for desired performance dependent on bus application and operating conditions.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**BATTERIES**

Provide three (3) group 31 12-volt low maintenance, lead antimony type batteries with a minimum of 1125 cold cranking amps each (3375 total) with 170 minutes re-service capacity at 80 degrees F.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**BRAKES**

Service brake dual full air brake system designed to meet all requirements of FMVSS-121 in effect at time of manufacture with full ABS. Service lining no less than 920 square inch in area. Brake components including lining to be extended service type.

TYPE: Drum; FRONT: 16.5" X 7"; REAR: 16.5" X 8-5/8" Brake Size.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**AIR BRAKE SYSTEM**

Brake system shall include a gear driven air compressor with a minimum output of 18.7 CFM, and a minimum of four air reservoirs with a total of 6,470 cu. in. of capacity. . One optional air reservoir is to be designed entirely for air operated accessories. All air lines are to be color coded for ease of identification and service. The air lines shall be made of nylon or equal to withstand vibration. The air system shall include dual air pressure gauge and alarm system which will automatically activate when the air pressure reaches 60 psi or less. System shall be S-cam design with 24 sq. in. front brake chambers, 30 sq. in. rear brake chambers and automatic slack adjusters.

**TYPE: Drum; FRONT: 16.5" X 6"; REAR: 16.5" X 8-5/8" Brake Size. Must include Bendix AD-IP air dryer.**

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**PARKING BRAKE**

Parking brake shall be minimum 30 sq. in. spring type with dash-mounted control valve.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**COOLING SYSTEM**

Radiator to be heavy-duty brazed aluminum tube and fin construction to achieve maximum corrosion protection Radiator and charge air cooler to be mounted over and under, (not stacked or in tandem), to prevent clogging and provide ease of cleaning. **Coolant is to be heavy duty premium grade antifreeze only. “Not extended life.”** Coolant must be identified at inlet with permanent label.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**DESIGN**

Type D bus with rear mounted engine. Body and chassis shall be manufactured and warranted by the same manufacturer.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**DRIVE LINE**

Spicer Life SPL 100 series minimum, (with engines of less than 720 ft.lb torque) with coated slip section, with safety guard to prevent damage to under carriage of bus in the event of failure

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**ENGINE**

Shall be a Cummins ISL 9 with a 260 Horsepower minimum 720 ft. lbs. torque minimum electronically controlled in-line 6-cylinder engine. Engine shall provide electronic monitoring system for water temperature, unaided cold starts to zero degrees F, engine diagnostic data and data logging capabilities. Maximum speed shall be limited to 70 mph. Engine shall include an exhaust brake and a compression brake.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**EXHAUST SYSTEM**

2013 Emissions achieved by utilizing exhaust mitigator and Diesel Exhaust Fluid or DEF

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**FAN DRIVE**

Shall be a thermostatically controlled mechanical operated fan drive system and a 24" diameter 10-blade fan shall be incorporated.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**FIREWALL**

The front fascia of the body and the chassis to be integrated through a firewall design This firewall is to be accessible through a lockable, hinged access panel and is to provide access to the front header system, wiper motors, air brake plumbing, steering column shaft, washer-bottle, horns, brake pressure switches, and main electrical connections. This firewall design shall provide additional structural strength to the body/chassis interface, provide additional driver protection, and increase sealing to prevent air, dust, and water from entering the interior of the bus body.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**FRAME**

All welded and bolted construction with grade 8 flange head bolts and nuts. The main frame shall be a continuous section from the front of the vehicle to aft of the rear axle. Dimensions shall be not less than 10" x 3" X ¼" with a minimum 50,000 PSI yield strength. Frame rails shall not be notched, tapered, or cutout to provide clearance for engine or step well installation. Engine shall be installed on bolted modular rails to provide a full-width clearance of not less than 34" between the rails. This allows for easy engine component accessibility and routine maintenance Front tow hooks are required.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**FUEL TANK**

100 gallon capacity minimum meeting all requirements of FMVSS 30 The tank to be located between the frame rails and immediately aft of the front axle This location will provide an increased level of safety and will provide optimum weight distribution. The bus floor shall include an access plate for servicing the sending unit of the fuel tank. An outside fuel filler door with latch to be provided

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**INSTRUMENTS/PANEL** (\*All gauges shall be individually serviceable and replaceable)

- Speedometer/7 digit odometer (including tenths)
- Tachometer/Hour meter
- Oil Pressure Gauge
- Water Temperature Gauge
- Fuel Gauge
- Voltmeter
- Dual Air Pressure Gauge
- Combination directional signal/headlight dimmer switch on steering columns
- Warning lights and buzzers for oil pressure, water temperature, and air pressure
- Hazard warning switch on the steering column
- Electronic fast idle control
- Key type starter and engine stop switch
- Two (2) Aux Outlets for accessories to be installed in the driver compartment

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**RUSTPROOFING**

All chassis framing, fasteners, and suspension systems are to be painted with a rust inhibiting paint after assembly and before body mounting.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**SHOCK ABSORBERS**

Heavy duty direct acting double action piston type, 2 fronts and 2 rears.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**SPRINGS/SUSPENSION**

Three (3) taper leaf type (parabolic) springs, with a minimum capacity of 6600 lbs, each side front. Springs to be mounted inboard to provide at least a 45 degree turn angle Heavy duty radius leaf varied-rate type springs rated at 8500 lbs. each side rear to provide optimum comfort at no load or at full load.

Meets or Exceeds  Yes  No – Exceptions\_\_\_\_\_

**STEERING**

Integral full power Ross TAS-65 or Sheppard M-I 00 with a tilt and telescoping 20" three spoke padded steering wheel. Adjustable brake and accelerator at end of driver's seat.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**STEP GUARD**

A steel step guard or skid plate is to be installed under the front entrance step to protect the steps and entrance door from damage. (Area behind step well must be insulated.)

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**TIRES**

Single tire front axle and dual tire rear axle. Minimum 11R22.5 16 ply steel radial tubeless type tires.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**TRANSMISSION**

PTS3000 Allison automatic. Shift control shall be mounted to the right of the steering column. The transmission shall include an external filter and oil to coolant transmission cooler to be mounted in the radiator to provide maximum efficiency and fewest connections and fittings. The transmission fluid fill and check shall be located on the left side of the engine opposite the exhaust manifold. Back up alarm buzzer is required.

**Must use Transynd automatic transmission fluid or synthetic equivalent.**

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WHEELBASE**

Shall be 238 inches for a 78 passenger or 267 inches for a 84 passenger to minimize rear body sweep The rear overhang measured from the centerline of the rear axle to the rear bumper shall not exceed 117".

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WHEELS**

Seven (7) minimum wheels ten hole stud piloted dual-mounting, double cap nut 8.25" X 22.5 All wheels to be interchangeable. Brakes and wheels shall be outboard mounted so that brakes can be inspected without disturbing the axle or wheel seal. Color BLACK

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WIRING**

All chassis wiring to be color coded numbered, and shall be routed through convoluted tubing for protection. The wiring shall be protected by a manual reset circuit breaker. A master 150 amp circuit breaker and battery cut-off switch shall be provided.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_



**RADIO**

AM/FM radio with a minimum of eight (8) speakers installed. With integrated P. A. system installed.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**AISLES**

There shall be a minimum 12" aisle from the entrance door to all emergency doors. There shall be a minimum 16" clearance between engine cover and right front seat barrier for ease of entrance and egress.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**BUMPER**

Front and Rear: shall be one-piece, formed from 3/16" plate steel. The bumpers shall be a minimum of 9 1/2" high after forming with a minimum section modulus of .5369 for added strength.

Front bumper to be equipped with **Crossing Control Arm.**

The rear bumper shall wrap around back comers extending forward at least 12" fitting snugly to the body to prevent hand holds.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**COLOR**

Exterior: Shall be National School Bus Yellow. This paint shall be baked-on, high solids polyurethane. The roof is to be painted white. Trim, including rub rails, warning light visors, and door handles shall be black.

Interior: Shall be light gray baked on enamel. Area from the bottom of the side windows to the seat rail shall be Galvalume steel. All seat frames, dash, heater and defroster ducts shall be a baked-on black powder coating for scratch resistance. All metal panels on the bus to be painted shall be primed on both sides prior to assembly.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**CONSTRUCTION**

The bus body shall be constructed of prime, commercial quality steel or other material with strength at least equal to steel. The bus body shall be constructed to meet or exceed all state and federal school bus requirements in effect at the time of manufacture. Internal skeletal structure shall be welded. Screws, rivets, or huck bolts are not acceptable.

Roof Bows: The roof bow frame assembly shall consist of 14 gauge hat section bows extending from the bottom of skirting on the one side to the bottom of skirting on the other side. Bow frames shall be continuous, one-piece, 14-gauge rolled channel hat section 1-7/8" deep, mounted on 28 3/4" centers to provide a roll bar type protection. Roof bows must be tied together with two external crash rails. (Internal crash rails.)

Floor: The floor shall be constructed of 14-gauge Galvalume "C" channels forming an "I" beam crossmember at approximately 9'. These "I" beam crossmember shall be equal to a 9 gauge thickness and shall extend the full width of the floor except in the wheelhouse area and shall be designed so as not to trap moisture. Floor coloring to be gray marble.

Must include aisle strips. (With plywood flooring over steel flooring)

All floor crossmembers shall be welded to 14-gauge steel floor channel bumpers which extend the entire length of the body floor on each side. This floor bumper shall also serve as the interior seat rail, to be used for mounting seats. This floor bumper shall be welded at each point of intersection with the body bows.

There shall be a 2 1/4" X 2 1/4" tubing reinforcement added to the front and rear of the wheelhouse area. Reinforcements in these areas increase the durability and longevity of the bus body.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**DOORS**

The service door shall be an air-operated, outward opening, two-panel door. The door panel shall be a bolted frame construction and made of anodized extruded aluminum. Each door panel shall have one-piece glass to provide maximum visibility to the loading area. Each panel shall be attached to pivot points at the top and bottom of the panel with greaseless self-cleaning bearings. The door control mechanism shall be located to the left of the driver on the switch cabinet to prevent accidental opening by students. An emergency opening control valve shall be located above the windshield adjacent to the door. The control mechanism of the door shall be located above the door and concealed behind a hinged panel for ease of service. Vandalocks shall be provided on front door, side door, and rear push out window.

The service door shall be located forward of the front wheels on the right side of the bus. The door shall seal against the bottom step edge and a stationary rubber gasket mounted to the door. No part of the door shall ride in the stepwell when closed. Vertical closing edges of the door shall be equipped with flexible material to protect passengers.

All entrance and exit doors shall be equipped with a full-width 1" x 3" padding located above the door opening. The service door and side emergency doors shall contain drainage holes in the bottom of the door to allow for drainage of condensation and to deter corrosion.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**EMERGENCY EXITS**

All emergency exits shall conform to FMVSS 217.

Two roof hatches required. Transpec (**NO EXCEPTIONS**)

Emergency Door: There shall be an emergency door located on the left side of the bus. This door shall have a minimum of 24" x 58" clear opening and be equipped with a piano type hinge with brass pin. The door hinges shall be so designed to allow lubrication to be channeled to the center 75% of each hinge loop. There shall be a device installed on the top of the emergency door that will automatically hold the door in the open position during emergencies and evacuation drills.

The left side emergency door and the rear push out emergency window shall be equipped with a system of audible buzzers which will sound at the exit and in the driver's area when the release mechanism is moved toward the open position. Rear push out emergency window shall provide a clear opening of 22" x 57". Two push out windows (per side) and two Transpec roof hatches shall be provided.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**ELECTRICAL**

Shall be equipped with fully integrated multiplex electrical system for both body and chassis ECMs to be chassis frame mounted for ease of access. The electrical system shall be 12 volts. The wiring shall be color and number coded and a wiring diagram shall be furnished with each bus. A master battery cut off switch shall be provided and installed near the battery compartment.

Interior body wiring shall be routed down the left side of the bus, above the side windows, behind a completely removable cover. The cover shall be removable without loosening the side windows.

All wires shall be insulated and protected from external damage. The body wires shall be securely fastened to a metal stringer which runs from the front of the compartment to the back, behind the wiring cover. The wires shall be fastened at intervals of not more than 24".

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**ENGINE COMPARTMENT**

The rear engine compartment shall be fully insulated with thermal and sound insulation sandwiched between the interior davenport seat panels and Galvalume or aluminized steel engine compartment panels. This insulation shall provide protection from heat, fumes and excessive noise from entering the passenger compartment. The engine compartment shall be capable of withstanding detergents and high-pressure wash. A dustpan is to be installed on the curb side to prevent debris from entering the engine compartment.

The engine door shall provide access to the engine compartment and related components. The door shall open to a minimum 115° and incorporate an interlock in the starting circuit to prevent starting the engine from the driver's area when the door is open.

The opening shall be a minimum 84" x 31"

The engine compartment shall be equipped with side engine doors, one each side. The doors shall be:

- Secured by a flush-mounted adjustable lever latch.
- Hinged vertically for swing-out operation.
- Designed with hinges that have removable pins for
- Greater access for service.
- Designed to allow adequate air flow to the engine.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**FENDERETTES**

The front and rear wheel openings shall be equipped with rubber fenderettes that stand off the body side approximately one and one half inches for added protection.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**EXTERIOR PANELING**

Front Hood: Shall be constructed of high strength composite material. Hood shall incorporate a recessed area for installation of warning lights. The hood shall be bonded in place over a tubular steel support structure for additional strength.

Front Access Panel: A full width lockable panel located below the windshield shall be constructed of high strength composite material. The panel shall be hinged and open downward to allow access to the front heater system, wiper motors, air brake plumbing, washer bottle & horns mounted on the firewall. Panel shall have a recessed area for mounting 7" front turn signals.

Bottom Front Fascia/Cowl: Shall be full width mechanically fastened panel constructed of high strength composite material. Panel shall house recessed single round headlights and amber daytime running lights.

Roof: The roof panels shall be double-lapped, 20 gauge, zinc-coated steel, riveted to each flange of the body bow frame.

The roof sheets shall be one section. All roof sheets shall be sealed to prevent leaks. The roof shall be reinforced with two 16 gauge roof crash rails applied internally, riveted through the roof panels and into the roof bows to provide an extra measure of strength in the overhead areas. Exterior panels shall be primed both sides before assembly for rust prevention.

The exterior side panels shall be at least 20 gauge sheet steel, riveted to both flanges of the roof bows. The side sheets shall extend below the center line of the rear axle. The side sheets shall have corrugation between the seat level guard rail and the floor line guard rail. The side panels shall be primed on both sides before assembly.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**FIRE EXTINGUISHER**

Each bus shall be equipped with one dry type chemical fire extinguisher to meet state standards. The fire extinguisher shall be mounted in the accessory compartment located above the windshield. This compartment shall contain a glass in the door so that equipment may be seen and it must be lettered "Safety Equipment Inside" and ALL emergency equipment must be stored in this compartment.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**FIRST AID KIT**

Each bus shall be equipped with a metal type first aid kit meeting state standards. The first aid kit shall be mounted in the accessory compartment located above the windshield. This compartment shall contain a glass in the door so that equipment may be seen.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**TRIANGLE FLARES**

Each bus shall be equipped with a set of triangle flares in accordance with FMVSS. The triangle flares shall be mounted in the accessory compartment located above windshield. The compartment shall contain glass in the door so that equipment may be seen.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**DOCUMENT CONTAINER**

Must include a document pouch visible from the driver seat.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**FLOOR COVERING**

Floor covering shall be heavy duty RCA rubber or equal, gray with white marble. The floor under the seats, over the wheelhouse and in the driver's compartment shall be covered with .125" thick smooth rubber.

The aisle and entrance steps shall be covered with slip resistant .1875" thick ribbed rubber. All floor seams must be sealed with a waterproof sealer and covered with a 1" wide 16-gauge rustproof metal stripping or molding. The floor covering along the wide walls shall be covered with metal molding so that dirt cannot readily work underneath the edges.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**FUEL TANK OPENING**

Exterior: The exterior fuel fill opening shall be covered with a hinged metal door which contains a positive latch **THUMB LOCK COVER.**

Interior: The interior fuel tank opening shall contain an access plate in the floor located above the fuel tank for servicing the fuel tank sender and connections.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**DEFROSTER**

Defroster shall be of sufficient capacity to keep windshield clear of fog, snow, and ice. The defroster shall include full length windshield defroster channel for even distribution of heated area to the windshield. To include two (2) 6" fresh air type defroster fan mounted over center of windshield.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**HEATERS**

All heaters shall be of the copper coil design type with aluminum fins. Heaters shall be plumbed in parallel to obtain the maximum heater output. . Rear heater to be two 84,000 BTU minimum units. One unit to be installed midway right side rear. One to be installed left side rear.

All heaters are to be easily serviceable with cleanable air filters. All heater hoses shall be covered with metal. Front heater shall have a minimum rating of 91,000 BTU's with ducting for driver's heat. Heater ratings shall be based on testing as outlined by SBMI.

Driver's heater required minimum 15,000 BTU's to be located behind driver's seat.

The heater fans shall blow air toward the front and rear. Heater cutoff valves (2) shall be located in the engine compartment.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**HANDRAILS**

There shall be two stainless steel handrails on each side of the entrance door, mounted near the midpoint of the step well and extending to near the top of the seat barrier. Handrails shall be securely attached and designed so as to reduce the likelihood of snagging clothing or other articles.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**IDENTIFICATION**

The bus shall be lettered in accordance with all applicable federal and state requirements. Must include a document pouch.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**INSTRUMENTS, GAUGES, AND SWITCHES**

The chassis instruments and gauges shall be located within easy view of the seated driver. (Also see "instruments" in chassis section.) Two aux. outlets for accessories to be installed in the driver compartment.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**INSULATION**

Ceiling, side and rear panels shall be insulated with a minimum 1 1/2" thick blanket type fiberglass insulation to properly deaden sound, reduce vibration, and provide a thermal barrier. The insulation shall be fire resistance of type approved by Underwriters Labs, Inc. 1/2" sound absorbing foam rubber padding with black vinyl pebble grain surface shall be installed on the toe

Board/firewall area to reduce noise and heat in the driver's area. The insulation shall include full acoustical headlining.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**INTERIOR**

The interior of the bus shall be free of all unnecessary projections likely to cause injury. All interior panels shall have lapped edges. Interior headroom shall be a minimum of 79". (77" over plywood)

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**LAMPS & SIGNALS**

All lamps shall conform to all FMVSS and state laws in effect at time of manufacture. Lights to include:

- **Headlights:** Single sealed beam halogen (42 watt Lo beam/65 watt Hi beam) **With lights on audible alarm reminder.**
- **Cluster:** (3) amber front w/protective shields, (3) red rear, LED
- **Marker:** (2) front comers, (2) rear comers, and (2) side roof with protective shields, LED
- **Stop/Tail:** (1) right rear, (1) left rear -7" minimum, LED
- **Back-up Lamps:** (2) 6 inch LED Assy. with clear lens
- **Step well:** (1) minimum operating with dome light switch
- **Dome:** (10) minimum, (5) rows of (2), two dome switches (front half-rear half), Individual light and switch for driver's area.
- **Directional Front:** (2) rectangular amber, LED
- **Directional Sides:** (2) plain amber, (1) located behind entrance door below window rail; (1) located left side similar position, LED
- **Directional Rear:** To meet state standards, LED
- **Warning Light:** 8-way warning light, LED
- **Reflectors:** (2) on each side of bus, (2) on rear school bus alternately flashing warning lights shall be provided to meet latest state and Federal Motor Vehicle Safety Standards.
- **Stop Arm:** (Two) to meet FMVSS and state specifications, shall be Specialty L.E.D. front and rear.
- **Crossing Arm:** Crossing control arm to be installed. *See front bumper section.*
- **Electrical Comp.:** (2) clear lens for illuminating the electrical control panel (exterior panel)
- **Roof:** 4.5" roof mounted strobe light with guard.

- **Backing Alarm:** The bus shall be equipped with an automatic back-up alarm installed behind the rear axle. This audible alarm shall be rated at 112 dba in accordance with SAE-J-994b.
- **Passenger Advisory System:** CRS Electronics CR2B to be required.
- **OPTIONAL – Driver Alert Electronic Sign:** An electronic sign shall be located on the rear of the bus alternately displaying CAUTION and STOPPING when the overhead amber warning lights are activated. STOP & DO NOT PASS shall alternately flash when the overhead red warning lights are in use. In addition, CAUTION STOPPING shall be displayed anytime the four way flashers are activated.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**MIRRORS**

Interior mirror to be a minimum 6" X 30" safety glass with protected edges

Exterior rearview and cross view mirrors are to be contained in a single assembly. Mirror assemblies to be mounted from a single point on overhang arms. The flat mirror to be 8" x 9.5", convex rear view to be 8.5" x 3", and a convex cross view 9.25" x 9.25". Mirrors arms to have a breakaway feature. Shall be heated and remote controlled.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**MOUNTING**

Bus body shall be mounted to chassis frame in such a manner as to prevent shifting. Two bolts are required on each mounting bracket. Rubber mounting pads reinforced with fiber shall be used to cushion body on chassis at every floor crossing.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**MUD FLAPS**

There shall be mud flaps mounted on the rear side of the front and rear wheels.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**REFLECTIVE MATERIAL**

School bus front and rear, 1" wide rear body, and around all emergency exits and doors. 2" Band length of body.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**RUB RAILS**

Minimum exterior rub rails to be supplied:

- (1) 4 1/4" located below windows
- (1) 4 1/4" located at seat cushion level
- (1) 4 1/4" located at floor level
- (1) 4 1/4" located at skirt level
- (1) 1/8" thick angle located interior of skirt bottom, welded to bottom of bow frames.
- (2) 2-15/16" applied at roof extending the length of the passenger compartment internally

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**SEATS**

**Passenger Seats:** All seats to be designed and installed to meet FMVSS. All seats are to be 45" High off the floor. Seats to be gray upholstery Fireblock. Seat frames shall be powder coated non-reflective black. Cushions to be attached so as to prevent detachment from frame in collisions yet allowing for cleaning by pivoting upright.

Barriers are to be covered in Fireblock material.

At all side emergency doors there shall be an automatic flip-up seat. The seat cushion shall be designed to rise to a vertical position automatically when not occupied. Flip seat back shall be recessed to allow for seat cushion to fit into back when in the upright position.

**Driver's seat:** Air ride seat shall be high back with adjustable seat back. Seat back to recline 15° and include adjustable lumbar support. Seat cushion width shall be minimum 20" and offer forward cushion tilt for optimum driver comfort. Seat slide shall have minimum 7" adjustment by finger-tip control. Vertical movement to be air controlled. Two folding arm rests required. Upholstery to be black fabric inserts. Seat to meet FMVSS 202 and 222. Driver's seat storage pouch to be included.

**Driver's seat belt:** Shall be a Type II, 3-point belt with an adjustable "D" loop for driver comfort. The belt shall be ELR design with a push button release. Color: Orange

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**SOUND ABATEMENT PACKAGE**

To include one half inch sound abatement material in step well on fire wall. All ceiling panels to be perforated headliner.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**STEPWELL**

Three-step entrance covered with black slip resistant ribbed rubber with white nosing. Diamonette trim on floor edge to prevent wear. Entrance grab handle to be provided. Aluminized steel step well liners. There shall be a guard for the entrance door step well that will protect the front corner of entrance door step.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**SUNVISOR**

Visor to be a minimum 6" X 30" dark Plexiglas and fully adjustable

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**SWITCH PANEL**

Panel shall be mounted to the left of the driver with switches for the electrical components. Control panel indirectly illuminated and controlled by the headlamp switch rheostat. Each switch shall be individually backlit, provide international symbols, labeling and be controlled by the headlamp switch. Switches to be mounted at a 45 degree angle for driver comfort and better visibility. The side of the switch panel shall include a storage area for driver's maps and papers. **Two (2) Aux Outlets for accessories to be installed in the driver compartment.**

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_



**UNDERCOATING**

Entire underbody to be completely undercoated with wax base undercoating material or equivalent.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**VENTILATION**

Body shall be equipped with a static type, non-adjustable exhaust ventilator located in low pressure area of front roof. A driver controlled fresh air vent shall be supplied.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**VISIBILITY**

The design of this bus shall be such that the seated driver shall be able to view the ground by direct visibility along with a parallel line 10' forward of the front bumper the entire width of the bus. For the purpose of complying with this requirement, test to be conducted in accordance with SALE J-941 utilizing the dimensions of a 95th percentile adult male.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WINDOWS**

Two-piece side windows to be of safety tinted tempered glass mounted in flat black power coated aluminum frames. The top portion of the side windows shall be capable of being lowered to a position that provides an opening at least 12" X 22". All latches shall be removable and replaceable without removing the window.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WINDSHIELD**

Two piece flat safety glass laminated glass, set in rubber, slanted to reduce glare and provide maximum vision. Shall be tinted. 3,462 sq. in. clear opening minimum, with a 5" glare resistant band at top. The windshield area and window posts shall be painted with glare resistance flat black.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WINDSHIELD WIPERS**

Bus to be equipped with two heavy duty electrically operated wet arm type bottom mounted wipers. Wipers to be variable speed. Access to wiper motors through exterior panels.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WINDSHIELD WASHER**

Dual electric wet arm type windshield washers are required. Washer bottle to be accessible through front service panel.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**REAR ACCESS PANEL**

There shall be a removable panel, meeting 60% joint strength, located in the center of the rear Davenport seat allowing access to the top of the engine. The panel shall be screwed in place and include insulation with a sealant that will prevent heat and fumes entering the passenger compartment.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**WARRANTY**

SCHOOL BUS BODY WARRANTY: A copy of the body manufacturer's warranty shall be included with and become a part of any bid which shall receive consideration by the purchaser. No warranty other than manufacturer's five year limited warranty will be accepted. Such warranties shall speak specifically to the following:

Within the **first five years/unlimited mileage following delivery** to the purchaser's location:

- Failure in major structural components including those caused by deterioration due to rust.
- Rust performance of sheet metal surfaces and paint adhesion.
- Failure in seat frames and barrier frames.

Within the **first two years/unlimited mileage following delivery** to the purchaser's location:

- Failure of any components manufactured by outside suppliers and included as original equipment by the body manufacturer. Where the outside supplier's warranty exceeds that of the body manufacturer then such warranty shall be stated and shall apply.

Within the **first year following delivery** to the purchaser's location:

- Failure of any components manufactured by outside suppliers and included as original equipment by the body manufacturer. Where the outside supplier's warranty exceeds that of the body manufacturer then such warranty shall be stated and shall apply.

SCHOOL BUS CHASSIS WARRANTY:

- A copy of the chassis manufacturer's warranty shall be included with and become a part of any bid which shall receive consideration by the purchaser. No warranty other than manufacturer's five year warranties shall speak specifically to the following:
  - Within the **first five years/unlimited mileage following delivery** to the purchaser's location:
    1. Failure of the chassis frame including cross members.
  - Within the **first two years/unlimited mileage following delivery** to the purchaser's location:
    1. Failure of any other components manufactured by outside suppliers and included as original equipment by the chassis manufacturer then such warranty shall be stated and shall apply.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_

**BID REQUIREMENTS**

All bidders must include a copy of the proposed floor plan showing knee room spacing. Buses are to be thoroughly cleaned before delivery. Delivery desired as soon as possible.

Please state earliest delivery date: \_\_\_\_\_

**TRAINING**

The successful bidder must provide a minimum of 16 hours of training for the mechanical staff: It will be necessary to have this training at the Roane County Schools Transportation Facility. This must be done by the manufacturer providing a mobile training classroom. All training will be at the successful bidder's expense.

No traveling by school employees will be allowed for this training.

**LITERATURE**

A parts manual for each unit is to be included.

Broadcast sheets or access to build list for each unit to be included.

**PRICING**

Bidders are to add a \$2,000 allowance in their bids for cameras to be selected by the owner. It is an add allowance. It is in addition to the total bid for each bus. It for the successful bidder to purchase or purchase and install an owner selected camera system. Any additional cost or savings accrues to the owner. It is an add allowance. It is in addition to the total bid for each bus. It for the successful bidder to purchase or purchase and install an owner selected camera system. Any additional cost or savings accrues to the owner.

Pricing is requested as follows:

DESCRIPTION	PRICE
<b>PRICE FOR FIVE (5) 84 PASSENGER BUSES AS SPECIFIED</b>	
<b>OPTIONAL DRIVER ALERT ELECTRONIC SIGN (ADD PER BUS)</b>	

**DELIVERY**

Delivery is required by July 4, 2016. Deliverability may be used as a consideration for award of the bid.

Meets or Exceeds  Yes  No – Exceptions \_\_\_\_\_