

# Bid Specifications for 2020 Type C 77-Passenger Diesel School Buses

Chassis to be new Type C model as described in these specifications. Minimum specifications are listed below, and each bidder must state the compliance details that pertain to the unit indicating size, quality, range and information as necessary to determine unit quality. Bidder's specifications must meet or exceed the minimum specifications listed and must detail any variance or deviations from specification. Any spaces that ask for a specific detail, type of component, or other pertinent information regarding the specification must be filled in to be considered a responsive bid. All chassis and body specifications shall meet or exceed those specifications as set forth by the Federal Department of Transportation, Federal Motor Vehicle Safety Standards, and the 2017 Missouri Minimum Standards for School Buses (or as may be in effect) at time of manufacture.

These specifications must be filled out and returned with bid to be considered. Marking YES means you meet Specifications exactly. Marking NO means you must fill out an Variance From Specification comment to the right of the YES/NO checkboxes. Failure to do so will result in bid being disqualified.

**NEW 2020 77-PASSENGER SCHOOL BUS CHASSIS AND BODY SPECIFICATIONS**

YES	NO	VARIANCE FROM SPECIFICATION
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**Chassis: New 2020 Model chassis for 77-passenger capacity school bus body**

**Wheel base:** 276" minimum required axle to axle centers for type of bus bid.

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**Frame Rails:** high strength, low alloy steel, 50,000 PSI

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**Bumper, Front:** Full width aerodynamic, 1/4" minimum thickness, 14" height heavy-duty steel.

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**Bumper, Rear:** 14" high, 1/4" minimum thickness

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**Frame Members, Attachment, & Supports:** all frame members, attachments and supports shall be attached using minimum Grade 8 bolts and/or fasteners

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**Chassis Frame Rails and some Attachments:** Powder-coated black finish for maximum rust and corrosion protection

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**Axle, Front:** 10,000 lb. capacity with oil-lubricated wheel seals/hubs, with front shock absorbers

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**Required:** State front axle warranty

**Suspension, Front:** 10,000 lb. taper leaf design with rubber bushings, and shock absorbers.

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**Axle, Rear:** Single reduction with gearing that will support efficient highway driving speeds. Shall include a magnetic drain plug.

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**Rear suspension:** 21,000 lb. Capacity, with heavy-duty shock absorbers and leaf springs

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**Steering:** Power assist type steering gear

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**Steering Shaft:** U-Joints shall be serviceable with grease fittings.

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YES	NO	VARIANCE FROM SPECIFICATION
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**Steering Column:** Tilt automotive adjustable type.

**Steering Wheel:** the steering wheel shall be cushioned, 18" in diameter.

**Adjustable Foot Controls:** electric with switch control - **REQUIRED**

**Cruise Control:** electronic

**Tow hooks:** 2 mounted front & 2 mounted rear

**ENGINE AND TRANSMISSION**

**Engine, Diesel:** - Turbo-charged, in-line 6 cylinder diesel engine, 250 HP. 660 ft/lb torque rating, or better. Must meet current EPA engine emissions standards. Preferred engine is Cummins ISB.

**REQUIRED: List engine make, model, & HP rating**

**Transmission:** Allison PTS2500 5-speed automatic transmission with overdrive.

**Exhaust System:** Diesel particulate filter to meet 2010 emission requirements

**Cooling system:** Heavy duty with viscous fan clutch and visible coolant level check system

**Engine block heater:** Minimum 750-watt with male socket mounted in front bumper.

**Alternator:** Leece-Neville, 240 amp (or equivalent)

**Battery System:** Three Group 31 maintenance free batteries with a minimum combined rating of 2,850 CCA's.

**Battery Box:** battery box shall be body mounted, vented and sealed from road contaminant. In addition, the battery tray shall be equipped with rollers for ease of movement. Batteries to be accessible by opening door only without the need to remove a cover.

**Exhaust system:** Single horizontal with aluminized muffler, heat shields and left side tailpipe exit **prior to rear axle** is preferred.

**Electrical System:** 12 volts, negative ground. All wiring shall be color coded, numbered,

**Wiring Protection:** all wiring shall be protected in a continuous loom and include grommets.

**Chassis Electrical System Connectors:** all chassis connectors shall be moisture sealed and SAE automotive locking type.

YES	NO	VARIANCE FROM SPECIFICATION
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**Electronic Diagnostics System:** the bus shall be equipped with an on board dash LCD diagnostic display which can display fault codes for engine and chassis that can be read with a laptop computer device attached. A copy of the appropriate engine diagnostic software must be included as a part of the vehicle purchase.

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**Air Cleaner:** Bus shall be equipped with screen integrated with the hood air intake to remove moisture and large debris.

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**Air Cleaner Filter:** the filter shall be removable without the use of mechanical tools, and shall include an air restriction indicator

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**Engine coolant:** Shall be extended life coolant and pre - set to minimum of - 30°F.

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**Throttle and Cruise Control:** Engine electronics to include electronic throttle and cruise control.

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**Engine Alarm System:** Bus shall be equipped with both visual and audible alarms notifying the driver in the event of low oil pressure or high water temperature.

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**Fast idle switch:** electric

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**Low Voltage Protection Indicator:** Bus shall be equipped with both visual and audible alarms notifying the driver of a low voltage occurrence.

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**Headlights:** Replaceable halogen bulb without the use of tools for increased light output with Lexan cover for durability and safety.

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**Daytime Running Lights:** Headlight operation controlled by ignition switch. System to be capable of being deactivated by applying the parking brake except when the red warning lights are active.

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**Full Instrumentation:** Voltmeter, Oil and Temperature Gauges, Speedometer, Trip Odometer, Tachometer, Fuel Gauge. Additionally, the instrument panel shall be illuminated and include text light indicators monitoring both the amber and red warning light activations, emergency exit door opening, low coolant level and cruise control activation.

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**Body Circuit Cutoff:** Body circuit electrical disconnect solenoid, all body circuits, wired through ignition switch

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**Horns:** Dual electric horns.

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**BRAKE SYSTEM**

**Brake System:** Air-operated, S-Cam Dual System with ABS. Non-asbestos brake linings, with 15.0" X 4.0" front brakes and 16.5" X 7.0" rear brakes. Primary/secondary mechanical air pressure gauges and low air pressure warning light and buzzer.

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YES	NO	VARIANCE FROM SPECIFICATION
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**Air Dryer:** Bendix AD-9 dryer with heater,

_____	_____	_____
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**Automatic slack adjusters:** Vehicle shall be equipped with Haldex automatic slack adjuster front and rear

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**Air compressor:** shall be a minimum of 18.7 CFM capacity,

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**Drain Valve:** Bendix DV-2, Automatic with heater on all tanks

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**Parking Brake:** chassis shall be equipped with air-operated, spring-loaded parking brakes on the rear axle that are activated by a dash - mounted switch/valve

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**FUEL**

**Fuel Tank:** 100 gallon steel diesel tank mounted between-the-rails, with protective skid plate

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**Fuel Tank Sender Inspection Plate:** an inspection plate shall be mounted over the fuel tank in the floor of the bus body.

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**Fuel/Water Separator:** heated

_____	_____	_____
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**Low Fuel Level Indicator:** Bus shall be equipped with a visual alarm light notifying the driver in the event of low fuel level.

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**Heat Shields:** heat shields shall be located between any part of the fuel system that is 12" or closer to any part of the exhaust system

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**Fuel filler door:** to be equipped with a non-locking latch (not just spring loaded to hold it closed)

_____	_____	_____
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**WHEELS AND TIRES**

**Wheels:** 8.25" x 22.5" steel disc, hub piloted, 10 Stud, painted high gloss black

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**Tires:** Hankook AH-12 11R22.5 14-ply tires on all 6 tire positions. Preferred tires, but equivalent will be accepted.

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**MISCELLANEOUS**

**Winterfront covers:** Yellow snap-on & removeable

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**Hood:** the hood shall be constructed of molded fiberglass with such a design to incorporate a replaceable yellow grill, and a side-mounted air engine air intake grill feature that filters out large particles prior to reaching the air filter.

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**Hood Wire Harness Assembly:** headlight and turn signal wiring harness shall have a quick disconnect connector at, or near, the bumper.

YES	NO	VARIANCE FROM SPECIFICATION
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**Road speed governor:** Electronic

_____	_____	_____
_____	_____	_____

**Windshield wipers:** 5-speed intermittent electric

**WARRANTIES**

***(Bidders must provide a copy of warranty certificates for covered components with the bid detailing all warranty coverages)***

**Towing:** Minimum 2 yrs/10,000 miles  
***Include warranty provided with bid***

_____	_____	_____
_____	_____	_____

**Transmission:** 5 yrs/Unlimited miles  
***Include warranty provided with bid***

_____	_____	_____
_____	_____	_____

**Engine:** 5 yrs/100,000 miles **minimum**  
***Include warranty provided with bid***

_____	_____	_____
_____	_____	_____

**Chassis:** 1 Year Unlimited Mileage Chassis Warranty  
***Include warranty provided with bid***

_____	_____	_____
_____	_____	_____

**BUS BODY SPECIFICATIONS**

**Capacity:** 77 passengers

_____	_____	_____
_____	_____	_____

**Headroom:** Minimum 78" measured at the center of the aisle with 12" window sashes.

_____	_____	_____
_____	_____	_____

**Stepwell:** Three-step design. The stepwell shall be constructed of 14 - gauge galvanized steel, welded and sealed to the main floor structure. Steps shall be covered with ribbed rubber treads, color matched to the main floor of the bus, with white safety nosing on all steps. Back edges of all step treads shall be sealed at the joint where they meet the risers to prevent moisture and dirt from collecting between the tread and riser.

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_____	_____	_____

**Exterior Paint:** Baked-on polyurethane National School Bus Chrome yellow paint on exterior, with black guard rails, bumpers, and state required warning light backgrounds. Window pilasters may be yellow or black. Roof to be painted white. Paint to have a 5-yr warranty against all defects.

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_____	_____	_____

**Interior Paint/Side panels:** Baked-on polyurethane interior, manufacturer's standard color. The interior side panels below the windows shall be constructed of aluminized steel. Paint to have a 5-yr warranty against all defects.

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YES	NO	VARIANCE FROM SPECIFICATION
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**Undercoating:** Two - stage process to include complete undercoating of the bus body prior to mounting the body on the chassis for complete body coverage. After body mounting a second undercoat shall be applied for maximum corrosion and rust protection.

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**Floor Covering:** Koroseal with ribbed center aisle with aluminum aisle trim. Flooring material to be black or grey marbled.

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**Wheel House Covers:** The wheelhouses shall be covered with ABS composite or similar material.

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**Body Side Panels:** the side panels shall be constructed of a minimum 16 - gauge steel with a smooth panel appearance.

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**Upholstery:** **Blue, 42 oz fire-block** on all passenger seats, barriers, and header bumpers

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**Insulation, thermal & noise:** Minimum of 2" fiberglass insulation located in roof, sides, and end caps. Driver area floor and firewall noise insulation package.

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**Headliner:** Ceiling panels are to be perforated with sound insulation, full length of bus

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**Stairwell Assist Rail:** 1" diameter, both forward (RH) and aft (LH) of the entrance door.

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**Rear Door Hinges:** The rear emergency door shall be constructed with hinges that include grease fittings on any external hinges that are exposed to the elements or road debris.

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**Rub Rails:** (4) including snow rail: All rub rails shall be painted high-gloss black, and shall be finished on all ends with a metal end cap.

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**Drip Rails:** Run the full length of the body. Forward end of the RH side drip rail shall have a diversion channel to ensure that water does not drip down directly over the entrance door. The left side shall have the same type of water diversion over the driver's window to prevent dripping into the driver's window.

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**Cowl Steps:** Two, fold down.

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**Sub-floor:** 5/8" exterior grade plywood

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**Front and rear doors:** to have 4" padded header over the doors

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**Driver Seat:** Air Suspension, 6 to 17 degree seat back adjustment, mechanical lumbar support, **cushion adjustment at rear-mechanical(if available)**, right side arm rest, black.

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**Driver seat belt:** Orange, 3-point DOT shoulder belt

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YES	NO	VARIANCE FROM SPECIFICATION
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**Driver storage area:** Must be an area with door/lid enclosure with a built-in cup holder and USB accessory port.

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**Passenger seats:** to be Missouri high back, 39", blue "Fire Block" upholstery. Seats to be on 27.75" centers,

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**Passenger Barriers:** DOT approved fully padded upholstered to match seats

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**Seat covers:** to have a minimum 1-year warranty from manufacturers defects.

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**Modesty panels:** to be installed between floor and the bottom of both left and right side barriers

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**Entrance door:** air operated outward opening door switches left of driver with exterior key lock.

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**Emergency Windows:** four windows, two left & two right with appropriate lettering for "Emergency Exit". All windows to be aluminum split sash.

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**Passenger windows:** to be tinted to 28% light

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**Windshield:** shall have tinted band at top.

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**Defrosters:** full window width, hot air defrost and two 6.5" defrost fans, one center, one left of driver

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**Windshield wipers:** to be bottom mounted with individual electric motors, intermittent control switch and wet arm style.

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**Rear door:** to be designated "Emergency Exit" with decal mounted ABOVE door, or on uppermost portion rear door glass (any lower installation will not be acceptable) and audible alarm when opened. Must be lockable from inside with ignition "kill switch" when locked.

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**Heaters:** 90,000 BTU or equivalent front, minimum 30,600 BTU stepwell, 84,000 BTU midship and rear with two motors and separate switches. MUST include hot water booster pump. **Heat level to be driver controllable - variable rotating knob**

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**Heater cut off valve:** gate, 3/4"

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**Two-way radio & video power source:** The LH area of the front header (bulkhead) shall include a stubbed-in 12V, circuit-protected power source for the installation of a two-way radio and video system. This circuit must be labeled at circuit breaker panel.

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**Crossing arm:** Electrically operated with interrupt switch.

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**Roof hatches:** (2) Transpec 1975-028-121-03

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**All body circuits:** protected circuits

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**All body wiring:** to be color coded and numbered.

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YES	NO	VARIANCE FROM SPECIFICATION
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**Mirrors**

<b>Interior rear view:</b> 6 x 30	_____	_____	
<b>Cross View Mirrors:</b> - Heated and properly braced	_____	_____	
<b>Exterior View:</b> - Heated, individually remote adjustable by driver.	_____	_____	
<b>Sun visor:</b> 6" x 30"	_____	_____	

**Lighting**

*(all exterior lighting can be either incandescent or LED)*

<b>Tail lights:</b> 4" to meet state specifications	_____	_____	
<b>Stop/tail lights:</b> (2) 7"	_____	_____	
<b>Turn signals, front mounted:</b> (2) incandescent or led headlight assemblies	_____	_____	
<b>Turn signals, side mounted:</b> shall be armor protected, and mounted per state specifications	_____	_____	
<b>Master cut-off:</b> Ignition operated master cut-off switch, all body circuits.	_____	_____	
<b>8-way lights: with weather hoods,</b> switches left of driver	_____	_____	
<b>Stop arm:</b> front and rear, Specialty Mfg 6000 Series, electrically-operated stop arm wired for automatic operation with entrance door to meet Missouri specs	_____	_____	
<b>Back-up lights:</b> (2) 7" Clear	_____	_____	
<b>Step well light:</b> operated by door opener	_____	_____	
<b>License plate light</b>	_____	_____	
<b>Dome lights:</b> Two rows of recessed dome lights	_____	_____	
<b>Driver's dome light:</b> on separate switch	_____	_____	
<b>Dome light over emergency door:</b> Single, on separate switch	_____	_____	
<b>Strobe light:</b> Roof mounted, white, single-flash strobe light	_____	_____	
<b>Back-up alarm:</b> 112db	_____	_____	
<b>Fire extinguisher:</b> 5-lb, with hose, mounted near entrance door	_____	_____	
<b>Body fluid clean up kit:</b> mounted on front header.	_____	_____	



**First aid kit:** mounted near entrance door

YES	NO	VARIANCE FROM SPECIFICATION
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**Emergency triangular warning kit:** mounted on drivers barrier level with top of modesty panel

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**Reflexite V82 grade reflective tape:** extending down both sides, on rear both vertically and horizontally and "SCHOOL BUS" lettering on front and rear.

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**Reflectors:** as required by Law.

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**Seat Belt Cutter**

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**Lettering:** Exterior per Missouri state minimum specifications. District numbering shall be in four locations with 2-digit numbers, to be determined. Beltlines (side lettering) shall read: **PLATTE CO R-3 SCHOOL DISTRICT (in 6" letters)**

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**Additional Equipment:**

**Certificate holder:** (2) 9 3/8" X 6" with transparent covers

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**Radio/PA:** AM/FM/-MPLX Stereo with antenna and cables with interior PA and 8 speakers

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**Post Trip Child Inspection System:** The bus to be equipped with a Child-Chek system, or equivalent, that is activated by the driver activating the red warning lights and opening the entrance door while on route. The system shall be designed so as to require the driver to walk to the back of the passenger compartment upon completion of their route to disarm. If not disarmed, the headlights will flash and the horn will sound alerting personnel the bus was not checked to ensure all students have exited the bus.

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**Underbody Luggage Compartments:** Option to include the maximum amount of underbody storage available between the front and rear axles on the applicable bus you are bidding. Do not include any underbody luggage compartments aft of the rear axle. The luggage compartments doors shall be constructed with hinges that include grease fittings on any external hinges that are exposed to the elements or road debris. **Please list quantity and sizes of compartments being bid.**

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**Passenger Seat: Two (2)** Seats meeting all Missouri State specifications with 2 5-point integrated seats and seat belts. Seats would be placed in first row immediately behind driver seating area.

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### **Vendor Notice**

**The successful bidder shall be responsible for the transfer and proper installation (cameras, recording unit and light indicators connected) of existing Seon cameras and mobile video recording equipment from the trade-in to the new vehicle. Buyer will remove the camera equipment from the trade-in bus(es).**

## INSTRUCTIONS TO BIDDERS

The school bus body and chassis furnished must comply with all current rules, regulations and standards as established by the State of Missouri and Federal Government in effect at the date of manufacture.

Invoice(s) for net purchase price should be made to the Platte County R-3 School District, and must be dated on or after October 1, 2019. The district is exempt from sales tax, and a Missouri state tax exemption certificate will be furnished upon request. Destination or freight charges shall be included in this bid (FOB Platte City, MO). Payment will be made upon the completion of a satisfactory inspection for specification compliance and final acceptance of units.

It is the intent of the Platte County R-3 School District to procure three (3) new 2020 model 77-passenger buses and to trade-in three (3) of our current fleet buses. The Board of Education reserves the right to buy outright, or to trade any or all trade-in units as indicated, and to accept the bid that is in the overall best interests of the Board of Education.

Delivery of completed units must be made in the month of October.

Bids shall be enclosed in an envelope and marked as follows:

“BUS BID” – lower left hand corner

“NAME OF BIDDER” – upper left hand corner

**Bids are due no later than 10:00 am CST on Tuesday April 30, 2019.** Any bids received after that will be considered as "non-responsive" and will be returned to the bidder unopened.

Any and all exceptions to the specifications outlined herein must be noted and thoroughly explained in the bid proposal. The terms “no structural differences” or “we are equal to your specifications” will not be permitted. It will be the responsibility of the Board of Education or their representatives to determine if a substitution to the specifications is considered “equal to”. The bidder must provide detailed specifications for any exceptions so the Board of Education can make the necessary comparisons to enable a proper decision. Failure to do so may result in rejection of your bid for non-compliance. These specifications must be returned with the proposal.

# Platte County R-3 School District

## 2020 Model School Bus Bid Sheet

**COMPANY BIDDING** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_

**PHONE** \_\_\_\_\_

**Chassis Model:** \_\_\_\_\_

**Body Model:** \_\_\_\_\_

**Engine Model and HP rating:** \_\_\_\_\_

**Purchase Price**

**Base price per unit,** \_\_\_\_\_

\_\_\_\_\_

**Estimated delivery after receipt of order** \_\_\_\_\_

<b>TRADE-IN ALLOWANCES:</b>	_____	(1) #40 2004 Thomas 77 pax , VIN# 1T88S4C2251155621	166,690 mi *
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_____	(2) #26 2006 Bluebird 77 pax VIN:1BABKCKA96F234518		195,123 mi *
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_____	(3) #12 2004 Thomas 77 pax VIN:1T88S4C2841140653		131,096 mi *
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\* mileage as shown on odometer as of 3/5/2019

**(Note trade in bus units may change)**

Completed bus(es) will meet or exceed the specifications and provisions as outlined in the enclosed bid specifications letter unless variances have been clearly noted in writing on the above specification sheet.

\_\_\_\_\_  
Authorized Selling Agent  
*(please type or print)*

\_\_\_\_\_  
Signature and Date

