

BID SPECIFICATIONS

NJ Type B School Vehicle 2 Wheelchairs + 12 Ambulatory Flexible Floorplan to 3 W/C or 20 Ambulatory Gas Engine

1.0 QUALIFICATIONS

- 1.1 The manufacturer of the body must be ISO 9001:2000 certified. Written certification of compliance shall be included with the bid submission documents.
- 1.2 The body manufacturer shall have been in business of manufacturing school vehicles for a minimum of 10 years and maintain product liability insurance of not less than \$10 million.
- 1.3 The bidder shall have operated as a vehicle dealer, having distributed school vehicles and maintained a repair facility and parts distribution center located in New Jersey for a minimum of 5 years prior to the date of bid. A copy of NJ Dealers License shall be included with the bid.
- 1.4 These specifications are for vehicles meeting all applicable New Jersey and Federal requirements and a "Vendor Certification Statement" certifying same shall be provided at time of delivery.

Exceptions:

2.0 BODY

2.1 SEATING

- 2.1.1 Floorplan: Shall consist of, on the driver's side, two rows of 45" seats with seat track capable of accommodating 3 additional rows of seats; on the curb side, three rows of 30" seats.
- 2.1.2 Covering: Shall be heavy-duty gray vinyl meeting the criteria contained in the NSFSB Fire Block Test for school bus seat upholstery.
- 2.1.3 Seat Backs: Shall be 28" in height.
- 2.1.4 Seat Belts: A color-coded seat restraint shall be provided for each seating position.
- 2.1.5 Restraining Barriers: Which meet FMVSS 222 shall be provided behind the entry door and driver's seat, the same width and height as the seat backs behind them.
- 2.1.6 Driver's Seat: Shall be OEM high back type, re-covered in Fire Block upholstery.

Exceptions:

2.2 DIMENSIONS

- 2.2.1 Vehicle Length (minimum inches): 261
- 2.2.2 Exterior Width (maximum inches): 95
- 2.2.3 Interior Height at Aisle (minimum inches): 76
- 2.2.4 Interior Width at Seat Level (minimum inches): 91

Exceptions:

2.3 CONSTRUCTION

- 2.3.1 Body Structure: Shall be certified by the manufacturer to comply with FMVSS 220 for rollover protection and FMVSS 221 for joint strength integrity.
- 2.3.2 Exterior Panels: Shall be zinc coated galvanized steel for strength, corrosion resistance and ease of repair. *Aluminum panels are not acceptable.*
- 2.3.3 Interior Sidewalls: Panels below the windows must have a galvanized finish to prevent scratches.
- 2.3.4 Roll Cage: Shall be of steel that is galvanized and welded with continuous welds at each attachment point.
- 2.3.5 Roof: Shall be designed with one exterior seam, to minimize the possibility of leakage during the life of the vehicle. *Multiple roof seams are not acceptable.*
- 2.3.6 Rub Rails: Steel guardrails shall be located at floor, seat, and skirt levels. All rails must wrap around the rear corners and shall be one piece with formed ends. *Rub rails comprised of spliced sections or with separate end caps are not acceptable.*
- 2.3.7 Rear Bumper: Shall be of pressed channel minimum 3/16" thick, 10" in height with 2" deep flanges. Molded ABS shrouds shall be provided to protect the leading edge of the bumper from catching on passing objects

Exceptions:

2.4 FLOOR

- 2.4.1 Flat-floor: Wheel wells shall not protrude into the passenger compartment.
- 2.4.2 Sub-flooring: Shall consist of a full length galvanized steel panel, laminated to 5/8" plywood.
- 2.4.3 Covering: The under-seat area shall be covered with smooth rubber, min. 1/8" thickness; aisle and platform to be covered with ribbed rubber minimum 3/16" thickness, angled at entry for easy sweep out.
- 2.4.4 Access Plate: Shall be provided in the floor to access the fuel tank-sending switch.

Exceptions:

2.5 INSULATION & RUST-PROOFING

2.5.1 Insulation: 1 ½" fiberglass insulation shall be installed in the side walls, rear wall and end caps.

2.5.2 Undercoating: The underside of the body shall be completely coated with an asphalt or rubber base material in compliance with NJDMV requirements.

Exceptions:

2.6 PAINT

2.6.1 Exterior: The vehicle shall be finished in an acrylic urethane enamel of National School Bus chromium yellow.

2.6.2 Warranty: The paint shall have a limited lifetime warranty. *A copy shall be provided with the bid.*

2.6.3 Roof: Shall be painted white to reduce heat build up.

2.6.4 School Bus Signs: Shall be of reflective material, front and rear

2.6.5 Rub Rails: All rub rails shall be painted black.

2.6.6 Reflective Tape: 2" yellow retro-reflective tape shall be installed along the full length of each side of the body, outlining the rear of the bus and around all emergency exits.

2.6.7 Lettering: Vehicle shall be lettered per Board's specifications.

Exceptions:

2.7 DOORS

2.7.1 Entrance Door: Shall be 2 leaf outward opening, providing a clear opening of at least 24" x 82". AS2 glass panels shall be provided in the upper and lower portion of each leaf. Lower glass must be located within four inches of the first step top surface.

2.7.2 Door Control: Must include a swing away mounting that allows easy access to the engine cover with the removal of a single retaining bolt.

2.7.3 Grab Handles: Of stainless steel shall be provided on both sides of the interior doorway.

- 2.7.4 Emergency Door: Shall have a clear opening of at least 36" x 50" with a stainless steel continuous hinge and include upper and lower glass providing a minimum viewing area of at least 1,100 sq. in., a buzzer to indicate when door is unlatched and a positive device to hold the door open.
- 2.7.5 Vandal Lock: A device shall be provided to enable locking of rear door with a starter interrupt.
- 2.7.6 Driver's Door: Shall include an exterior rub rail.

Exceptions:

2.8 WINDOWS

- 2.8.1 Split Sash: Windows with black anodized aluminum frames, 28" x 28" nominal, shall be provided on each side, providing minimum 9" vertical openings.
- 2.8.2 Tinted Glass: With 27% light transmission shall be provided in split sash to reduce heat build up.
- 2.8.3 Rear Glass: All glass in the back of the bus shall be clear. *Tinted is not acceptable.*
- 2.8.4 Emergency Egress: One push-out exit window shall be provided on each side, not directly opposite each other. They shall be vertically hinged on the forward side of the vehicle, and include a buzzer in driver's compartment to warn if un-latched.

Exceptions:

2.9 MIRRORS

- 2.9.1 Rear View: Power remote mirrors with heating elements shall be mounted on each side meeting FMVSS 111.
- 2.9.2 Cross-Over: Heated 9" x 13" elliptical mirrors meeting FMVSS 111 shall be provided.
- 2.9.3 Interior: A 6" x 16" safety glass rear view mirror shall be provided.

Exceptions:

2.10 ELECTRICAL

- 2.10.1 Electrical Panel: The body electrical panel shall be located in a compartment in the front header above the windshield for easy access.

- 2.10.2 Wiring: All wiring shall be color-coded and function-labeled. Pre-wired harness shall be routed above the windows inside an easily removable molding. Circuits must be protected by circuit breakers.
- 2.10.3 Wiring Diagrams: Shall be provided with the vehicle, which references the color-coding.
- 2.10.4 Control Panel: A panel containing back-lit rocker type switches must be mounted near the passenger door control for easy access by driver.
- 2.10.5 Warning Lights: A halogen eight lamp sealed beam school bus warning system mounted on black headers with visors, shall be provided with a solid-state flashing unit activated by a foot switch.
- 2.10.6 Monitor System: A 16 lamp system shall be provided to indicate positive operation of school bus lamps, brake lights, rear turn signals and back-up lights.
- 2.10.7 Exterior Lighting - - shall include:
 - 2.10.7.1 I CC clearance Lights – LED type, recessed in caps with armor shields;
 - 2.10.7.2 Stop/Tail Lights - two red 7" and two flush mounted 4" lamps on rear of vehicle;
 - 2.10.7.3 Rear Turn Signals - two 7" lamps;
 - 2.10.7.4 Side Directional Signals – with armor shields on each side of body behind doors;
 - 2.10.7.5 Back-up Lights - two recessed 4" lamps, minimum, which shall be wired to activate with opening of the rear emergency door
- 2.10.8 Interior Lighting – shall include:
 - 2.10.8.1 Stepwell Lighting - two stepwell lamps, activated by opening entrance door.
 - 2.10.8.2 Dome Lights – 2 lamps shall be installed on each side of the passenger compartment, and an additional dome light provided over the driver door.
- 2.10.9 Radio: An AM/FM /CD stereo including clock, antenna and 4 speakers shall be provided.

Exceptions:

2.11 HEATERS / VENTS

- 2.11.1 Heater / Defroster: Hot water type as supplied by chassis manufacturer to be deluxe, high-output, with defroster.
- 2.11.2 Rear Heater: A 60,000 BTU min. heater shall be mounted on the rear wall and include two shut-off valves and line bleeder. There shall also be a water flow regulating valve installed in the pressure line for convenient operation by the driver while seated to control temperature output..
- 2.11.3 Air Conditioning: A 45,000 BTU minimum system consisting of both a front and rear evaporator shall be provided. The rear evaporator must be flush mounted in the rear wall of the vehicle. NO EXCEPTIONS.

Exceptions:

2.12 SAFETY EQUIPMENT

- 2.12.1 Stop Arm, with a reflectorized blade.
- 2.12.2 Crossing Control Arm with a yellow polycarbonate arm and magnetic holder.
- 2.12.3 Safety Hatch: Two (2) Transpec Low Profile ventilator/emergency exits with exterior handles and ajar buzzers shall be installed in the bus roof.
- 2.12.4 Back-up Alarm
- 2.12.5 Strobe Light: The vehicle shall be pre-wired for the installation of a strobe light one foot from the rear of the roof.
- 2.12.6 First Aid Kit - NJ approved
- 2.12.7 Fire Extinguisher - 2A10BC with hose and gauge
- 2.12.8 Triangle Reflector Kit
- 2.12.9 Pry Bar - 30" long, secured accessible to driver
- 2.12.10 Gas Cap Retention Tether
- 2.12.11 Seat Belt Cutter
- 2.12.12 Storage – A compartment with finished interior shall be provided above the driver's door.

Exceptions:

3.0 CHASSIS

- 3.1 ENGINE: Gas – 6.0L with one 600 CCA Battery, minimum.
- 3.2 WHEELBASE: 139 inches, minimum
- 3.3 G.V.W.R.: 12,300 pound, minimum
- 3.4 ALTERNATOR: 145 amp, minimum
- 3.5 FUEL TANK: 33 gallons, minimum
- 3.6 TRANSMISSION: 4 Speed Automatic with Heavy Duty Cooler
- 3.7 BRAKES: Power - Four Wheel Disc with Anti-lock
- 3.8 TIRES: All Season Radials
- 3.9 MISCELLANEOUS
 - 3.9.1 Power Steering
 - 3.9.2 Tilt Steering Column
 - 3.9.3 Daytime Running Lamps
 - 3.9.4 Intermittent Windshield Wipers
 - 3.9.5 Heavy Duty Cooling
 - 3.9.6 Drive Shaft Guards at each section

- 3.9.7 Exhaust System must exit through the rear bumper of vehicle
- 3.9.8 Fuel Tank Heat Shield
- 3.9.9 Tow Hooks, front
- 3.9.10 Mud Flaps, front and rear

Exceptions:

4.0 WHEELCHAIR REQUIREMENTS:

- 4.1 Track: "L" track shall be installed the entire length of the driver's side of the body. Four strips shall be recessed in the floor and one strip mounted above the windows. This track shall be capable of accommodating either wheelchair securements or ambulatory seats.
- 4.2 Securement Systems: [SPECIFY 1 to 3] Retractable four-point tie-down systems with shoulder and lap belts shall be provided. Storage pouches for the belts shall be mounted to the wall adjacent to the wheelchair positions.
- 4.3 Aisle: 30" must be maintained to the lift and emergency door when all wheelchairs are loaded.
- 4.4 Wheelchair Door: Shall be located on the passenger side, behind the rear axle. Door shall include:
 - 4.4.1 Continuous stainless steel hinge;
 - 4.4.2 Upper window, tinted;
 - 4.4.3 Red flashing light, dash mounted, to indicate door ajar; and,
 - 4.4.4 Vandal lock.
- 4.5 Lift: A fully automatic FMVSS 403/404 compliant lift with platform at least 33" x 51" and two handrails shall be provided. Lift shall be equipped with a manual back-up system.
- 4.6 Interlocks: Shall be provided to prevent operation of the bus while the lift is not fully stored and locked, and prevent operation of the lift when the doors are closed.
- 4.7 Lighting: Two dome lights shall be mounted above the door and a light shall be mounted on the inside of the door in compliance with FMVSS 403/404.
- 4.8 Handicapped Symbol: A 6" x 6" accessibility symbol shall be provided on the back of the vehicle, below the window-line.
- 4.9 Fire Blanket
- 4.10 Engine Fire Suppression System: An automatic engine fire suppression system shall be provided in the engine compartment. It shall include a light in the driver's compartment to indicate the existence of a fire and remain lit until the system is serviced. It shall also illuminate when the system is discharged.

Exceptions:

5.0 OPTIONS

5.1 Additional Ambulatory Seats: Provide [SPECIFY 1 or 2] additional 45" seats.
 [SPECIFY 1 max] additional 30" seat.

5.2 Communications: Y / N [CIRCLE] Provide a two-way voice communication system per the Board's specifications attached.

