CHASSIS SPECIFICATIONS

Body Application:	2013 Blue Bird Microbird G-5
Passenger capacity:	19
Chassis:	2013 Chevy 12,300lb. GVWR Dual Rear Wheel
Engine:	6.6L Duramax Diesel engine – 2010 emissions compliant Block heater Air Filter-oil paper element type. Oil Filter-1 qt. full flow, disposable type
Transmission:	Automatic, with overdrive
Electrical:	Alternator, 145 AMP minimum Battery Delco Freedom 600 CCA, dual
Front/Rear Axle:	Dual rear wheel 8600 lb. rear axle - 4.10 ratio 4600 lb. front axle Heavy duty-front & rear shock absorbers
Front/Rear Springs:	Leaf springs – rear Independent coil springs-front
Chassis Frame:	139" W.B. Stabilizer bar Drive shaft guards Front bumper
Fuel tank:	35 gallon fuel tank, mounted between frame rails Fuel tank guard-frame mounted, steel, bolted/welded construction
Brakes:	Four wheel disc brakes Four wheel anti lock brakes. Parking Brakes
Tires and Wheels:	Front Tires LT-225/75R 16E-Radials-All Season Dual Rear Tires LT-225/75R 16E-Radials-All Season
Miscellaneous:	Horn - single electric, high & low note. Windshield Wipers - intermittent, coordinated washer. Drivers retractable lap & shoulder belt High back driver's seat-adjustable style, door arm rest Undercoating-front wheelhousing Tinted Windshield & driver's window Heavy Duty Radiator-extra cooling Volt.-Temp.-Oil Gauges Power steering Factory dash air-conditioning

BODY SPECIFICATIONS

BODY TYPE: 2013 Blue Bird Microbird G-5
PASSENGER SIZE: 19

AISLE
Emergency exit door, entrance door and special service entrance doors must be a 15" aisle.

BATTERY COMPARTMENT
Battery(ies) must be located on the right side immediately behind the main entrance door and mounted on a galvanized steel tray with slide out bearings. Compartment must be weather-sealed with an EPDM rubber and equipped with a drip rail and mounted on stainless steel piano hinge.

BUMPERS
- **Rear Bumper**
  School bus bumper must be a 3/16" pressed steel channel, 10" high, flanged 2" at top and bottom, with a 12" wrap around. The bumper must extend 1" beyond the rearmost part of the body surface to prevent hitching to or riding thereon.

COLORS
- **Exterior**
  The school bus body must be painted National School Bus Yellow with Sikkens low VOC high gloss acrylic Urethane paint. Between window panels and lower window sills shall be black. Roof to be painted white.

- **Interior**
  The interior must be painted white.

CONSTRUCTION
Main structure must be assembled with locked bolts, huck-fasteners, and structural rivets. Only front and rear structures may be assembled with welds.

- **Body Structure**
  Roof bows must be one-piece, floor-to-floor, hat section type and be made of 16-gauge G90 galvanized steel. Two (2) black, 18-gauge structural beams extending the full length of the body.

- **Exterior Panels**

  Exterior Rear and Front Panels

  Rear panel must be one-piece and made of fiberglass reinforced composite, with waterproof recesses for lights. The front panel must be two-pieces made with fiberglass reinforced composite, waterproof recesses for lights.

  Exterior Side Panels

  Exterior side panels to be made of 0.040" pre-primed aluminum for corrosion protection and paint adhesion.

  Roof Panel

  The roof panel must be made of one-piece 0.040" aluminum to prevent water infiltration through roof seams. Panels located immediately above side windows shall incorporate a drip rail running the full length of the body.

- **Exterior Rear Wheel Trims**

  1/8" Thermoplastic wheel trim must be applied over the rear wheels.

- **Floor structure**

  Aluminum

  Longitudinal "C" shaped sub frames must be mounted to the OEM chassis frame rails using a double action energy-absorbing soft mount system. The sub frame must be made of 10-gauge G90 galvanized steel. Transversal "C" sections of floor must be made of 0.060" aluminum linked with "L" shaped cross-members and fastened to the sub frame. All passenger seats shall be fastened to 16-gauge G90 galvanized steel reinforcement channel.

- **Front and Rear End Structures**

  The front and rear end structures must be made of aluminized steel square tubing for corrosion protection. Front and rear structures must be mechanically affixed to sub-floor and roof bows.

- **Gravel Shields**

  Thermoplastic gravel shields must be installed on the lower front section of each body side. Shields shall be 12" in height and flanged 3 ¾" underneath the body.

- **Side Impact Barrier**

  Reinforced side impact barriers made of G90 galvanized steel must be incorporated into body design and riveted to the sub-floor. An L-shaped reinforcement must be integrated into the seat rail and run the full-length of the body.

ELECTRICAL SYSTEM

- **Electrical Compartment**
  Electrical compartment must be located under the right portion of the chassis dashboard as not to obstruct driver visibility through the More-View window.
  The compartment shall enclose the body electrical control panel, the air conditioning control panel, the school bus alternately flashing signal lamps module, the 75-amp continuous-duty relay.

- **Body Instrument Panel**
  The body instrument panel must be located at the right of the driver and integrated to the OEM-supplied engine console cover so as to not impede or obscure the driver's visibility of the loading zone and/or the More-View window.
  A cup holder shall be provided on the body instrument panel.

- **Body Wiring Harness**
  Main body harness(es) must be color and number coded. Harness(es) must be protected with loom under the body and in the engine compartment. Grommets must be installed to protect every wire passing through metal openings. Wiring harness(es) must be located within the passenger compartment, for easy access.

- **Wiring Diagram**
  A complete body-wiring diagram must be provided.

EMERGENCY EXIT

The emergency door shall be equipped with a header pad and a 3-point fastening device and door hinge shall be stainless steel piano type, shall extend the full height of the door and provide an unobstructed opening of 53" H by 33" W. The emergency door must be weather-sealed with a bulb-type seal trim made of EPDM rubber.
An upper and lower glass must be incorporated into the rear emergency door. Upper glass surface shall be 671 square inches and lower glass surface shall be 408 square inches. Both windows shall be tempered safety glass with 62% light transmittance. Glass shall be bonded to prevent water infiltration.

ENTRANCE DOOR

The entrance door must be **electrically operated**. The entrance door must be equipped with a positive locking mechanism to avoid strain of the electrical motor when the door is closed. Electrical motor assembly must have passed a ten (10) year, 200,000-cycle test.
The entrance door shall have a minimum horizontal opening of 32", and a minimum vertical opening of 74 ½". 2 full-length clear glass panels must be installed with a minimum unobstructed area of 1,730 square inches. Glass shall be bonded to prevent water infiltration. When door is closed it must not create a blind spot larger than 5 ½" wide.
The upper bearings of the door mechanism shall be maintenance-free type. The lower bearings shall be lifetime maintenance-free Iglide® bushings with stainless steel pins to prevent corrosion.

FLOOR COVERING
5/8" plywood under a 1/8" grey smooth rubber material. The floor covering in the aisle must grey ribbed rubber covering.

HANDRAILS
The handrail must be made of 1.25" black powder coated steel and mounted on the interior left side of entrance door step well.

HEATER
Front heater and windshield defroster shall be as supplied by the OEM chassis manufacturer. Rear heater must be floor mounted and rated at 42,000 BTU, minimum.

INSIDE HEIGHT
Inside body height must be 76", measured at the center aisle over the floor covering, at any point on longitudinal centerline from front vertical bow to rear vertical bow.

INSIDE WIDTH
Inside body width must be 93", measured at the seat cushion and floor level.

INSULATION
Body must be insulated with 1½" thick fiberglass in the headlining, side, front and rear walls of the school bus. All roof bows shall also be insulated with 1½" thick fiberglass.

INTERIOR
- **Interior Panels**
  All interior and ceiling panels must be constructed of 0.025" and 0.040" pre-painted aluminum. ABS trim panels installed over all doors. Full length, easily removable PVC service panels located above side passenger windows and must enclose the electrical harnesses to facilitate maintenance.
  Ceiling panels must be inserted into longitudinal mounting tracks. **NO EXCEPTIONS**
  Below the windows, panels must be made of 0.025" embossed aluminum and hemmed on all sides.

LAMPS AND SIGNALS
- Two (2) 4" **LED** white rear backup lamps
- Two (2) 4" **LED** red stop/tail lamps.
- Two (2) 7" **LED** red stop/tail lamps must be mounted on the rear.
- Four (4) dome lamps must be mounted in the interior roof panels over the seats.
- Interior **LED** stepwell light must operate when the entrance door is open.
- Three (3) **LED** identification lamps shall be installed in the rear cap and three (3) **LED** amber identification lamps shall be installed in the front cap.
- Bus must be equipped with **LED,** non-sequential 8-way warning lights, two (2) red and two (2) amber lamps at the front and rear of the vehicle.
- **LED** side marker/clearance lamps.

- Specialty solid state electric operated high intensity reflective octagonal stoparm, red with a white boarder and 6" high lettering "STOP" on both sides. Includes red LED STROBE lights over and under the word "STOP" visible from both sides.

LETTERING
HAYSVILLE USD 261 is to be applied on both sides of the body and bus number is to be applied in an appropriate spot near the doors on both sides, front and rear of bus.

MIRRORS
- **Interior Mirrors**
  A 6" x 16" mirror, with padded edges, must be installed.

- **Exterior Mirrors**
  Self-defrosting Rosco side view and cross view mirrors.

RADIO
AM/FM/CD Stereo, with digital clock, including four speakers 2-front and 2-rear.

REFLECTIVE MARKING
3M Scotchlite Diamond Grade reflective tape package including body sides tape, rear outline tape, and "SCHOOL BUS" front and rear.

SEATS AND BARRIERS
First passenger seat directly behind the driver must be a 39" C.E. White Child Restraint seat with seatbelts. All remaining passenger seats must be C.E. White brand with seatbelts at all passenger positions, Department of Transportation approved. Burgundy fire-block upholstery.

UNDERCOATING
The entire underside of the body, including but not limited to floor, skirts, wheel housings, sub-floor structure, rear bumper mounting brackets and braces, must be coated with rust-proofing material that meets the requirements for salt spray resistance (5% salt and 1000h), abrasion resistance and fire resistance.

VENTILATION
A non-closing type static vent must be in forward section of roof panel over driver area.

WATER INFILTRATION TEST
A positive pressure water infiltration test must be performed by manufacturer before delivery to ensure proper water seal of joints, fasteners, and gaskets found on vehicle.

WHEEL HOUSINGS
Wheel housings must be made of G90 galvanized steel and sealed with polyurethane sealant. Stainless steel rivets must be used to attach wheel housings to the floor structure and floor sheets.

WINDOWS

- **More-View Window**
  All school buses must be equipped with a More-View window located between the A-pillar of the chassis and the entrance door.

- **Rear Windows**
  The glass shall be made of tinted- tempered AS3 glazing with a 62% light transmittance. Glass shall be bonded to prevent water infiltration.

- **Side Windows**
  Side windows shall be 12" split-sash type and made with black aluminum frames. The glass shall be made of tinted-tempered AS3 glazing with a 62% light transmittance. **Exterior horizontal ledge must be angled to evacuate water towards the exterior of the vehicle. Neoprene gaskets and sealant must be used to ensure proper water seal.**

MISCELLANEOUS

- Fire Extinguisher, 5 lb. dry with hose.
- 24 unit first aid kit.
- Triangular warning devices kit
- Body fluid cleanup kit
- Tow hooks, rear (2).
- Mudflaps, black rubber, front and rear.
- Windshield defroster fan.
- Vandal lock for rear emergency door and front entry door.
- Complete pre-delivery servicing and inspection.
- 112 DB reverse activated back up alarm.
- Transpec "Triple Value" roof hatch

AIR CONDITIONING

In wall bulkhead mount Carrier air-conditioning model AC6iw22MAX, 58,000 BTU minimum output.

PLEASE NOTE: These are basic minimum specifications required by District. Any deviations from these specifications must be listed by bidder on a separate sheet and must accompany bid. Failure to do so will result in rejection of your bid and/or your product for reason of non-compliance with our invitation.