

Contents

DESCRIPTION.....	2
DETAILED SPECIFICATIONS.....	2
DIMENSIONS.....	3
CHASSIS EQUIPMENT.....	3
VEHICLE BODY.....	4
Body, General Construction.....	4
Interior.....	6
Stanchions and Hand Rails.....	6
Electrical System and Components.....	7
Wiring.....	7
Instruments and Controls.....	8
MIRRORS.....	9
PASSENGER DOORS.....	9
DRIVER DOORS.....	9
FLOOR STRUCTURE.....	10
WINDSHIELD & WINDOWS.....	10
LIGHTING.....	11
Interior.....	11
Exterior.....	11
HEATING.....	12
AIR CONDITIONING.....	12
SEATS.....	12
SAFETY EQUIPMENT.....	13
REVERSE ALARM.....	13
MUD FLAPS.....	13
EXTERIOR PAINT.....	13
MISCELLANEOUS TECHINCAL SPECIFICATIONS.....	14
WARRANTY.....	14
WHEELCHAIR LIFT EQUIPMENT.....	14
WHEELCHAIR SECUREMENT AREA.....	15
INSPECTIONS.....	16

NOTE: Accepting options to purchase cut-a-way chassis shuttle buses with seating arrangements for 16 ambulatory and 2 to 4 wheelchair positions. Purchaser may designate wheelchair positions in the front left; across the rear of the bus; or allowing for more positions with the use of flip style seats.

DESCRIPTION:

These specifications describe a new mid-sized transit bus (the “Bus”), which will be used to transport passengers in both rural and urban areas. The Bus will be of a “Steel Cage” type construction for sidewalls, rear walls and roof. All bidders must comply with each requirement listed. The Bus shall be of substantial and durable construction in all respect, with particular attention given to features, which will provide the safest possible Bus for transporting passengers. Altoona test results required to be furnished as a part of this bid.

Quantity: minimum one (1) vehicle to be purchased with ten (10) options to purchase additional vehicles for a maximum of ten (10) vehicles per specification. In addition, KPTA/RTEC has the right to assign a portion of the contract awarded, to allow other transit agencies to purchase any remaining options.

Failure of RTEC/KPTA to specifically identify Federal and State regulations in its specification does not relieve the bidder of the responsibility to meet them.

DETAILED SPECIFICATIONS:

Materials

All materials used in conversion of the Bus shall conform in all respects to American Society of Testing Materials, Society of Automotive Engineers or similar association standards. Materials used shall be of first quality and shall be exactly duplicated in manufacture, design and construction on each bus. All units or parts not specified shall be manufacturer’s best quality and shall conform in materials, design, or workmanship to the best practice known in the automotive industry. All parts shall be new and in no case will used, reconditioned or obsolete parts be accepted. The parts on all vehicles provided by the same manufacturer should be interchangeable.

Capacity

Bus must be able to accommodate the following load:

16 ambulatory and 2 to 4 wheelchair positions plus driver.

DIMENSIONS:

Description	Requirements
Bus Body Type	Build as Wide Body
Body Warranty	6 years/60,000 Miles Structural Warranty
Overall Exterior Length	307" +/-5"
Overall Exterior Width (ex. mirrors)	95" +/- 2" Wide Body
Overall Height	110" +/- 3"
Interior Height	Interior Height 80" +/- 2" Clarification: Minimum 80" interior height when wheelchair positions are in the rear of the bus. Minimum 74" when the floor is raised to accommodate front wheelchair securement areas.
Interior Length Behind Driver	201" Maximum
Interior Width	92" +/- 2" Wide Body
Aisle Width	17" Minimum
Ground to First Step	11" +/- 1" Maximum
Step Depth	10" Minimum

CHASSIS EQUIPMENT:

Description	Requirements
Model Year	2019 or Newer
Wheelbase	176" Minimum/ 190" Maximum
G.V.W.R	14,500Lbs minimum
Engine	6.8L V-10 Gasoline Engine
Transmission	Five (5) Speed Automatic W/ Overdrive
Rear Axle Ratio	4:10:1
Steering	Power
Shocks	Heavy Duty Front & Rear
Brakes	Power Disk, Antilock
Batteries	Duel OEM 750 CCA Minimum; Cables from front battery to rear shall be minimum 4 gauge, with rear circuit breakers/junction block installed inside the rear battery box.
Alternator	OEM 225 Amps Minimum
Bumper Front/Rear	Chrome Front/ 10-gauge Minimum 7" wide built in recessed step style steel bumper with non-skid surface Rear Bumper
Tires/Wheels	LT 225/75R16E/Stainless Steel Wheel Simulators
Four-Wheel Alignment	Four-wheel alignment (caster, camber, toe-in and thrust angle) shall be done on completed bus prior to delivery. Provide a copy of the alignment report with the vehicle.

Description	Requirements
Spare Tire	Mounted on wheel of same size and brand shall be shipped loose inside the vehicle.
Four-Wheel Alignment	Four-wheel alignment (caster, camber, toe-in and thrust angle) shall be done on completed bus prior to delivery. Provide a copy of the alignment report with the vehicle.
Fuel Capacity	37 Gallons minimum
Radiator	Heavy Duty, Largest Capacity Available
Front Air Conditioning	Std. Dash A/C 13,500 BTU Minimum
Rear Air Conditioning	55,000 BTU minimum output with dedicated compressor, 2-fan skirt mounted condenser
Front Heat	Std, Dash Heat 20,000 BTU
Rear Heat	Rear Heat 35,000 BTU
Gauges	Oil Pressure, Fuel, Amp Meter, Temperature
Drive Shaft Guards	Two (2) Minimum
Wipers	Intermittent
Air Bag	Drivers Side
Steering Features	Tilt Wheel W/Cruise Control
Radio	OEM AM/FM CD Radio With Clock In OEM Chassis Location In Dash

VEHICLE BODY:

Body, General Construction

The body structure shall be built as an integral unit. All joints and corners where stress concentration may occur shall be adequately reinforced to carry loads and withstand road shock.

Body Structural Framing

The vehicle body structure must incorporate an integral, fixture-welded steel body framing for floor, front, rear, sidewalls and roof. Fastening of floor to roof and roof to sidewalls by means other than welding is not acceptable. Any method of construction that is accomplished without welding or that result in a configuration that is unable to meet the quality and structural integrity as defined above is not acceptable. The purchaser will be the final judge as to the acceptability of the proposed construction.

The vehicle body structure must incorporate a full jig-welded steel body framing for floor, front, rear, sidewalls and roof including above the driver. Any construction method utilizing fiberglass or plastic as primary support in stress bearing wall sections is not acceptable and will not be considered. The body shall incorporate steel structure as the primary load-bearing mechanism.

The side and end framing shall be so designed and constructed that they will carry their proportion of the stresses around these openings.

All posts in body side and roof sections shall be of durable box construction securely fastened to the under frame structure so that the entire frame shall act as one unit without any movement at the joining. The end posts shall be designed to resist wear.

The sidewall structure shall be a combination of and/or equivalent of the following: All vertical support columns shall be 1"x 2" 18-gauge hot rolled steel, formed box channel with reinforcing groove and/or 1"x 2" 16-gauge hot rolled steel tube. All non-supporting members shall be 1"x 1" 16-gauge hot rolled steel tube and/or 1"x 1" 16-gauge hot rolled steel C-Channel.

The sidewall structure and polystyrene core shall be uniformly bonded to all interior and exterior substrates and finish panels over the entire panel surface, thereby creating an integrally structured composite wall panel.

The vehicle floor assembly shall be a lateral body support structural design, incorporating longitudinal stringers welded on a maximum of 16" spacing and a perimeter structure of steel angle. The entire floor assembly shall be a jig welded steel structure, equivalent of the following: Lateral G-Channel Crossbeam: shall be 2.0"x 4.8" 14-gauge cold rolled steel, reinforced at each mounting point. Longitudinal support members shall be C-Channel 1"x 1 ½ " and 1"x 3 ½ " 12-gauge hot rolled steel. The floor assembly perimeter structure shall be 1 1/4"x 2" 12-gauge hot rolled steel angle. In the wheelchair lift position, a minimum 11-gauge steel plate approximately 20"x56" shall be welded to the floor assembly for strength.

The roof structural support members shall be the equivalent of 16-gauge hot rolled steel hot section roof bows 1 ½" high x 3 3/8" wide with an 18-gauge hot rolled steel reinforcing cap plate attached to the open side of each bow.

The roof structure and polystyrene core shall be bonded to all interior and exterior substrates and finish panels over the entire panel surface; thereby creating an integral structured composite roof panel.

Before or after assembling, all steel body parts shall be given a thorough multiple stage anti-corrosion treatment and prime paint shall be applied to all steel

The body shall be bolted to the chassis through rubber isolator bushings as provided by the chassis manufacturer. Welding of any-body understructure to the chassis frame will not be permitted.

The exterior roof material shall be seamless one-piece fiberglass reinforced plywood (FRP). The sidewall and roof shall be joined at the roof gutter above the windows. All panels shall be

installed so that they will shed water, that is, the leading panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone.

Aluminum exterior sidewalls shall be insulated from the sidewall structure to prevent electrolysis. Side panels below the floor line shall be aluminum easily removable for service and repair. 060 Aluminum exterior skin.

Inside walls and ceiling shall be insulated. The insulation shall be minimum 1" thick high-density polystyrene.

All nuts, bolts, clips, washers, clamps and like fasteners shall be zinc or cadmium plated, or phosphate coated to prevent corrosion.

Wheel housings shall be of steel construction, 11-gauge minimum. Wheel housings are to be constructed and adequately reinforced to prevent deflection. Ample clearance shall be provided for tires under load and operating on both smooth and rough terrain

Access doors shall be provided where necessary to service transmission, fuel pump, engine, and radiator, battery, and air conditioning components. Auxiliary Battery slide tray, in passenger side skirt panel.

The entire body frame under structure of the vehicle is to be fully undercoated with non-flammable resin-type material, polyoleum or equivalent, applied at the time of manufacture.

Any bright metal exterior trim shall be stainless steel, polished aluminum, or chrome plated.

Must be undercoated and anti-corrosion warranted for 5 years.

Water channeling rain gutters shall be installed over all door and window openings.

Interior:

The interior is to provide a pleasant, aesthetically pleasing atmosphere. School bus- type interior is not acceptable.

Interior walls shall provide fiberglass reinforced plywood (FRP) finish that is durable, easily cleaned, coordinates with the vehicles interior color scheme and eliminates outside noise.

The headliner shall be covered with fiberglass reinforced plywood (FRP) that coordinates with the vehicle interior color scheme.

A driver's sun visor shall be provided

A large driver's storage area must be available in the bulkhead.

Stanchions and Hand Rails

All stanchions shall be 1 1/4" stainless steel clad and shall be securely fastened into structural members at all mounting points. Stanchions shall not be mounted to sheet metal, fiberglass or other non-reinforced areas.

A vertical stanchion and padded modesty panel shall be installed in the entry way at the rear of the step well. A driver stanchion with tinted barrier must be installed. A vertical stanchion must be located beside the lift to protect seated passengers from moving lift parts.

There shall also be a right and left entrance hand rail at the step area. These hand rails shall be mounted in a manner that allows passengers to grasp throughout the ascent or descent of the vehicle.

Electrical System and Components:

The electrical systems and equipment shall comply with all applicable FMVSS and shall also conform to all the applicable SAE recommended standards and practices. All electrical and electronic components shall be selected to minimize electrical loads thereby not exceeding the vehicles generating capacity. All electrical system components and wiring shall be readily accessible through access panels for checking and for maintenance. All switches, indicators, and control shall be located and installed in a manner that facilitates easy removal and servicing. All exterior housings of lamps and fixtures shall be corrosion resistant and waterproofed. The harness supplying the rear lights shall be hermetically sealed including terminals and connection points.

The switch panel mounted on the dashboard within easy reach of the driver, shall incorporate all switches including, but not limited to, the following: passenger compartment, light switch, rear air conditioning switch, rear heater switch. These switches shall be back lighted for easy night operation.

The electrical system shall incorporate a warning light and audible buzzer, located either on the switch panel or the dashboard, to show when a door is ajar.

The Electronic Body Circuit Panel with Self-Diagnostic Capabilities located above driver door in an ABS non-conductive enclosure with door. This circuit panel must be separate and distinct from the vehicle chassis circuits. All wiring provided by the bus manufacturer should be copper and conform to all the SAE J1292 requirements.

Wiring:

All general-purpose wiring shall be vinyl insulated and shall meet SAE standards. Each wire shall be color, number and function coded. These numbers and functions should appear at a minimum of 6" intervals the entire length of the wire.

The wiring shall be routed in a split open-type loom. All looms and wiring shall be secured to the body or frame with straps in order to prevent sagging and movement, which results in chafing, pinching, snagging, or any other damage.

All harness and wiring terminals shall terminate at appropriate junction terminals set in baked or molded plastic material. All wiring and end connectors shall be of the soldered, hand, or machine-staked type.

All wiring devices, switches, and etc., except circuit breakers, shall be rated to carry at least 125% of the maximum ampere load for which the circuit is protected. There shall be a master electrical component panel located inside the bus. Circuit breakers shall be of the manual reset type and designed specifically for each circuit.

All switches supplied by the bus manufacturer shall employ permanently engraved labels. These shall be backlit. Decals or other “stick-on” type labels are NOT ACCEPTABLE.

Horn(s) shall be furnished and installed in a place to be protected from wheel wash.

Instruments and Controls:

The following instruments are to be provided:

- Voltmeter
- Oil pressure gauge
- Fuel tank level gauge
- Engine temperature gauge
- Headlight high beam indicator
- Directional signal and flasher action light

All instruments are to be grouped on a single panel in full view of the driver with no instruments obstructed by controls, trim panels or other appurtenances and arranged in a consistent and uniform manner.

The following controls, in addition to the normal steering, braking and transmission functions are to be provided:

- Column mounted turn signal lever
- Emergency flasher facing driver and clearly visible
- Door control at driver's location

- Master exterior light switch
- Separate switch and temperature controls for driver heaters and defrosters
- Two-speed wiper control - with intermittent feature
- Passenger compartment lights

MIRRORS:

Right hand and left hand fully adjustable outside rear view mirrors shall be provided. Non-Corrosive Single Mount Break away type with convex 7" x 13" in size.

A rear view mirror shall be installed for driver's view of the interior with convex.

Rear window 'van eyes' shall be provided.

PASSENGER DOORS:

The entry door shall be fully encompassed by an integrally welded steel door surround. The complete door surrounds and header shall be a minimum 14-gauge steel, and will incorporate the step well, and be installed in the body as a single unit. The step well shall be minimum 10-gauge steel with each step being no higher than 11".

The door shall have a full clear opening width of at least thirty inches (30") and a full height of at least eighty inches (80"). An extension of the basic van door is not acceptable.

The passenger entry door shall be located directly across from the driver at a 90-degree angle for maximum viewing of entryway.

The entry door shall be a two-leaf full-view tempered glass, outward opening type, power operated, and controlled from the driver's seat.

At the meeting edges of each door leaf, a rubber seal shall be installed so that the edges form a tight overlapping seal when closed.

Dual lift doors shall be installed at the wheelchair entry with top window and pneumatic door shocks to hold doors open while wheelchair lift is being operated.

Top Rear Amber Flashing Lights that operates when the wheel chair lift is in use.

DRIVER DOORS:

Driver step or running board mounted at driver door, attached to the frame of the vehicle. Step must be heavy-duty aluminum or stainless steel to withstand a load of 400 pounds with no movement.

FLOOR STRUCTURE:

The floor sub-structure shall be covered with minimum 5/8" CD exterior grade plywood. The underside of the floor shall be sealed with a material to prevent moisture intrusion. All edges must be sealed.

Floor covering shall be slip resistant vinyl flooring, constructed with aluminum oxide, silicon carbide, quartz and multiple colored PVC chip blended throughout a high quality vinyl wear surface for better depth perception for sight impaired (top coating is not acceptable). Bacteriostats will be incorporated providing all exposed surfaces with excellent anti-bacterial properties. Minimum thickness of 2.2 millimeters (combination of flooring and backing material will not be accepted). Altro trans floor or approved equal. Purchaser shall choose from a minimum of 4 standard colors (sample swatches provided with bid) to match seat colors.

The entire floor will be a uniform thickness throughout the vehicle, eliminating the need for ribbed surfaces, while exceeding the ADA minimum slip resistance standard rating of .06 static coefficient of friction under dry or wet conditions. Coving material is to be installed to support floor when rolling floor covering up the sidewall of vehicle to the seat track.

Seams are to be heat welded to provide a permanent waterproof seal against water penetration leading to premature sub-floor failure or curling leading to possible tripping hazards.

Landing area and step edgings are to be yellow safety vinyl edging. Edging is to be heat welded to the main floor and step treads to provide for a long lasting seam. Step tread and riser are to be a one continuous piece construction eliminating seam at the back of the step and up the riser by covering material.

Yellow Standee Line shall be provided.

WINDSHIELD & WINDOWS:

The windshield is to be a one-piece design as provided by the chassis manufacturer. Windshield shall be tempered tinted safety glass.

The driver's window shall be roll down type made of tempered safety glass.

The side passenger windows shall be transit type, as opposed to the school bus type. It is desired to maintain a transit type appearance, and school bus windows will not be accepted.

Passenger windows must be capable of opening to ensure ventilation. Windows shall be an upper T-Sliding design.

The view (eye) level shall be measured from the top of the side windows. This view level shall be a minimum of 62" measured from the floor. The bottom of the window shall not be above the level of the seat back.

One emergency escape window must be provided on each side of the bus. In addition, red lights are to be over the windows to show these locations.

Emergency windows must be clearly labeled and operating instructions must be clearly visible. All windows shall be designed and installed in compliance with FMVSS 217.

All passenger windows must be safety glass with an AS-3 marking. Windows are to be dark tinted to a maximum of 31% light transmission.

All passenger windows shall be installed in black powdered or anodized aluminum frames, or the equivalent. Each side window shall be a minimum of 108" perimeter dimension.

A top window will be in wheel chair door for the wheelchair passenger view.

A window at top and bottom will be located in the door at the rear of the bus.

LIGHTING:

Interior

All interior lights to be LED.

Shall consist of one (1) step well light to illuminate entrance area adequately when door is opened and one (1) drivers' courtesy light that activates when driver's door is opened or with head light switch.

Passenger cabin lights shall offer sufficient interior light levels to allow safe passenger movement. These lights shall activate when the entrance door is open or with a separate interior switch located by the driver.

An exterior LED light, that meets ADA requirements, shall be mounted in the body skirt by the front entrance door. This too shall activate when the door is opened.

Exterior

Dual rectangular LED headlamps of sealed beam type are required with high and low beam. If available from the chassis manufacturer.

All exterior lights must meet State and US DOT requirements.

Directional signals shall meet all Federal Motor Vehicle Safety Standards front and rear.

Directional signals shall be operated by lever on left side of steering column.

In addition to directional signals, rear lamps shall consist of two (2) 4" round red stop/tail Lamps, two (2) 4" round white back up lamps and two (2) 4" round amber turn signals.

A circuit shall be provided for the directional signals which, when on, will cause them to function as traffic hazard warning signals.

The flasher unit for directional signals and emergency flashers shall be replaceable and shall be a simple plug-in unit.

A LED license plate light shall be provided on the rear of the vehicle.

All marker lights shall be LED.

HEATING:

The heating system shall have at least two (2) unit type heaters, one (1) located in the driver's area (chassis supplied) and one (1) in the passenger area. Output of the passenger heater shall be at least 35,000 BTU's. An exterior cut-off water valve shall be installed for rear heater.

Heaters are to be individually controlled by three (3) position switches; low, high, and off, and be controlled from the switch panel.

Provisions shall be made for windshield defrosting adjustable output within reach of the driver.

AIR CONDITIONING:

Shall consist of chassis OEM dash air conditioning and body manufacturer installed rear air conditioning. Capacity of rear air conditioning shall be a minimum of 55,000 BTU's. System shall incorporate a two (2) fan skirt mounted condenser with a dedicated compressor. Bidder shall submit information on make and type of air conditioning proposed along with wiring/plumbing diagrams.

SEATS:

The driver's seat shall be cloth (sample swatch with bid) upholstery color coordinated with the passenger seats and have retractable seat belt. The driver's seat shall be high back, adjustable fore and aft and it shall have a right hand flip-up armrest.

All seats shall be semi-contoured or pleated type bench seats. All seats shall use Featherweight or approved equal mid high seating with floor and wall track. It is not desired to obtain a school bus type seat.

Seats shall be spaced on a minimum of 32" seat centers allowing 17 ½" minimum leg space between the front of the bottom cushion and the back of the next forward seat.

All seats shall provide a minimum seat width of 17" per passenger or 34" for each two (2)-passenger seats. Seat backs are to be a minimum 33" in height measured from the floor to the top of the back of the seat.

Seat cushion depth shall be a minimum of 18". All seats shall be covered with a transit quality vinyl. Seats shall be foam padded and shall be constructed with no-sag spring bottom suspension. It is not desired to obtain plywood bottoms.

Under the seat mounted retractable seat belts at all seating positions. The seatbelts must be useable with standard infant/toddler seats and meet ADA and FMVSS requirements.

Three (3) 24" seatbelt extensions to be included with each vehicle.

Padded Grab/assist handles shall be mounted on top of all Seats.

Flip-up armrests shall be mounted on the aisle side of each passenger bench.

SAFETY EQUIPMENT:

Each vehicle will be equipped with a 16-unit first aid kit; bloodborne pathogens clean-up kit, 5-lb. fire extinguisher, three (3) triangle reflectors and two (2) seatbelt cutters. These items should be properly placed and secured.

The bidder shall provide Back-up Sonar integrated into rear step bumper.

REVERSE ALARM:

Bus shall be equipped with a reverse alarm that activates when the transmission is put in reverse operation.

MUD FLAPS:

Mud flaps shall be installed behind the front and rear wheels

EXTERIOR PAINT:

The bidder shall quote in accordance with the purchaser's existing fleet paint design. Exterior color to be White unless purchaser chooses another color at time of order. Interior color(s) to be specified by purchaser. Specific information regarding exact paint design will be provided to

the bidder upon request. Purchaser may make changes to this color scheme when placing order.

MISCELLANEOUS TECHNICAL SPECIFICATIONS:

There shall be no sharp corners on the unit that will cause injury to passengers. All corners that can cause injury shall be rounded or padded.

Welds shall be relatively free of slag inclusions and undercut. Fillet welds size shall be equal to the thickness of the least of the joined parts.

Conduit (1.75" diameter minimum) must be enclosed in ceiling close to wall on driver's side, the length of the bus.

No wires shall be visible on the exterior or interior of the bus.

The body shall be free of all cracks, dents, and defects due to metal fatigue or physical damage.

Heat Shield to be placed between exhaust and fuel tank.

WARRANTY:

Chassis Manufacturer will provide a minimum of three (3) year or 36,000 miles' parts and labor and corrosion warranty to cover all components and parts of the vehicle. Chassis Manufacturer will provide a five (5) year, 60,000-mile powertrain warranty. It is the purpose of these Specifications to provide a bus body that will provide many years of service. The Conversion Company if different from the Chassis Manufacturer shall warranty the bus body structure for a period of at least six (6) years.

WHEELCHAIR LIFT EQUIPMENT:

Wheelchair lift shall be the latest model Braun NCL919FIB or approved equal that meets ADA regulations. The wheelchair lift shall include a platform with a minimum clear width of 34" and a minimum clear length of 51". Power unit shall be twelve (12) volt electro-hydraulic operated. Power unit shall be readily accessible for service. The wheelchair lift shall incorporate an emergency method of operating if the power to the lift fails. The wheelchair lift shall include handrails on both sides of the platform (ADA 38.21) and safety strap. Wheelchair lift shall be grounded to the chassis frame with minimum 4-gauge copper wire.

The lift shall have a self-cleaning, see-through, non-skid platform which can be folded and unfolded by one person. The controls shall be placed adjacent to the lift in such a position to enable the attendant or the disabled person, once the person is on the platform, to operate the lift.

Lift control switch shall be completely weather proof and labeled as to function.

Wheelchair lift warranty of Five (5) year parts and three (3) year labor.

The wheelchair lift controls shall be interlocked with the vehicle brakes, transmission, or door, or shall provide other appropriate mechanism or systems, to ensure that the vehicle cannot be moved when lift is not stowed. (ADA 38.23 b.2) Wheelchair Interlock to Contain LED Panel with Self-Diagnostic Capabilities

Wheelchair lift door shall be a double door and provide a minimum clear opening height of 71".

Wheelchair lift doors shall have top window.

Dual lift doors with pneumatic door shocks to hold door open while wheelchair lift is being operated.

Illumination of the wheelchair lift platform shall be accomplished with dual exterior LED lights with Single Interior LED light located below window level and shielded to protect the eyes of entering and exiting passengers (ADA 38.31).

Wheelchair lift door(s) shall incorporate a light on the dash to indicate that the door(s) are not closed. An interior LED light shall activate when the door(s) are open to illuminate the wheelchair loading or unloading (ADA 38.31).

A passenger safety lap strap shall be mounted on the lift.

American Disabilities Act (ADA) regulations shall supersede all requirements included in these specifications.

Lift capacity must meet ADA Specifications (600lbs subject to change).

WHEELCHAIR SECUREMENT AREA:

Two (2) wheelchair securement areas shall be available.

Wheelchair securement areas must have a clear floor area of 30" by 48" for each securement position. Front loaded wheelchair positions will be aligned with the wall, placing one securement position in front of the other behind the driver's area not to block the aisle. Track length minimum of 36". Rear side wheelchair positions shall be side by side and provide ample floor clearance 30" x 48" each with adequate space for assistance with securing tie downs, minimum 66" x 50".

Wheelchair must be secured in a forward facing position. (ADA 28.23 d.4)

Wheelchair securement must include a seat belt and shoulder harness for the wheelchair occupant mounted on each side of the rear door with L-Track adjustments. These belts shall not be used in lieu of a device that secures the wheelchair itself. (ADA 38.23 d.7) Must be fully

retractable with metal housing. Ratchet type tie-downs are not acceptable. 4-point, heavy duty, fully automatic retractable Q-Straint QRT 360 or approved equal (dual knobs) tie-downs built to withstand the higher loads of the WC18 standard and be compatible with WC19 wheelchairs mounted onto L track fitting with Lap & Shoulder Belt Occupant Restraint.

The vehicle must have pouches mounted to hold the wheelchair tie-down devices while not in use.

American Disabilities Act (ADA) regulations shall supersede all requirements included in these specifications.

INSPECTIONS:

A representative of the Rural Transit Enterprises Coordinated, Inc., d/b/a RTEC reserves the right to inspect any vehicle produced by any manufacturer and intended for delivery under this contract. Any deficiencies identified must be rectified prior to acceptance of the vehicle.

Use a separate sheet for each bus type/size.

Type/Style: 16 + 2

All Items Need Pricing to be Included in Bid

ITEM#:	Base Bid Price Options	Price
1	Upgrade to E450 chassis with 14,500 GVWR package and 6.8L V10 gas engine	_____
2	Substitute 3500 chassis with 14,200 GVWR package with 6.0L gas engine.	_____
3	Substitute 3500 chassis with 14,200 GVWR package with 6.6L diesel engine.	_____
4	Upgrade from gas engine to diesel engine	_____
5	CNG Conversion	_____
6	Two year body warranty	_____
7	Raised floor	_____
8	Pair of wheel chocks	_____
9	Energy absorbing rear bumper	_____
10	Upgrade double foldaway seat with retractable seat belts	_____
11	Upgrade double seat to double mid-hi flip seat with retractable seat belts	_____
12	Upgrade single seat to single mid-hi flip seat w/seat belts	_____
13	ICS Integrated child seat	_____
14	3.5 level seat covering	_____
15	Hard vinyl headliner covering	_____
16	Padded vinyl interior wall covering	_____
17	Add additional passenger seat	_____
18	Delete passenger seat	_____
19	Extra long seat belts	_____
20	Vinyl Driver Seat	_____
21	Powered driver seat	_____
22	Powered door locks and windows	_____
23	Upgrade wheelchair lift	_____
24	Move wheelchair positions to front load with vertical stanchion on right hand side of lift door in front of passenger seats	_____
25	Add additional wheelchair position	_____
26	Delete wheelchair position	_____
27	Slide and Click tie downs	_____
28	Add passenger door exterior key lock	_____
29	Add twin - windows in the rear of shuttle bus	_____
30	Manual passenger door operation, credit for electric	_____
31	Upgrade to higher BTU AC system	_____
32	Credit for deletion of stainless steel wheel simulators	_____
33	Stainless steel safety latches mounted to hold the lift door open while wheelchair lift is being operated	_____
34	Clearance signage for driver's view	_____
35	Add strobe light	_____

36	Dual Ceiling grab rails	_____
37	Package shelves	_____
38	Overhead luggage rack with LED lighting	_____
39	Stop request, cable style with touchtape or pads at the WC postions	_____
40	PA with exterior speaker	_____
41	Destination sign front only - electronic	_____
42	Destination sign front and side - electronic	_____
43	Fare Box	_____
44	Spare tire secured and mounted in a safe location as specified by purchaser.	_____
45	Vinyl graphics specified by purchaser.	_____
46	Exterior paint color excluding white	_____
47	One Oxygen tank holder that mounts on L Track	_____
48	Sleeping Child Check	_____
49	Backup camera with a 5-7 inch minimum monitor	_____
50	Bicycle Rack mounted on front of bus	_____
51	Grab Bar for Front Load Lift	_____
52	Car Seat Tether Hooks on Bus Seat	_____
53	F-450 4X4 Drive Train	_____
54	E-Series Cutaway 4X4 Drive Train	_____
55	Power Mirrors	_____
56	Heated Mirrors	_____
57	Lumbar Drivers Seat	_____
58	Air Ride drivers Seat	_____
59	Seat Cover Color Change	_____
60	Tablet that corosponds with purchasing agencies existing data provi	_____
61	4 Camera Surveillance Camera System	_____
62	8 Camera Surveillance Camera System	_____
63	L Track the Length of the bus	_____
64	Fender Mounted Key Storage Tube	_____
65	37 inch wide wheelchair lift	_____
66	Map lights above passenger seats	_____
67	Idle Lock Anti-Theft Device	_____
68	Rear Mount LED Strobe Lights engage when braking	_____