

ATTACHMENT C – SPECIFICATION SHEET(S)

CATEGORY 4

**ADA ACCESSIBLE VAN & MINIVAN
TECHNICAL SPECIFICATIONS**

SCOPE

Vehicles will be expected to be ADA-compliant and to operate daily on all types of roads and in all types of climates. Vehicles will be started and stopped frequently, resulting in demands on the drivetrain, suspension, and braking systems. Components must be the heaviest-duty available in order to provide maximum durability and reliability. Acceptable vehicles shall provide safe, comfortable, and dependable operation throughout their useful service life.

Base model technical specifications are offered in this document. In addition, vehicle optional features (options) may be requested by various Purchasing Entities but are not necessarily required for base vehicle operation.

SECTION 1. GENERAL REQUIREMENTS

- 1.1 Vehicle chassis shall be the latest model year in standard production for which the Original Equipment Manufacturer's (OEM's) published literature and detailed specifications are available. Unless otherwise specified, all items listed as OEM parts or equipment shall be provided and installed by the chassis manufacturer.
- 1.2 All conversion component and subcomponent parts, equipment, and accessories shall be new and completely installed, assembled, and/or adjusted according to the manufacturers' requirements. All exposed edges and surfaces shall be smooth, free from burrs and other projections, and neatly finished.
- 1.3 The total purchase price quoted shall include all items of labor, materials, tools, equipment, and other costs necessary to fully complete the manufacture and delivery of the vehicles specified. Proposer shall not omit any part or detail required to deliver each vehicle ready for immediate service, even if such part or detail is not addressed in these specifications.
- 1.4 Whenever a specific trade or product name is used within these specifications, the following statements apply: "... or approved equal with the same standards of quality, design, and performance" and "...if available." If the proposed vehicle fails to meet or deviates from the specified requirements, Contractor shall note the deviation and submit it to the Purchasing Entity with the proposal. Requests for deviations to be considered shall be detailed and supported with relevant documentation and submitted with proposal for review.
- 1.5 Contractor shall complete a full 4-wheel alignment of the completed vehicle per chassis OEM guidelines prior to vehicle delivery. This alignment should be completed after the vehicle arrives in the State from which the vehicle was purchased and should be completed at the vehicle upfitter/converter location. Any repairs required to bring alignment settings within the adjustable range shall be completed prior to delivery, and a printout showing chassis VIN, the before and after alignment settings, and the alignment shop's contact information shall be required at delivery. Contractor shall be responsible for arranging and paying for vehicle to be aligned locally in the Purchasing Entity's location (city/town) if a valid settings printout is not provided at delivery.
- 1.6 Contractor shall perform the first Annual DOT Inspection before delivery. Inspection report paperwork and certification sticker shall be provided with each vehicle at time of delivery.

1.7 Contractor shall ensure all open warranties have been fulfilled prior to delivery. A description of warranties including the start dates and mileage limits shall be provided with each vehicle at time of delivery.

SECTION 2. LEGAL REQUIREMENTS

2.1 The completed vehicle shall meet all applicable FTA regulations, Buy American, Transit Vehicle Manufacturer (TVM), Federal Motor Vehicle Safety Standards (FMVSS), Federal Motor Carrier Safety Regulations (FMCSR), and Environmental Protection Agency (EPA) regulations in effect at the date of manufacture and the manufacturer shall so certify. The vehicle shall comply with all federal, state, and local regulations, and shall meet all requirements of the Americans with Disabilities Act (ADA) in effect at the date of manufacture, regardless of whether or not all specific regulations are addressed within the details of these specifications. Any vehicle found to be outside these standards of compliance shall not be accepted.

2.2 In the event of any conflict between the requirements of these specifications and any applicable legal requirements, the legal requirements shall prevail.

2.3 Contractor must submit signed Federal Certificates and abide by all the requirements of certifications.

SECTION 3. ALTOONA TESTING

3.1 Contractors shall submit a full copy of a Surface Transportation and Uniform Relocation Assistance Act (STURAA) Test Report prepared by the Penn State College of Engineering on behalf of the FTA supported Bus Testing and Research Center for proposed vehicles that have undergone STURAA testing. Contractor shall submit verification for proposed vehicles that are certified exempt from STURAA testing.

SECTION 4. VEHICLE CLASSES AND DIMENSIONS

4.1 The **Two CLASSES** identified below include four (4) TYPES of ADA accessible vehicles. Each CLASS shall be configured with side entry access for ambulatory and mobility aid passengers. **No rear-entry configurations for *primary* entrance/egress of ambulatory and mobility aid passengers shall be considered.** It is understood and acceptable to have an emergency exit located in the rear of the vehicle for ambulatory and mobility aid passenger emergency egress, based on OEM configuration.

4.2 Minimum to maximum overall length (OAL) for each vehicle TYPE is provided in these specifications in order to group proposed vehicles by comparable size. Proposed vehicles for the TYPE A ADA MINIVAN CLASS may feature minivan chassis manufacturers such as Chrysler, and proposed vehicles for the TYPE B, C, and D VANS CLASS may feature full-size passenger van and wagon chassis manufacturers such as Ford and RAM, but any vehicle and/or chassis manufacturer that meet the requirements of these specifications may be proposed. **Cargo van upfits for the purpose of mass passenger transport shall**

not be considered.

CLASS 1:

TYPE A ADA MINIVAN – Lowered Floor Modified ADA Accessible Minivan. OAL = 200”-209”

CLASS 2:

TYPE B ADA VAN – Full Size Passenger Van or Wagon, Standard or Mid-High Roof. OAL = 210”- 229”.

An X2C passenger van at 235.5" overall length is an acceptable deviation.

TYPE C ADA VAN – Full Size Passenger Van or Wagon, Mid-High or High Roof. OAL = 230”- 249” **TYPE D ADA VAN** – Full Size Passenger Van or Wagon, High Roof. OAL = 250”+

- 4.3 **Passenger Seating Capacity** shall vary by CLASS and TYPE. Proposers shall submit **one** floor plan diagram for each vehicle proposed by CLASS and TYPE showing the maximum seating capacity and layout offered for the base vehicle price proposed.
- 4.4 Diagrams for each base vehicle price proposed shall detail a layout showing the maximum ambulatory seating capacity the proposed vehicle may be configured to provide using fixed, foldaway, flip and/or removeable ambulatory passenger seating, to include seating over the mobility aid (wheelchair) securement position. Diagrams are to offer, at minimum, one (1) mobility aid securement position. Mobility aid securement positions that shall be concealed with foldaway seats deployed must meet ADA clear floor area requirements with seats stowed.
- 4.5 Diagrams shall detail placement of fixed and/or foldaway/flip/removable seating and mobility aid securement positions, doors and windows, and the location of significant components such as the mobility aid lift or ramp and rear HVAC unit. Exterior and interior height (continuous headroom), passenger ground to first step entry, emergency exit(s), seat width, aisle width, hip-to-knee spacing, and mobility aid securement position dimensions shall all be identified in the diagram. The diagram should also include the vehicle wheelbase and OAL measurements.
- 4.6 Passenger seating capacity modifications and additional or alternate mobility aid positions may be required by Purchasing Entity’s. If awarded, Contractor shall agree to provide alternative floor plan diagrams upon request.
- 4.7 **Wheelbase (WB)** of vehicles in each CLASS and TYPE shall be the minimum length necessary to provide the proposed number of seats while meeting all interior spacing requirements.
- 4.8 Contractor shall specify the OAL, WB, exterior height and width, and roof style as applicable, for each vehicle proposed in each CLASS and TYPE.
- 4.9 **Gross Vehicle Weight Rating (GVWR)** and Gross Axle Weight Ratings (GAWR) shall be

specified for each CLASS and TYPE .

- 4.10 **Weight Certificate** from the Purchasing Entity's state certified scale showing the unladen curb weight of the completed vehicle, with a full fuel tank, shall be submitted at time of delivery. Certificate shall be labeled with applicable VIN.

SECTION 5. VEHICLE SPECIFICATION REQUIREMENTS

- 5.1 Engine** shall be gasoline-powered OEM standard for chassis proposed. Contractor shall specify engine type, size/displacement, peak rated horsepower, and peak rated torque for the base vehicle offered by CLASS and TYPE.

5.1.1 Cooling System shall be OEM standard with coolant freeze protection level of -34° F.

5.1.2 OPTION: CLASS 2 ONLY = Alternate OEM Gasoline Engine options and pricing outside of base gasoline engine/pricing offered shall be provided.

5.1.3 OPTION: Engine Block Heater pricing shall be provided applicable to OEM chassis offered.

- 5.2 Transmission** shall be OEM automatic, with auxiliary oil cooler. Contractor shall specify number of speeds.

5.2.1 Shift Interlock shall lock shifter in park position whenever side entry door(s) is ajar.

- 5.3 Exterior Back-Up Alarm** shall sound an audible warning alarm whenever transmission is shifted into reverse gear. Alarm shall be loud enough to be heard clearly over ambient background noise and heavy traffic.

- 5.4 Backup Camera and Monitor** shall be OEM standard, and shall display a live feed of the area to the rear of the vehicle whenever shifted into reverse gear.

- 5.5 OPTION: Reverse Assistance System** pricing shall be provided for bumper-mounted sensor system, such as Hawkeye, to detect and alert driver to obstacles behind the vehicle whenever shifted into reverse gear.

- 5.6 Chassis** shall meet or exceed the following:

5.6.1 Front and Rear Axles shall be heavy duty OEM.

5.6.2 Front and Rear Suspension and shocks/struts shall be heavy duty OEM.

- 5.7 Limited Slip Differential** shall be provided as standard with OEM chassis, if available, **for CLASS 2 vehicles only**. Contractor shall specify front or rear wheel drive vehicle and

differential gear ratio.

5.7.1 Traction Control System shall be provided as OEM standard.

5.8 Driveshaft shall be OEM standard. If proposed chassis is rear wheel drive, one (1) or more protective metal guards shall be installed to prevent any section of the driveshaft from striking the ground, contacting brake or fuel lines, and/or penetrating the body of the vehicle in the event of a failure.

5.8.1 OPTION: All Wheel Drive (AWD) chassis pricing shall be proposed, if available from OEM.

5.8.2 Steering shall be OEM standard power-assist with tilt-wheel feature.

5.8.3 Service Brakes shall be OEM standard 4-wheel ABS disc brakes.

5.8.4 Parking Brake shall be mechanically-operated OEM standard or electrically actuated parking brakes for Ford as approved deviation.

5.9 Exhaust shall be a corrosion resistant OEM system that meets or exceeds FMVSS, State of the Purchasing Entity, and EPA noise level and emission requirements.

For vehicles purchased from the State of California: emissions must also meet California Code of Regulations (CCR), Title 13 – Motor Vehicles, Section 1961, Exhaust Emission Standards and Test Procedures – 2004 and subsequent Model Passenger Cars, Light Duty Trucks, and Medium-Duty Vehicles, and California Air Resources Board Regulations. Vehicle engine and fuel system must have Certified California Emissions; Documentation must be provided prior to award.

5.10 Fuel Tank shall be OEM standard. OEM fuel system shall not be modified. Any fuel tank breached during modification shall be removed and replaced with a new fuel tank. Contractor shall specify capacity. A 19 Gal OEM Tank which must be relocated to "aft of axle" to allow for the Lowered Floor is acceptable.

5.11 OPTION: Extended Range Fuel Tank pricing shall be proposed, if available from OEM. Contractor shall specify capacity of options.

5.11.1 Fuel Filler shall be OEM standard. Modification to the Fuel Filler to accommodate the relocation of the Tank is acceptable.

5.11.2 Front and Rear Bumpers shall be OEM standard impact resistant.

5.11.3 Front and Rear License Plate Holders and mounting hardware shall be provided.

5.11.4 Exterior Side View Mirrors shall be OEM standard, remote-operated, with heated defrost.

5.11.5 Rear Window Defroster(s) shall be OEM standard.

5.11.6 Windshield Wipers shall be OEM standard adjustable speed intermittent wipers.

5.11.7 Cruise Control shall be OEM standard.

5.11.8 Horn shall be OEM standard.

5.11.9 Stereo shall be OEM standard with minimum four (4) interior speakers.

5.12 Airbags shall be OEM standard in driver and passenger areas. Contractor shall specify number and type/placement.

5.13 Front and Rear Mud Flaps or Splashguards shall be installed, clear of suspension and exhaust components. Clearance between tires and flaps shall be sufficient to allow for installation of snow chains. Contractor shall note as a deviation if mud flaps or splashguards are not available for proposed vehicle by CLASS and TYPE

5.14 Tires shall be OEM All Season radials of equal size and rating. Tires shall be rated to meet or exceed GVWR. A matching OEM full-size spare tire and mounted rim shall be shipped loose with each vehicle. Spare shall be secured and covered to prevent damage to tire, rim, or vehicle interior during transport. All tires and rims, including spare, shall be electronically spin-balanced. Contractor shall specify tire manufacturer, model, and size.

5.14.1 OPTION: Spare Tire Delete and credit pricing shall be proposed.

5.14.2 OPTION: Winter Mud and Snow Tires pricing shall be proposed for a complete set of four (4) or six (6) tires (dependent on vehicle proposed by CLASS and TYPE) to be provided in addition to OEM All Season tires. Cost can also be supplied per tire to allow Purchasing Entity's to determine if only front or rear tires need to be changed to Winter Mud and Snow Tires. Winter tires shall be mounted, balanced, and installed on the vehicle if delivered during the winter season, with unmounted OEM tires secured inside. Vehicle shall have OEM tires installed and winter tires secured inside if delivered at a time other than the winter season. Contractor shall specify manufacturer, model, and size.

5.14.3 Wheels shall be OEM standard steel, rated to meet or exceed GVWR. Standard 17-Inch x 7.0-Inch Aluminum Wheels on the Chrysler Voyager van model is acceptable.

5.14.4 Tire Pressure Monitoring System (TPMS) shall be OEM standard for all tires, including spare.

5.14.5 Air Valve Extensions and Stabilizers shall be installed if a dual rear wheel (DRW) chassis is proposed.

5.15 Windows shall be all-around OEM standard and shall meet all applicable Federal and State Motor Vehicle Safety Standards. Window glass to the side and rear of the driver shall be uniformly tinted with darkest available OEM tint that still allows FMSCR minimum 27%

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light transmittance. After-market film shall not be accepted as a substitute for OEM tint. Windows shall be power-operated where applicable.

5.16 Windshield shall be OEM and tinted to allow a minimum 70% light transmittance, with a darker band above eye level.

5.17 Interior Finish shall be a non-reflective material. The interior shall be aesthetically pleasing and contain smooth finishes without any unprotected sharp edges. All panels, finish materials, and treatments shall be flame retardant in conformance with FMVSS requirements, and shall shed water for ease of cleaning.

5.18 Interior Panels shall be OEM or equivalent to the extent possible. Any additional panels required shall be scuff and scratch resistant and match color and style of OEM interior. Fastening devices shall match color of panels. There shall be no open seams between trim panels.

5.19 Driver and Co-Pilot Sun Visors shall be OEM standard, matching interior.

5.20 Rearview Mirror shall be OEM standard.

5.20.1 OPTION: Interior Passenger View Mirror pricing shall be provided for an adjustable angle mirror with 6x9 inch nominal dimensions to be installed above the windshield of **CLASS 2** vehicles.

5.21 Driver Storage compartment shall be provided. Contractor shall specify type and location of storage.

5.21.1 OPTION: Storage Area pricing shall be proposed to install an interior rack or enclosure to store baggage, personal items, and/or small mobility aids. Contractor shall describe options available and detail any modifications required to add storage area to floor plan diagram.

5.22 Vertical Stanchions, Rails, and Grab Handles shall be 1.25 inches in diameter and provided as required to meet applicable ADA regulations. Stanchions, rails, and handles shall be stainless steel, powder-coated yellow, or padded with non-slip surface. Vertical stanchions shall be bolted into structural anchor points top and bottom or at the steel structure of the B & C pillars if this provides a more secure structural mounting point.

5.23 Heating, Ventilation, and Air Conditioning (HVAC) shall be OEM dual front and rear heating and cooling system capable of maintaining comfortable interior temperatures throughout the vehicle even during extreme exterior climate conditions. System shall have separate controls for front and rear temperature and fan speed settings. Contractor shall specify heating and cooling output ratings in BTUs. The Ford standard OEM heating and cooling system is acceptable.

5.24 Auxiliary Heater shall be installed in rear passenger area of **CLASS 2** vehicles to supplement OEM HVAC system. Fan speed selector switch shall be installed independent of OEM system. Contractor shall identify heater location on floor plan diagram and shall specify output rating in BTUs.

5.25 Auxiliary Heater Hoses shall be supported by insulated 'P' clamps at intervals of 24 inches or less. Hoses shall be shielded against heat at any location where they are routed near any part of the exhaust system, and protective grommets shall be installed at any point they pass through or rub against sharp or abrasive surfaces.

5.25.1 OPTION: Rear HVAC Controls pricing shall be proposed for an independently operated OEM HVAC control panel accessible to passengers in middle or rear of vehicle, if available.

5.26 Electrical System shall remain unchanged from OEM standard to the extent possible. All OEM functions energized through the ignition switch shall remain as installed.

5.27 Alternator shall be heavy duty OEM. Contractor shall specify amperage output rating.

OPTION: Hybrid Option: The vehicle charging system will use the largest OEM optional 12-volt alternator offered.

5.28 Single Battery shall be heavy duty OEM on **CLASS 1** with a minimum rating of 700 CCA. Contractor shall specify manufacturer, type, and CCA rating.

5.29 Dual Batteries shall be heavy duty OEM on **CLASS 2** vehicles, if available. Single battery shall be heavy duty OEM if dual batteries are not available for the chassis. Contractor shall specify manufacturer, type, and CCA rating.

5.30 Battery Terminals and Cable Connections shall be coated with anti-corrosion protectant. Accessible connections shall be double-checked for tightness prior to delivery.

5.31 Wiring shall be properly sized and protected according to the latest revised versions of SAE standards and shall incorporate maximum radio frequency interference (RFI) suppression. Electrical circuits shall be color-coded and permanently labeled every 18 inches or less to identify circuit function. All body wiring harnesses shall be run inside the body in protected areas, loomed and secured with rubber or plastic-coated clamps to prevent damage to wiring insulation. Protective grommets shall be installed at any point wiring harnesses pass through or rub against sharp or abrasive surfaces. Harnesses

routed under the vehicle shall be encased in corrosion and moisture-resistant loom and attached with clamps to the frame or sub-floor structure every 18 inches or less. Connections shall be protected from the elements using environmentally sealed connectors. There shall be no exposed or loose wiring in the driver or passenger areas.

- 5.32 Electrical Accessories** shall be wired through the ignition to shut off whenever the ignition switch is off. Any connections to the OEM electrical system shall be “plug and play” only, with no splicing or cutting of OEM wiring harnesses.
- 5.33 Controls and Switches** added during conversion shall be permanently labeled for easy identification and backlit for nighttime visibility.
- 5.34 Driver Area Power Points** shall be OEM standard. Contractor shall specify all 12 Volt and/or USB power points provided in driver/co-pilot area.
- 5.35 Passenger Area Power Points** shall be OEM standard. Contractor shall specify all 12 volt and/or USB power points provided in rear area of vehicle.
- 5.36 OPTION: Two-Way Radio Antenna Prep and Pre-Wire** pricing shall be provided for a roof mounted antenna ground plane (if needed) and added wiring. Antenna mounting plate shall be securely grounded to metal substructure of body with a 12 gauge wire. Fuse-protected circuits shall include a 20 amp ignition-hot lead, a 5 amp battery-hot lead, and a battery ground lead. Leads shall be supplied in driver area with three (3) feet of excess wires for end-user radio installation.
- 5.37 Exterior Lights and Reflectors** shall meet all Purchasing Entity state and FMVSS/DOT specifications and requirements.
- 5.37.1 Daytime Running Lights (DRL)** shall be OEM standard.
- 5.38 Interior Lights** shall provide a minimum of two (2) foot-candles of illumination at each entry way and each passenger seating position. Lights shall be installed so as not to create a hazard for boarding and alighting passengers, and shall meet all ADA requirements for illumination. Interior lights shall be operated by a switch in the driver’s area and shall operate only when ignition switch is on. The standard Ford lighting of four down the center of the van and a fifth directed towards the side sliding door is acceptable.
- 5.38.1 Driver’s Dome Light** shall activate whenever driver’s door is open.
- 5.39 Mobility Aid Access Area Lighting** shall illuminate interior and exterior loading area whenever side entry is ajar.
- 5.40 Mobility Aid Securement Area LED Lights** shall be installed in vehicle walls to illuminate the floor and securement anchorages at each mobility aid securement position for **CLASS 2** vehicles proposed.

5.41 Body Modifications of OEM minivan, passenger van, or passenger wagon to facilitate installation of mobility aid lift or ramp and/or meet ADA entry door clear opening requirements shall be made in such a manner that maintains equivalent OEM structural integrity. No modification shall be made to the vehicle roof to meet the door opening height requirement. All metal components that are added shall be welded by certified technicians and made corrosion resistant through use of stainless-steel materials and/or application of rust-inhibiting primer.

5.42 Floor shall be insulated to prevent exhaust heat, gases, and road noise from entering the passenger compartment. Any lowered floor conversion shall be engineered and constructed of corrosion resistant materials of sufficient size and strength to maintain or exceed the OEM standards and properly braced and reinforced to assure the structural integrity of the vehicle remains intact. Contractor shall specify floor construction, materials, and installation methods.

5.43 Sub-Floor shall consist of water-resistant properties. Contractor shall specify sub-floor material and thickness. 1-1/8" commercial grade moisture resistant plywood is acceptable.

5.44 Floor Covering shall be durable, slip resistant, and commercial transit-type. Covering shall not shrink during the service life of the vehicle. Floor material shall be securely bonded to sub-floor with waterproof adhesive in accordance with manufacturer's requirements. All mating edges shall be weather sealed and heat welded to prevent water penetration. Floor covering color shall aesthetically match seat coverings and interior. Contractor shall specify floor covering type and color code.

5.45 Option: Alternate Floor System configuration pricing and details shall be proposed for flexible positioning platforms such as Abilitrax or Smartfloor on **CLASS 2** vehicles, as available by vehicle **TYPE**. Proposed pricing shall outline costs of any additional modifications or accessories required if option is selected, such as moveable seat base adapters or mobility aid retractor fittings.

5.46 Step Edges shall have yellow step nosing, as applicable. Contractor shall specify distance from ground to bottom of lowest entry step in the floor plan diagram submitted for each base vehicle proposed.

5.47 Step Risers shall be a maximum of 9 ½ inches high, and step tread shall be a minimum of 8 ½ inches deep, if applicable, on **CLASS 2** vehicles. Tread depth on all steps shall be equal and comply with all regulatory requirements.

5.47.1 OEM Driver and Co-Pilot Floor Mats shall be provided.

5.48 Doors shall be OEM standard unless alternate side passenger entry configuration is provided as an option or otherwise noted. Doors shall all be properly sealed to prevent entry of air drafts and water into vehicle interior, including spray from driving rain or commercial vehicle wash equipment. Materials used for weather seals shall be designed to withstand varying temperature extremes, road splash, salt, and other exterior elements

without leaking or deteriorating.

5.48.1 Door Locks shall be OEM standard power locks. Two (2) sets of keys/remote entry Key Fobs shall be provided.

5.48.2 Option: Additional Key Set pricing shall be provided, to include OEM remote entry Key Fob.

5.48.3 Sliding Side Door(s) shall be OEM standard, either power or manually operated from inside or outside.

5.48.4 Option: Power OEM Sliding Side Door(s) pricing shall be proposed if not OEM standard.

5.48.5 Option: Alternate Side Passenger Entry configurations may be proposed, if available, for **CLASS 2** vehicles. Alternate Side Entry configurations shall be curb side only and ADA compliant. Rear-entry options will not be considered. Proposer shall specify pricing and details.

5.49 Rear Door(s) shall be OEM standard. Contractor shall specify clear opening height and width.

5.49.1 Option: Rear Door Ajar Warning pricing shall be proposed for a system to notify the driver whenever a rear door is open, if available, for **CLASS 2** vehicles. System shall provide a notification that is easily distinguishable from mobility aid access door ajar warning light and alarm.

5.50 Emergency Exits shall be provided and marked as such for **CLASS 2** vehicles. Exits shall be clearly labeled, with instructions for use permanently posted above, beside, or below the designated exit. Contractor shall specify location and type of each emergency exit and shall label locations on floor plan diagram. Driver and co-pilot doors can be considered emergency exits if the van upfitter/converter designates each door as such.

5.51 Running Boards shall be provided at driver, co-pilot, and passenger slider door points for **CLASS 2** vehicles. Running boards shall be continuous, heavy duty expanded metal or grip step type and shall run the full length of each entry opening.

5.51.1 Option: Running Board Delete and credit pricing shall be proposed.

5.51.2 Option: Power Running Board/Step pricing shall be proposed for an OEM power-deployed entry step at the passenger slider door.

5.52 Mobility Aid Access shall be provided via side entry mobility aid ramp or lift. Mobility aid access entry way shall be ADA compliant with a minimum clear opening width of 30 inches and minimum clear opening walk-in height of 56 inches from top of ramp or raised lift platform to header of doorframe. Contractor shall specify entryway clear opening height and width.

5.52.1 Mobility Aid Ramp shall be standard on all lowered floor vehicles. Ramp shall be ADA and FMVSS compliant with minimum useable width of 30 inches and minimum 800 lbs. capacity. Ramp shall be slip-resistant, manually operated, and may be a fold-out, in-floor, or swing-out style installed according to manufacturer's exact specifications. Ramp shall not obstruct the view through any vehicle window while stowed. Contractor shall specify proposed base vehicle ramp type and dimensions.

5.52.2 Option: Power Mobility Aid Ramp pricing may be proposed for a power-deployed entry ramp.

5.52.3 Option: Alternate Mobility Aid Ramp configurations ILO base shall be proposed, if available. Contractor shall specify pricing and details.

5.53 Mobility Aid Lift on **CLASS 2** vehicles shall be at minimum 800 lbs. capacity, with handrail belt or high visibility equivalent. Platform shall be minimum 32 inches wide. Lift shall be installed according to manufacturer's exact specifications, and mounted so that the inner barrier plate shall not rattle against the vehicle floor or any trim/closeout pieces while stowed. When deployed, there shall be a smooth transition between lift baseplate and passenger area flooring. Lift shall be ADA and FMVSS compliant, and shall not operate unless transmission is in park, parking brake is applied, ignition is switched on, and mobility aid access door is open. Lift shall not obstruct the view through any vehicle window while stowed. Contractor shall specify proposed base vehicle lift type and dimensions.

5.53.1 Option: Alternate Mobility Aid Lift models ILO standard such as the Shift-N-Step may be proposed, if available for **CLASS 2** vehicles. Contractor shall specify pricing, details, and whether any modifications to vehicle body or headliner are required.

5.54 Mobility Aid Access Door Interlock shall lock vehicle shifter in park and activate a warning light in driver area whenever access door is ajar. An audible alarm shall also sound whenever access door is ajar unless vehicle shifter is in park and parking brake is applied. Interlock shall prevent shifting out of park until access door is securely closed. If mobility aid lift is installed, interlock shall also be configured to provide power to lift only when parking brake is applied, shifter is in park, ignition switch is on, and access door is open.

5.55 Mobility Aid Passenger Securement system shall include a set of four (4) Q'Straint QRT Max retractors, wall-mount adjustable shoulder and lap belt occupant restraints, and four (4) floor attachment points per mobility aid position. Floor anchorage points shall be Q'Straint L-Track and come out perpendicular to the wall. Anchorage points shall be recess-mounted and flush with floor to prevent tripping hazards. Recessed area shall be sealed prior to anchorage installation to prevent water intrusion. Mobility aid passenger securement system and anchorage shall meet all FMVSS and ADA requirements, including a clear floor area of minimum 30" x 48" for each mobility aid position.

5.55.1 Option: Alternate Securement System pricing shall be proposed for all other manufactured mobility aid retractor, restraint sets, and floor anchorage point systems available by CLASS. System pricing shall include installation of alternate or additional anchorage points as needed, as is the case in a Scooter Securement System with five (5)

points.

5.55.2 Option: Q'Straint QRT-MAX Delete and credit pricing shall be provided.

5.55.3 Option: Q'Straint L-Track Delete and credit pricing shall be provided.

5.55.4 Option: Additional Mobility Aid Securement Position pricing shall be proposed, to include complete QRT Max retractor set, wall-mounted occupant restraint set, and L-Track anchorage points.

5.56 Vinyl Storage Pouch for retractor and restraint sets shall be installed at each mobility aid securement position.

5.56.1 Option: Tie Down Storage System for L-Track (TDSS-L) pricing shall be proposed, to install L-track for mounting four (4) retractors under a double foldaway seat. If Alternate Securement Systems are proposed and are compatible with a different TDSS product, provide additional pricing for all TDSS options here. Tie down securement devices may be shipped loose.

5.57 Seating Configurations shall match proposed floor plan diagrams.

5.57.1 Seat Dimensions and Spacing to be specified by Contractor shall include: Seat Width (per person); Seat Depth; Seat Back Height; Hip to knee room (27 inches *minimum* per position), minimum required hip to knee spacing shall be maintained between front row seats and driver seat even when driver seat is adjusted to rearmost position; and Aisle Width (per row, as applicable), specified aisle width shall also include distances between fixed or foldaway seats (deployed or stowed) and the edge of the clear floor area of any adjoining mobility aid securement position.

5.57.2 Driver Seat shall be OEM standard with reclining high-back, right side armrest, lumbar support, with either a power or manual 4-way or 6-way adjustable base. Proposer shall specify manufacturer, type, and upholstery color.

5.57.3 Option: OEM Power Driver Seat pricing shall be proposed, if available and not already OEM standard.

5.57.4 Co-Pilot Seat shall be OEM standard high-back or equivalent, with manual adjustable base and lumbar support. If adapted to be removeable, such as the case for **CLASS 1**, co-pilot seat shall quickly lock/unlock into/out of securement position and be easily removed from the vehicle. Contractor shall specify manufacturer, type, and upholstery color.

5.57.5 Passenger Seats shall be OEM or aftermarket fixed or foldaway seats such as Freedman GO-ES, as applicable per manufacturer and/or seating configuration. Rear bench seat for **CLASS 1** shall be OEM standard with OEM equivalent knee-to-floor or knee-to-footrest height. Contractor shall specify manufacturer and model of all passenger seats.

5.57.6 Three (3)-Point Seat Belts shall be provided at each ambulatory passenger seating position.

5.57.7 Child Seat Anchor System shall be provided in at least one (1) ambulatory seating position.

5.57.8 Two (2) 12” seatbelt extensions shall be provided with each vehicle.

5.57.9 Option: Passenger Seating Add/Delete pricing shall be proposed to match installed seating per base floor plan diagram proposed by CLASS and TYPE. In this section, Contractors are to provide all varieties of seat types and pricing that match up to, and can appropriately alter, the base floor plan diagram proposed, to include single and double fixed/foldaway/flip seats.

5.57.10 Option: Passenger Seating Add/Delete pricing shall be proposed to match up to any Alternate Floor System proposed for **CLASS 2** vehicles. In this section, Contractors are to provide all varieties of seat types and pricing that match up to, and can appropriately alter, Alternate Floor System proposed, per single modular seat cost.

5.57.11 Option: Arm Rest pricing shall be proposed, per position, to match any van upfitter/converter installed ambulatory passenger seating.

5.57.12 Option: Seat Back Grab Handle pricing shall be proposed, per position, to match any van upfitter/converter installed seating.

5.57.13 Passenger Seat Coverings shall match OEM driver and co-pilot seat colors. Non-OEM seats shall be upholstered in Freedman Level 1 - Vinyl. Contractor shall specify fabric and color.

5.57.14 Option: Alternate Passenger Seat Coverings fabric and color choices pricing shall be proposed ILO base. This can include an anti-bacterial and/or anti-microbial cloth upholstery material.

5.58 Paint shall only be applied to exterior surfaces that have been properly cleaned and primed as required by the paint manufacturer. Painted surfaces shall be impervious to diesel fuel, gasoline, and commercial cleaning agents. Basic vehicle shall be OEM standard white.

5.58.1 Option: OEM Full Color Paint Other Than White pricing shall be proposed per CLASS and TYPE per OEM standard color selection.

5.59 Custom Graphics pricing shall be proposed for graphic schemes that may be required by individual Purchasing Entity's. Graphics pricing is to be provided per the Tier system defined below. Purchasing Entity's shall provide any designs, photos, paint codes, or additional information that may be required to develop a configuration specific quote at time of order and shall approve elevation diagrams and designs before the vehicle order is finalized with the Contractor.

5.59.1 Option: Graphics Tier 1 pricing for simple single stripe and agency name.

5.59.2 Option: Graphics Tier 2 pricing for simple striping with agency logo.

5.59.3 Option: Graphics Tier 3 pricing for custom multiple-colored stripes and custom logo.

5.59.4 Option: Graphics Tier 4 pricing for full vehicle wrap.

5.60 Safety Equipment shall be provided with every vehicle. All equipment shall be mounted in secure, accessible locations in driver area without creating an obstacle or hazard.

5.60.1 Fire Extinguisher shall be provided, minimum five (5) lbs. ABC rechargeable type, with gauge. Extinguisher shall be mounted with matching bracket and outfitted with label showing recent charge date.

5.60.2 First Aid Kit shall be provided. DOT-compliant, minimum 16-unit kit.

5.60.3 Bloodborne Pathogen/Body Fluid Cleanup Kit shall be provided.

5.60.4 Three (3) Unit Emergency Warning Triangle Kit shall be provided in a storage box. Triangle sides shall be 17" to 22" long and 2" to 3" wide.

5.60.5 Webbing/Seat Belt Cutter shall be provided, capable of cutting seatbelts and mobility aid securement straps without exposing cutting edge. Shall not be useable as a weapon.

5.60.6 Option: Roof Hatch pricing for **CLASS 2** vehicles shall be proposed for a rooftop emergency exit allowing for multi-position ventilation.

5.60.7 Option: Security and Surveillance System shall include installation of a two (2) camera system with day/night interior cameras with HD; HD DVR; event button; hard drive to store 30 days of recording time (8-hours per day); and all associated management hardware and software. DVR shall be mounted in secure, accessible location in driver area, with no exposed wires or cables.

5.60.8 Option: Single Additional Camera pricing shall be proposed. Contractor shall also specify number of cameras that may be added to the system without requiring an upgrade.

5.61 Signage and Decals required by State and Federal law regarding safety and operating procedures shall be affixed to each vehicle exterior and interior. At least one (1) international symbol of accessibility shall be located on the exterior in concurrence with ADA regulations. Interior and exterior signs may be decals or placards. Any decals must be 3M premium grade vinyl or equivalent.

5.62 Manuals shall be provided at time of delivery. Electronic files shall be stored and delivered on a flash drive.

5.63 Periodic Maintenance and Inspection (PMI) Schedule shall be provided in Word or Excel format. PMI schedule shall be a single comprehensive guide detailing the relevant manufacturers' recommended inspection procedures and service intervals for the base vehicle and all serviceable subsystems and components (such as HVAC and ramp or lift).

5.63.1 OEM Chassis Owner's Manual shall be provided.

5.63.2 Mobility Aid Lift or Ramp Operations and Maintenance Manuals shall be provided.

5.64 ADA Van Upfitter/Converter Specific Operations and Maintenance Manual shall be provided, to detail functions of all accessories, components, and controls added during conversion. Wiring diagrams shall also be included, and shall identify any new circuits, fuses, relays, breakers, or connections added to OEM chassis electrical system during conversion.

5.65 Additional Optional Features details and pricing may be proposed for features, accessories, and equipment offered by the OEM, ADA Van Upfitter/Converter, or Dealer pertinent to this specification but not specifically detailed in this specification.