MISSOURI DEPARTMENT OF TRANSPORTATION
ADULT PASSENGER MODIFIED RAISED ROOF VAN
WITH REAR MOUNTED WHEELCHAIR LIFT VEHICLE SPECIFICATIONS

1. The intent of these specifications is to describe a standard width type vehicle that will be modified, restructured and assembled by using best quality materials, components and workmanship in accordance with sound engineering principles and manufacturing practices to provide safe and reliable transportation for ambulatory and non-ambulatory adult passengers.

   SHODDY AND INFERIOR QUALITY MATERIALS AND WORKMANSHIP WILL NOT BE ACCEPTABLE.

   MoDOT reserves the right to conduct in-plant inspections.

2. Acceptable Makes and Models:

   2010 or 2011 Chevrolet or GMC model 30 or G3500 extended van with 155" wheelbase or approved equal.

   2010 or 2011 Model Ford E350 Cargo or Window Super Van with 138" wheelbase or approved equal.

   60% domestic content, final assembly point in USA

3. GVW Rating, Minimum 9,000 lbs.

4. Body, Exterior: Shall have manufacturer's standard items for the grill; grill frame, hubcaps, moldings around windows, doors, lamps, etc. Drip rails shall be installed above all doors to prevent water leakage into van. Each vehicle will be thoroughly water tested before delivery.

5. Body, Interior: Standard comfort and convenience items shall be all manufacturer's standard items and equipment, plus all additions or substitutions listed. If special option package is required with minor items not specified, include in your bid price.

   Headliner or Ceiling - Shall be full length for driver and passenger area. Headliner shall have longitudinal and cross member supports where needed to prevent flexing and vibration. The supports shall not be visible from the interior.

   Paneling and Trim - Complete on all doors, walls, ends and corners.

   Doors, walls, ends, corners will be covered with quality installed trim and panels. Only trim similar to OEM quality is acceptable. The material shall be fire resistant, sanitary and easily

cleaned. There will be a full-length headliner (smooth surface) located above driver and passenger compartments.

Floor and Floor Coverings - The entire floor, except driver's area, is to be made level with plywood or fiberglass re-enforced a minimum of 1/2" thick securely placed over the metal floor by glue, screws or a combination of methods that will assure a permanent fitted floor. The subfloor shall be covered with a minimum of 2.2 mm thick vinyl transit type floor covering. All seams will be heat welded. Heat welding only applies when mating of similar surfaces. Rear wheel housings will have carpet or rubber installed on them to deaden exterior sound from road debris. Any sound deadening material is acceptable.

The entranceway and aisle will be non-skid type and under the seats. The aisleway will be made of high visibility yellow or white vinyl flooring.

Floor covering color shall be contrasting to the vehicle interior, including seat-covering material.

All exposed edges around the wall, doors and entranceways shall be trimmed with a metal molding securely screwed or glued in place. The driver area shall have insulated floor covering and mat. Meeting point of wall and floor will be properly trimmed with metal, ABS or rubber material and have a quality waterproof seal between floor and wall junction.

Insulation - The entire interior dash firewall, engine cover, lower panels, doors, floor, sidewalls, ceiling, headliner, etc. shall be insulated with 1" fiberglass. Insulation shall be 1" thick fiberglass or polyurethane. OEM insulation is acceptable for OEM retained components.

Insulation must be completely enclosed by the ceiling, wall panels, window moldings, etc.

Scuff Pad - Side step sill, full length for driver entrance, OEM is acceptable.

Grab Rails and Stanchions - A floor to ceiling stanchion shall be installed near the aisle immediately left of the entrance door. This stanchion shall be connected to the vehicle right hand sidewall by a guardrail. This panel shall be padded on the side facing the passenger seating positions.

An upright supporting type stanchion or handle shall be installed from the floor to the ceiling at the right of the entrance door, within easy reach of boarding passengers to provide passenger assist.

There will also be a floor to ceiling stanchion guardrail installed directly behind the driver's seat. This stanchion and guardrail will not affect the adjustment of the driver's seat.

There will be an exterior grab handle securely mounted to the left door pillar by the driver’s entrance door. Approximate length to be 9".

Stanchions shall be securely attached to the ceiling and floor with at least two screws at top

and two at the bottom. These screws will go into some substantial material to reduce the chance of becoming loose. The stanchions and guardrail shall be tubular, bright finish metal.

Certification - All materials including insulation used in the interior shall be the latest fire resistant type that meets or exceeds all State and Federal requirements on the date of manufacture. (FMVSS 302) A certification shall be fixed to the vehicle and be plainly visible. FMVSS 302 compliance includes but is not limited to items such as raised roof, headliner, insulation, and plywood sub-floor.

6. Seats, Seating Arrangement and Seat Belts: This arrangement shall provide seating as listed below and shown on the appropriate exhibit. (See Exhibit E)

   If there is a conflict between the written specification and the floor plan diagram, the written narrative controls.

   Floor Plan E - This seating arrangement shall provide (2) two-passenger forward facing folding seats on the left side, three (3) 1-passenger seats on the right side and (2) two forward facing wheelchair positions: both covered with a folding two-passenger seat. Total capacity 7 ambulatory and 1 wheelchair, or 3 ambulatory and 2 wheelchairs.

   The driver's seat shall be an electric power fully adjustable high back bucket type with HD clothe covered full depth foam padded seat cushion and backrest. Seat will have folding armrest on RH side.

   Floor Plan E will have at least three seating positions that meet the FMVSS 225 latch system requirements for child safety seats. They may be located on either fixed or folding seats and must be designated as safety seat locations. The preferred location of these positions will be on the aisle side of the two-passenger seats.

   Fold A-Way Seat Requirements

   Fold-A-Way type seats shall meet all dimensional, structural, and testing requirements of the standard seat specification.

   All seats shall be forward facing for ambulatory passengers and fold against the wall when wheelchair space is required.

   In the folded position, the seat may extend into the bus no further than 10" installed at 90 degree to maximize space for wheelchair loading and positioning.

   In the down, fixed position, the seat may not extend into the aisle more than 36".

   Fold-A-Way type seats shall be Freedman 3 PT, or approved equal.

   The (2) two-passenger seats shall have a minimum width of 35"; the (1) one-passenger seats shall have a minimum width of 17".

All seats shall have a minimum depth of 16"; the backrests shall have a minimum depth of 2".

Seats will meet all aspects of FMVSS 210. Certification will be provided with bid.

All passenger seat cushions and backrests shall be covered with HD Level 3 vinyl material. Seat cushions and backrests shall have full depth foam padding. The seat cushion padding shall have a density (4" minimum) sufficient to support occupants without bottoming. Seating material will be a minimum of 36 oz.

All seat frames will be painted or powder coated finish to prevent corrosion.

Seats will be placed to allow adequate shoulder room for passengers sitting next to the wall. The walk-through aisle between right and left hand seats shall be a minimum of 10". (When measured between cushions.)

Seat spacing shall be a minimum of 30" centers and/or 24" hip to knee room.

Fixed seats shall be a Freedman 3 PT, or approved equal (wall mounted shoulder harnesses are acceptable). The driver and all passenger-seating positions shall have seat belts and shoulder harnesses properly located and easily accessible. The driver and all passenger seating positions shall have equal length, (2) two-piece belts and retractors with a minimum usable extension of 60", adequate to encircle and secure at the hips from the smallest to the largest size passenger that will be expected to use the belt, regardless of where the belts are anchored. The belts shall latch at the points as described in FMVSS 208. Shoulder harnesses are required for all passenger seats. All front seats shall be designated as priority seating. Include three (3) 8” seat belt extenders that will work with all the belts on the vehicle.

7. Roof: The standard roof shall be removed and replaced with a steel, aluminum or fiberglass raised roof or roof and side panels. The replacement roof will be 24” high. The raised roof or roof and side panels shall be completely joined and be integral with the basic body and front and rear ends, side panels, and underbody structure by welding, riveting or bolting, or combining these methods to prevent separation at any point between the modification and basic body. Sheet metal screws will not be allowed.

Restructure and modification must be done in a manner that will not destroy the structural integrity of the vehicle. The material used and construction method must prevent vibration and drumming. Vehicle must meet FMVSS 220 for rollover protection.

All exterior and interior surface edges shall be turned, rounded or closed off and all protrusions must be either eliminated or adequately padded.

The roof must be supported and reinforced by a collapse resistant steel rollover protective structure (ROPS) that will be an integral part of the complete body.

The roof and ROPS structure must be capable of supporting the fully loaded vehicle if

overturned. This structure must encompass the entire driver and passenger compartment.

The installation must provide complete weather and dust proofing.

Special attention should be given during construction and assembly to prevent corrosion.

The interior height from floor to ceiling for the entire van, within 12" approximately from each side, shall be a minimum of 68”.

The exterior roof height, while providing maximum interior headroom, must not cause the vehicle to be top heavy and unstable. The roof should be aerodynamically designed to allow for minimum wind resistance.

8. Roof Ventilator/Emergency Exit: A dual purpose manually operated roof ventilator/emergency exit shall be installed in the extended roof of the vehicle at approximately the center of the passenger compartment. The hatch shall be 23" x 23" minimum and shall be installed so that when it is open and the vehicle in forward motion fresh air will be provided inside the vehicle. The hatch shall be a Transpec Inc. Model 1000 regular profile, Transpec Model 1075 Low profile, or an approved equal. Econo Model not acceptable.

9. Windshield and Window Glass: Safety plate windshield and window glass.

RH and LH front side door drop glass.

RH dual side load doors vent glass and vent glass on opposite side. Fixed glass in each rear quarter panel. OEM glass is acceptable.

Standard factory installed windows requiring no body modifications are the only acceptable windows.

All windows will have inside latches and locks for security.

The windshield and front door glass will be tinted; all other windows will have privacy sunscreen type glass. (Approximately 30% light transfers on passenger windows). Only factory sunscreen will be acceptable.

10. Doors:

Front - Drivers side (LH) standard van door with roll down window.

Passenger Side (RH) Operation - Modified standard van entrance door with roll down window. Door control arms shall not interfere with window operation. No opening device will interfere with window operation. Control arm will be adjustable to allow proper door sealing. A transit style bi-fold service door is acceptable (power operated).

This door shall provide high entry headroom with a minimum of 72" entrance height from

the top of the first entrance step to the door headliner. The top of the door entrance shall be fully enclosed and protected from weather and other elements; it shall have adequate width at top and protective padding to prevent head injury when entering or exiting. Door will meet ADA requirement 49 CFR 38.25.

This door shall have a below floor level entrance stepwell, with a minimum of (2) two steps. These steps shall be stationery; corrosion resistant steel adequately braced and be an integral part of the basic structure. The distance from ground to top of first step will be a maximum of 12 1/2" and a minimum of 10". Additional step heights will be a maximum of 9", the tread depth shall be a minimum of 8" and tread width a minimum of 12". All of the steps shall be level and the risers shall be vertical and not angled. Steps will meet ADA requirement 49 CFR 38.25.

Each step and riser will be covered with molded rubber or vinyl. The step covering will be non-skid type tread with white or yellow nosing. The riser shall be covered, painted, or coated with scuff resistant material. Galvanized steel is acceptable.

These steps will be fully recessed, enclosed and protected from weather and other elements. The bottom of the door can angle out to accommodate any steps that extend out beyond the van. Metal under covered step may be galvanized steel.

The stepwell light shall be provided and automatically operated by door control.

The entire outer edge of the door shall be weather stripped to provide a water and airtight seal. This door will have an emergency release to allow it to be opened from either the inside or outside in the event of a rollover or other emergency. This handle will disconnect the door arm to allow it to be opened in the conventional manner. Outside access maybe gained by breaking window glass.

The door opening, top and lower door extensions shall be structurally reinforced to have the same structural integrity as the original door and opening.

All OEM doors must retain factory exterior and interior locks and handles.

<u>Powered Ambulatory Door Operator Specifications</u>

The powered door operator shall be modular bolt-together design providing rigidity, proper alignment and operation.

The door operator shall be integrated with the OEM vehicle dash and front passenger door and latch mechanism.

The door operator shall have been dynamically tested to a minimum of 10,000 cycles.

The power supply shall be a 12-volt automotive electrical system driving a 12-volt gear motor. The gear motor shall be operable via handheld pendant control or dash mounted switch.

The control system used to regulate the open and close movement shall provide one (1) hand operation. A color-coded paddle switch shall be required and be permanently stamped with the appropriate function legends.

The door operator shall be designed to allow ease of troubleshooting, maintenance, and replacement, if needed, and may be center mounted.

The operation of the door drive unit shall provide a smooth articulation of the front passenger door throughout the open and close cycle. The door operator shall be integrated and sequenced with the OEM door latch via solenoid and timer to provide automatic unlatching. Disabling the OEM door latch or lock is not acceptable.

A manual backup system shall be provided to allow ingress and egress in case of electrical or mechanical failure. All controls that are removed should be able to be stored out of the way.

All fabricated components shall be finished with a baked-on powder coating, which will meet a salt spray test of 1000 hours.

There will be keyed switch located on the RH side of the vehicle to allow the operator to open and close the passenger entrance door from the outside.

Rear Dual Loading Doors - These doors shall be dual swing-out type with fixed glass. Replacement doors are acceptable provided they meet OEM quality.

The doors shall be modified and the height extended from the floor to the top of each door to allow for wheelchair entry. The minimum door height shall be 56" from floor to top of door opening. These doors shall be extended, weather proofed and padded in the same manner as specified for the front passenger entry door. Doors will have exterior mounted catches to hold them open while loading wheelchair clients (elastic cords). These doors will meet ADA requirement 49 CFR 38.25.

RH Side Loading Doors - These doors shall be double type with pop-out glass.

All doors will have factory installed position hold and check arms.

All doors will have factory installed exterior and interior handles and locks.

The interior step will need to be covered with a suitable metal to allow (1) one-passenger seats to be securely mounted.

The RH side door must have an inside handle and lock, conveniently located and will remain functional to be used as an emergency exit. This door will have lighting and labeling that meets FMCSR 393.92.

11. Instrument Panel and Instruments: Full width pad with speedometer, odometer and needle type gauges for fuel, oil pressure, water temperature, etc.

12. Mirrors, Rearview: Interior, Day-Night type. Exterior LH and RH below eye-line type. (Approximate size 6" x 9"). Also include left-rear mounted convex mirror to allow driver view directly behind the vehicle. (Mirrors will be approximate 8" in diameter). This mirror will have a telescoping post to facilitate adjustment. A 6” x 12” interior mirror will be located above driver’s area to facilitate view of the passenger area.

13. Hood Release Lock: In cab operated.

14. Windshield Wipers and Washers: Electric, (2) two-speed intermittent.

15. Miscellaneous Interior Items: Armrest for front driver door and padded sun visor for driver, ashtray for front driver area and cigar lighter.

16. Radio: Manufacturers standard.

17. Lights and Signals:

Exterior - High and low beam headlights, parking, tail, stop, backup, front and side marker lights or reflectors, license plate, hazard warning flashers, self-canceling directional signals, daytime running lights and back up warning beeper.

Wheelchair landing area light will be mounted so it cannot be easily torn from rear bumper. There will also be (2) two red strobe type lights mounted on rear of van that are visible from the rear when both rear doors are open. They will be at least 6" in diameter.

Two red strobe lights will be activated only by a dash-mounted switch with a pilot light to indicate activation.

The add-on roof will be marked with 2" wide x 6' long Diamond Grade reflective sheeting in the following manner;

A. Across the top rear - Red/White.
B. Along both sides - center - white.

Interior - Instrument panel, front and rear overhead lights, and all doors. Overhead lighting, activated by a dash-mounted switch, shall provide lighting intensity at a reading level. All door lights and RH front door stepwell shall illuminate automatically when doors are open.

All interior lights shall be adequately recessed as not to be a hazard to occupants. Interior light fixtures shall be operable with or without engine running. All interior lighting will operate on its own circuit.

All interior wiring shall be insulated and covered. A schematic of the installed wiring shall be furnished with each vehicle.

Each vehicle will be equipped with a reverse alarm. This alarm will be mounted in a location that will be protected from road debris.

18. Wheelchair Lift: Mounted in Rear of Van (Interior)

The lift shall be an electrohydraulic type providing power-up, power or gravity down and power or automatic fold. The power source shall be the vehicle 12-volt electrical system. The lift will be mounted within the body with access through the rear doors. Modifications for the lift installation must not affect the structural integrity of the basic vehicle.

The lift shall have a minimum rated working load capacity of 800 lbs.

The lift will have no dirty or greasy surfaces, which will contact the wheelchair occupant during normal operation.

The lift platform shall be constructed of expanded metal with a minimum usable width of 33" and a minimum depth of 51".

Platforms will be yellow with the exception that all edges of the platform surface, the visible edge of the vehicle floor or bridging device adjacent to the platform lift, and any designated standing area on the lift have outlines of at least 25 mm (1 in) wide of color that contrasts with its background.

The lift shall have the following:

Meet FMVSS 403 & 404 requirements.

A manual override to lower, and raise and an emergency platform release for use in the event of power failure shall be provided. Manual override will function without interference by interior obstructions.

A platform device that locks in an upward position acting as a curb before the platform has departed ground level and pivots downward upon ground contact, acting as an entry ramp. There will also be this similar safety barrier located on the inboard side of the lift platform. Each barrier will be at least 6" in height.

Lift will have nine interlocks as defined in FMVSS 403.

Door activated power cutoff device to prevent movement of the lift when vehicle doors are closed.

Two (2) handrails for use by the wheelchair occupant or standee. These rails shall automatically fold up or down with platform movement and shall fold flat against the platform during transport.

An automatic down pressure cutoff device shall stop downward movement of the platform upon contact with any obstruction or the ground.

The lift shall have automatic controls to perform all functions. Controls shall be hand

held, cord mounted console type, with sufficient cord length to allow operator to control the lift from inside or outside the vehicle.

Any part of the lift assembly protruding into the body that could be hazardous must be properly padded for passenger protection. This includes the lift end barrier. Manufacture's flexible end barrier meets padding requirements.

The electrohydraulic lift system shall have a monitoring device requiring no tools to allow for a quick and easy fluid level check.

Both types of lift systems and mechanisms must be easily accessible for repair and maintenance without dismantling and removal from vehicle.

The lift may be a Ricon S-5510 Series, Maxon WL-7, Braun Millennium or Century Series 2, or approved equal.

Descriptive literature and detailed specifications for lift must be included with your bid. Lift must meet all requirements of ADA 49 CFR 38.23.

The lift must provide either a safety belt occupant restraint system inter-locked to lift operation or an outside end barrier that locks in place before the lift platform leaves the ground more than 4". Both systems are to reduce the chances of a lift passenger falling or rolling off the lift platform during lift operation.

19. Wheelchair Securement Area for All Units: All Located in Rear Portion of Vehicle

Positive fastening wheelchair lock-in devices shall be provided for each wheelchair position.

Each securement device will meet 30 mph/20 g test criteria.

Securement locations will consist of a four point, belt hold down system complete with all belts, hardware and fittings.

All securement devices will be easy to attach to floor or mobility aid with mobility aid in place.

Retractable Wheelchair Securement System

The wheelchair securement tie down belts shall be retractable into a protected steel housing and eliminate the need for belt cleaning and storage. The belt housing and mechanical retractor shall be designed for a minimum of five (5) year life. Belts will incorporate a S-hook or J-hook design to secure belts to the mobility aid.

The location of the rear belts shall be positioned to allow the driver to secure the wheelchair frame between the rear wheelchair wheels. The retractable belts shall feature positive locking mechanisms. The belts shall be equipped with a release tab to release tension on the belts when unfastening the wheelchair and to take up the excess belt when securing the

wheelchair.

The retractable belts shall feature positive fully automatic locking mechanisms with knobs. Once the front belts have been attached to the wheelchair frame, a tension knob attached to the belt housing shall be applied to bring the wheelchair passenger and chair into a state of securement. The front belts shall be designed for a minimum life of five (5) years. Sure-Lok Titan or Q Straint Deluxe tie-downs are “approved equals”.

All wheelchair securement L-tracks will be attached to the floor with Grade 5 or higher bolts that go through the floor. These tracks will be securely attached with nuts and washers to meet all requirements of ADA 49 CFR 38.23 and will run the entire width of the securement area(s). Tracks will be a minimum of 44” apart, center to center. If there are two wheelchair positions, there will be four tracks so the center points will not share one track.

There shall be provisions for storing all of the hardware and belts in a pouch on the inside rear wall of the van. Floor mounted, durable metal or plastic boxes will be acceptable.

Easy to secure and release seat belts and shoulder straps which will encompass both the wheelchair and occupant shall be included. Easy to secure and release torso pads which encompass both the wheelchair and occupant shall be included for each wheelchair position. Include four (4) 16” “quick straps”, or approved equal for each securement location. The lap and shoulder belts will encompass any size individual.

Include on set of the following: Sure Lok AL700842, FF200637-020-05 and FE 200732, Q-Straint Q8-6325A and Q5634024INT or approved equal for <u>one</u> wheelchair position.

All bolts used in wheelchair securement modification shall be a grade 5 or higher. All wheelchair securement devices and installation will meet ADA requirement 49 CFR 38.23.

20. <u>Air Conditioning, Heating and Cooling</u>: Front and Rear

<u>Chassis Manufacturer's Optional</u>

Front integral high-output cooling, heating and defrosting unit with integral auxiliary rear cooling and separate heating for rear passenger area. The three-position speed controls for front and rear operation shall be front mounted easily accessible to driver and adjustable. Unrestricted modification air flow outlets are to be located front and rear providing heating and cooling throughout the driver and passenger compartments. <u>Heaters are to be floor mounted and air conditioning is to be roof mounted.</u> Air conditioning to be adequately padded to prevent injury, and rear heaters to be mounted behind rear wheel wells. Rear a/c ducts will be fully adjustable to provide airflow to passengers located directly below rear unit. Include a two-speed (off, low, high) 6" diameter fan in driver's area.

There shall also be a skirt-mounted air conditioner condenser to attain the required BTU cooling output. This condenser will be adequately protected from damage by rocks, mud and other material thrown by tires. Those protective shields must be rust proof with (2) two; (1) one for the front and (1) one for the rear of the condenser. The condenser unit will

be mounted horizontally and installed flush to the lower body panel. This will be accomplished by cutting a hole in the lower panel.

The supplier must guarantee that the heating and cooling system proposed to will provide passenger and driver comfort. Rear air conditioning will have a minimum capacity of 32,000 BTU's. Front A/C will have a minimum capacity of 12,000 BTU's. Rear heater capacity will be a minimum of 30,000 BTU's.

If, for modification purposes, a different type of heating and cooling system is required, the reason must be fully explained and the system proposed be described and this explanation and description included in your bid.

Include, with the bid, all information regarding the air-conditioner and heating system to be installed (make, model number, BTU output, etc.)

21. Chassis Requirements:

Include a Power Group Option. This option package must include power windows/locks, keyless entry, and power mirrors.

Engine - Gasoline V8, minimum 240 hp. The engine shall have a full flow replaceable or spin on type oil filter. Meeting current emission standards.

Trailer Towing Package or equal. Delete hitch assembly.

Cooling System - Heavy duty or maximum cooling radiator with overflow recovery reservoir and permanent type anti-freeze installed to protect the vehicle to at least 20 degrees F below zero.

Transmission - Automatic, 4-speed overdrive with auxiliary exterior oil cooler.

Alternator - Minimum of 190 amperes.

Chassis is to be equipped with a Pentax automatic or InterMotive AFIS fast idle control solenoid (or approved equal). Fast idle shall be automatic, and activated when a low voltage situation is detected and the transmission in park.

Battery - HD with adequate CCA and reserve capacity for operating van electrical options (minimum 600 CCA).

Steering - Power - include tilt wheel and cruise control.

Brakes - Power

Axle, Front - Minimum of 4,000 lbs. capacity.

Axle, Rear - Minimum 6,000 lbs, capacity, ratio approximately 4.00 to 1.

Drive Shaft Guard - Minimum of one shaft guard per drive shaft section (FMCSR 393.89).

Springs, Front - Heavy-duty coil with a front stabilizer bar.

Springs, Rear - Heavy duty, leaf type with “Roll Guard” or approved equal.

Shock Absorbers - Heavy duty, front and rear.

Fuel Tank(s) - Minimum capacity 31 gallons.

Tires and Wheels - Will be factory installed. Acceptable tire makes will be those listed as being available in the tire section of manufacturer's Truck Data Book on specification date.

Tires - Tires will be a major brand (not Firestone), and meet manufacturer's specifications. Five (front, rear and spare), minimum size 245 x 75 R16, steelbelt radial, blackwall tubeless, all season tread. Spare tire and wheel are to be factory mounted under vehicle.

Wheels - Five 16" x 6.5", 8 stud disc.

Tire Changing Tools - The jack will be of the best quality and have adequate capacity to raise a loaded vehicle and be the type that will allow for easy removal of wheel and tire from under the raised vehicle. The wheel wrench will be the best quality tool of sufficient length to permit removal of wheels in the safest manner. Adequate and safe storage will be provided.

Bumpers - Front and rear. Manufacturer’s Standard.

Undercoating - The entire body understructure shall have a heavy, long lasting undercoating material. Automotive quality undercoating is not acceptable. Undercoating will meet FMVSS 302 for flammability.

Running Boards - Vehicle will be equipped with (1) one 8” wide by 36” long aluminum running board mounted at the driver’s door location. It will be a minimum of 1/8” thick and will have a diamond embossed or other anti-slip design on the footing area. This running board will be securely mounted with at least 3 braces that are made of galvanized steel. A non-skid expanded metal will be installed on the entire step surface to prevent slipping. Diamond embossed only is not acceptable.

Safety Equipment - Unit(s) to have all the latest standard safety equipment as required by law and regulations.

This equipment shall include a five (5) pound 10 BC Class fire extinguisher, seat belt cutter, standard size 16-unit first aid kit containing an assortment of bandages and medications suitable for the care of minor cuts and burns, and three reflective bi-directional triangles, securely mounted in the driver's area. Include 3 LED warning light (Tri Alert or approved equal). Also, include an assortment of spare fuses for use in the vehicle chassis and

conversion electrical systems.

Each vehicle will have a blood borne disease kit including the following items: latex gloves, CPR mask, goggles, apron, disinfectant wipes, absorbent and scoop, I.D. tag and red plastic bag. All first-aid and bloodborne disease kits will be packaged in durable metal or hard plastic cases.

All bidders shall describe and furnish a complete detailed listing of the vehicle, requested drawings and modifications of the equipment he proposes to furnish.

A detailed drawing, showing interior floor plan and seating arrangements shall be included.

A detailed drawing for RH front door entrance stepwell shall be provided.

A detailed drawing for the RH front door and wheelchair access doors modifications.

A SCHEMATIC OF ANY INSTALLED WIRING SHALL BE FURNISHED WITH EACH VEHICLE. ANY CONVERSION ELECTRICAL ACCESS PANEL WILL BE MOUNTED IN A CONVIENT LOCATION.

A guarantee that the chassis manufacturer's warranty (3 years, 36,000 mile minimum) will be in effect at the time of delivery and acceptance, regardless of odometer reading or date of original purchase by supplier.

A list of all dealers or service centers for all add-on equipment used during the conversion.

A copy of the warranty on the air conditioning, if other than chassis manufacturer's optional and on the wheelchair lift and securement devices. All components will have a minimum 2 years, 24,000 mile warranty.

Estimated curb weight of the completed vehicle.

Heating and cooling system guarantee.

Description of heating, air-conditioning system.

<u>To be furnished with each vehicle at time of delivery</u>:

An operators manual for the basic chassis and other systems.

A parts book and a maintenance service manual for all add-on equipment used in modification.

22. <u>Color</u>:

<u>Exterior</u> – White – chassis and roof.

Interior - The interior trim, upholstery, seat belts, visors, etc., will be color keyed to exterior color.

23. Advertisements - Decals and all other forms of dealer advertisement will not be allowed.

24. If a 2010 Model cannot be supplied, then a 2011 Model must be supplied at the quoted price. This will only be exercised in the event of the successful bidder received a purchase order in time to order a 2010 Model year vehicle and fails to do so.

25. Undercoating – complete vehicle undercoating

26. Bidder guarantees that any paint applied during van modification will not show through with rust for 3 (three) years from date of delivery.

27. Vehicle will carry a minimum of 24 months 24,000 mile warranty on all conversion workmanship and materials (AC, Heating, Alternator, Body, and Lift).

28. Chassis warranty to be a minimum 3 years, 36,000 miles.

29. Bidder will certify that vehicle they meets all Federal Motor Carrier Safety regulations.

30. Buy America Certification and Final Assembly point. The final assembly point for the Buy America requirement is the location of the final conversion. The bidder will supply with the bid an itemized list of domestic produced parts or components used in the manufacturing of the vehicle; the estimated cost of each item, and the estimated total percent of the domestic components used in manufacturing the vehicle.

31. Include as an option on all floor plans. Safety Vision SV 5000, Backing Vision BV 1350, (or approved equal) backing vision system.

32. Include as an option on all floor plans. An overhead storage shelf (with netting) located above the seats on the driver's side.

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