

ADDENDUM  
4  
RFB2005-124-GJ

TITLE:

138" WB Paratransit Vans

**BID OPENING DATE May 25, 2005**

**Page 83-Section That Reads:**

**SPECIFICATIONS FOR A HEAVY DUTY FRAME, HELPER SPRINGS, FRONT AND REAR STABILIZER BARS & GAS FILLED SHOCK ABSORBERS**

Frame shall be of rigid steel construction. The frame and suspension shall be capable of supporting the weight of the vehicle, fully loaded with passengers, equipment and fuel, and equipment and all options installed, to the Vehicle's Gross Vehicle Weight Rating (GVWR), including all anticipated loads and stresses. The frame shall carry this weight without twisting as well as without flexing. The components hung from the frame, including, but not necessarily limited to, the exhaust system, the fuel lines, and the electrical wiring, shall be connected to the chassis frame by welding or bolting. The process of attaching these components to the frame shall not compromise its structural integrity. Vehicle shall be equipped with the manufacturer's heaviest duty front and rear gas filled shock absorbers and the heaviest duty front and rear springs available for the model ordered. The vehicle shall be equipped with the heaviest duty available front and rear stabilizer bars. Helper springs shall be added, to prevent any listing or leaning to the side of the vehicle on which the lift is located.

A GVWR for the overall vehicle and Gross Axle Weight Rating (GAWR) for the front and rear axles shall be specified by the manufacturer and shall be supplied to the procuring agency prior to the delivery of the vehicle.

OPTIONS: Price to install MOR Ride suspension on the rear      \$ \_\_\_\_\_

**HAS BEEN CHANGED TO READ:**

**SPECIFICATIONS FOR A HEAVY DUTY FRAME, HELPER SPRINGS, FRONT AND REAR STABILIZER BARS(OR APPROVED EQUALS, APPROVED EQUALS MUST HAVE STABILIZER IN FRONT) & GAS FILLED SHOCK ABSORBERS**

Frame shall be of rigid steel construction. The frame and suspension shall be capable of supporting the weight of the vehicle, fully loaded with passengers, equipment

and fuel, and equipment and all options installed, to the Vehicle's Gross Vehicle Weight Rating (GVWR), including all anticipated loads and stresses. The frame shall carry this weight without twisting as well as without flexing. The components hung from the frame, including, but not necessarily limited to, the exhaust system, the fuel lines, and the electrical wiring, shall be connected to the chassis frame by welding or bolting. The process of attaching these components to the frame shall not compromise its structural integrity. Vehicle shall be equipped with the manufacturer's heaviest duty front and rear gas filled shock absorbers and the heaviest duty front and rear springs available for the model ordered. The vehicle shall be equipped with the heaviest duty available front and rear stabilizer bars **(OR APPROVED EQUALS, STABLIZER MUST HAVE STABLIZER IN FRONT)**. Helper springs shall be added, to prevent any listing or leaning to the side of the vehicle on which the lift is located.

A GVWR for the overall vehicle and Gross Axle Weight Rating (GAWR) for the front and rear axles shall be specified by the manufacturer and shall be supplied to the procuring agency prior to the delivery of the vehicle.

OPTIONS: Price to install MOR Ride suspension on the rear \$ \_\_\_\_\_

#### **PAGE 89 THE SECTION THAT READS:**

#### **SPECIFICATIONS FOR A FIBERGLASS/PLASTIC BODY MATERIALS**

The body shall be formed by fastening structural sandwich panels (rear, front side and top) together to form a complete integrated body unit. The panels shall be made of honeycomb core material sandwiched between fiberglass/plastic sheets.

The body structure shall be adequately reinforced at all points and corners, where stress concentrations may occur, to adequately carry required loads and to adequately withstand road shock. The side and end forming shall be so designed and constructed that they will carry their full share of the stresses imposed without any damage and will absorb substantial and excessive impacts with as little damage as is practical.

Adequate reinforcement shall be provided around all doors, windows and other openings in order to transfer stresses around these openings.

The vehicle's body shall be attached to the chassis frame in such a manner as to prevent shifting or separation of the body from the chassis under any and all operating conditions.

After assembly of the body, the entire unit shall be completely coated with a gel or fiberglass coating to achieve a smooth, glossy appearance and to create a unitized structure precluding rattles or loose joints.

The fiberglass/plastic exterior body shall be of sufficient strength to support 150%

of the entire weight of the fully loaded (fuel, passengers, operator, and carryon) vehicle on its top or side, if overturned. The vehicle shall fully and completely satisfy the requirements of FMVSS 220. A copy of the FMVSS 220 roll over protection test results, certified by a registered professional engineer, shall be available and submitted to the Purchasing Agency by the bidder as part of the proposal. The vehicle shall fully and completely satisfy the requirements of FMVSS 221. A copy of the FMVSS 221 sidewall joint strength test results, certified by a registered professional engineer, shall be available and submitted to the Purchasing Agency by the bidder as part of the proposal.

All ASTM Specifications applying to this method of body construction shall be fully satisfied or exceeded.

**THE FOLLOWING QUESTION HAS BEEN ASKED:**

Will COA accept a steel and/or aluminum body side walls mounted over a welded steel frame?

**ANSWER-YES**

**PAGE 90 THE SECTION THAT READS:**

**SPECIFICATIONS FOR CRASHWORTHINESS REQUIREMENTS**

Each vehicle shall be designed, engineered, and constructed to contain an integrated structural steel framing system, including a roll cage, which is appropriately and securely fastened to the vehicle chassis.

Each vehicle shall fully and completely satisfy Federal Motor Vehicle Safety Standards 220 and 221. The vehicle manufacturer shall provide certification, signed and sealed by a registered professional engineer, that the procured vehicle was tested by an independent testing laboratory and found to be in full and complete compliance with FMVSS's 220 and 221. Each vehicle shall also fully satisfy all other applicable Federal Motor Vehicle Safety Standards and shall have all equipment required by the United States Department of Transportation and the Motor Vehicle Code of the State of New Mexico.

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

A complete description of the roll cage and the frame, including a sketch, showing size, type, location, etc. of structural members shall be submitted to the Purchasing Agency as part of the submitted proposal. Description shall also include

information on where and how the roll cage and frame is attached to the under frame (chassis).

All interior panels shall be riveted, welded, or otherwise fastened to the body frame. Exterior body seams shall be constructed in such a manner as to shed water and exterior panels shall have lap joints. All exterior joints and seams shall be protected by the application of a caulking compound. The body shall be sealed and made tight to prevent entrance of dust or moisture into the passenger and operator compartments.

Before assembling, all metal body parts shall be given a thorough multiple stage anti-corrosion treatment. All nuts, bolts, clips, washers, clamps, and like fasteners shall be zinc or cadmium plated, phosphate coated or stainless steel to prevent corrosion. Exterior body panels shall be securely riveted, welded or fastened in place.

**THE FOLLOWING QUESTION HAS BEEN ASKED:**

Will COA accept fiberglass side walls with steel tubing laminated into the fiberglass to provide support, Sidewalls are laminated to floor/under frame.

**ANSWER- YES**

**PAGE 95 THE SECTION THAT READS:**

**SPECIFICATIONS FOR A MAXIMUM NUMBER OF EMERGENCY ACCESS WINDOWS**

Each passenger seating and securement position shall have a window near it so those passengers can view the scenery while in transit. The number of available windows shall be maximized while still providing space in the body for an effective rollover protection device such as a structural cage that is welded or bolted to the frame.

Other than those items specifically addressed in this specification, the vender shall provide emergency access windows in the vehicle according to Federal Motor Vehicle Safety Standard (FMVSS) 217. If any clarification is needed, proposing vendor shall submit questions in writing to the procuring agency, well before the proposal due date so that written answers can be reasonably generated and sent to the questioning vender.

All windows placed in the walls parallel to the centerline of the vehicle shall be emergency access side windows. They shall be placed so that every passenger, including those positioned in securement areas, has a view of the outside environment.

Emergency access side windows shall be securely mounted to the primary structural framing of the body. Each window opening shall fully satisfy all applicable provisions of FMVSS 217. Each window shall be easily replaceable and shall be sized so that they are

interchangeable to the maximum extent possible with non-emergency access side windows.

Emergency access side windows shall incorporate full emergency push out capabilities with hinges along the upper edge of the window and frame unit. Each shall be equipped with two quick release mechanisms. One along the right and one along the left outer parallel edges of the window in locations that will be fully accessible to vehicle occupants after an accident or during an emergency. Concise and clearly written instructions for the proper opening of the emergency windows shall be permanently marked on metal plates, attached to the body side walls or window framing, located within six inches of the release mechanisms, and clearly visible within the viewing area of seated passengers and passengers using mobility devices in securement positions. Instruction information shall be placed on each plate twice, once in normal orientation and once upside down, so that in the event the vehicle overturns in an accident, occupants will be able to read the instructions. The wording on the sign, its size and its mounting location shall be proposed in the vender's proposal and shall be subject to final approval by the procuring agency.

Each emergency access window and frame shall be fully self-draining of rainwater and all other forms of precipitation. It shall be designed to reasonably prevent the intrusion and collection of debris. With appropriate reasonable maintenance as designated by the vender and provided by the owner, the emergency access windows shall be functional when needed after an accident or during an emergency. Maintenance information shall be provided designating the activities required to be preformed by the owner and their frequency in order to maintain the functionality of the emergency access windows.

Emergency access windows shall be easily released from the inside by vehicle occupants; shall be releasable from the outside by reasonable force exerted by emergency officials; shall be large enough to allow any injured occupant to be transported through while on a backboard or stretcher; and shall be large enough for an emergency official in typical dress to be able to easily move through and into the interior of the vehicle.

HAS BEEN CHANGED TO READ:

**SPECIFICATIONS FOR A MAXIMUM NUMBER OF EMERGENCY ACCESS WINDOW-ALL PASSENGER WINDOWS TO BE EMERGENCY EGRESS**

Each passenger seating and securement position shall have a window near it so those passengers can view the scenery while in transit. The number of available windows shall be maximized while still providing space in the body for an effective rollover protection device such as a structural cage that is welded or bolted to the frame.

Other than those items specifically addressed in this specification, the vender shall provide emergency access windows in the vehicle according to Federal Motor Vehicle Safety Standard (FMVSS) 217. If any clarification is needed, proposing vendor shall submit questions in writing to the procuring agency, well before the proposal due date so that written answers can be reasonably generated and sent to the questioning vender.

All windows placed in the walls parallel to the centerline of the vehicle shall be emergency access side windows. They shall be placed so that every passenger, including those positioned in securement areas, has a view of the outside environment.

Emergency access side windows shall be securely mounted to the primary structural framing of the body. Each window opening shall fully satisfy all applicable provisions of FMVSS 217. Each window shall be easily replaceable and shall be sized so that they are interchangeable to the maximum extent possible with non-emergency access side windows.

Emergency access side windows shall incorporate full emergency push out capabilities with hinges along the upper edge of the window and frame unit. Each shall be equipped with two quick release mechanisms. One along the right and one along the left outer parallel edges of the window in locations that will be fully accessible to vehicle occupants after an accident or during an emergency. Concise and clearly written instructions for the proper opening of the emergency windows shall be permanently marked on metal plates, attached to the body side walls or window framing, located within six inches of the release mechanisms, and clearly visible within the viewing area of seated passengers and passengers using mobility devices in securement positions. Instruction information shall be placed on each plate twice, once in normal orientation and once upside down, so that in the event the vehicle overturns in an accident, occupants will be able to read the instructions. The wording on the sign, its size and its mounting location shall be proposed in the vender's proposal and shall be subject to final approval by the procuring agency.

Each emergency access window and frame shall be fully self-draining of rainwater and all other forms of precipitation. It shall be designed to reasonably prevent the intrusion and collection of debris. With appropriate reasonable maintenance as designated by the vender and provided by the owner, the emergency access windows shall be functional when needed after an accident or during an emergency. Maintenance information shall be provided designating the activities required to be preformed by the owner and their frequency in order to maintain the functionality of the emergency access windows.

Emergency access windows shall be easily released from the inside by vehicle occupants; shall be releasable from the outside by reasonable force exerted by emergency officials; shall be large enough to allow any injured occupant to be transported through while on a backboard or stretcher; and shall be large enough for an emergency official in typical dress to be able to easily move through and into the interior of the vehicle.

**PAGE 98 SECTION THAT READS:**

**SPECIFICATIONS FOR AN ORIGINAL EQUIPMENT MANUFACTURER (OEM) INSTRUMENT PANEL FOR VEHICLE WITH HYDRAULIC BRAKES AND POWER LIFT**

The operator's instrument panel shall include, but not be limited to, a speedometer, odometer, upper beam headlight indicator, left and right turn signal indicators, hazard flasher, fuel gauge, and ammeter or voltmeter. The instrument panel shall also contain either gauges or warning lights (agency to select gauges or lights, gauges are better but lights are cheaper) indicating oil pressure, brake system pressure and water temperature. An indicator light shall illuminate when the lift or ramp system interlock is properly engaged, broadcasting that the lift may be operated. The instrument panel shall be adequately lighted. There shall be no glare off the instrument panel that would interfere with the operators' visibility.

If the vehicle is equipped with ABS brakes, the supplier shall permanently affix an engraved plaque with the letters "ABS" in high-contrast one-inch letters on a spot easily visible to the operator on the dashboard.

**HAS BEEN CHANGED TO READ:**

**SPECIFICATIONS FOR AN ORIGINAL EQUIPMENT MANUFACTURER (OEM) OR APPROVED EQUAL INSTRUMENT PANEL FOR VEHICLE WITH HYDRAULIC BRAKES AND POWER LIFT**

The operator's instrument panel shall include, but not be limited to, a speedometer, odometer, upper beam headlight indicator, left and right turn signal indicators, hazard flasher, fuel gauge, and ammeter or voltmeter. The instrument panel shall also contain either gauges or warning lights (agency to select gauges or lights, gauges are better but lights are cheaper) indicating oil pressure, brake system pressure and water temperature. An indicator light shall illuminate when the lift or ramp system interlock is properly engaged, broadcasting that the lift may be operated. The instrument panel shall be adequately lighted. There shall be no glare off the instrument panel that would interfere with the operators' visibility.

If the vehicle is equipped with ABS brakes, the supplier shall permanently affix an engraved plaque with the letters "ABS" in high-contrast one-inch letters on a spot easily visible to the operator on the dashboard.

**PAGE 115 THE SECTION THAT READS:**

**Platform Size And Construction**

The platform shall have a minimum clear width of 32 inches at the platform, a minimum clear width of 34 inches measured from 2 inches above the platform surface to 30 inches above the platform, and a minimum clear length of 52 inches measured from 2 inches above the surface of the platform to 30 inches above the surface of the platform.

The lift platform shall be of steel or aluminum construction and the surface shall be expanded metal or hole-punched metal grating. The platform surface shall be free of any protrusions over 1/4 inch high and shall be slip resistant. The lift platform at the

floor edge shall be in a color contrasting with the vehicle floor covering, or brilliant white, brilliant yellow or brilliant orange striping shall be provided on the vehicle floor edge at the lift platform.

Wheelchair/mobility aid lift construction shall be a modular steel box frame type design providing rigidity independent of the vehicle body for reinforcement and lift alignment. The lift shall be tested by an independent testing laboratory (and the results signed and sealed by a registered Professional Engineer) to a minimum 1,100 pound lift capacity, and be capable of safely lifting a static load of 1,100 pounds minimum, continuous lifting capacity. The platform shall be capable of safely supporting a 1,000 pound load, and the lift shall be capable of smoothly raising and lowering on the platform any load between zero pounds and 600 pounds. The certification shall be submitted as part of the proposal.

The lift platform shall not deflect more than three degrees in any direction when tested as follows. A static load of 600 pounds shall be applied through the centroid of a 26-inch by 26-inch test pallet placed at the centroid of the platform. The platform shall be raised and lowered with this weight. During the lift operation the platform shall not deflect more than three degrees in any direction between the loaded position and its unloaded position. The testing shall be accomplished by an independent testing laboratory and the verification results signed and sealed by a registered Professional Engineer. This certification shall be included in the bidder's proposal.

Working parts, such as cables, pulleys, and shafts, which can be expected to wear, and upon which the lift depends for support of the load, shall have a safety factor of at least six, based on the ultimate strength of the material. Nonworking parts, such as platform, frame, and attachment hardware, shall have a safety factor of at least three, based on the ultimate strength of the material. All power units, operating joints, linkage and mounting points to the body/frame shall be certified by the manufacturer in a written test report as being adequate for this loading and having the safety factors specified. A copy of this test report shall be included in the bidder's proposal.

Under-floor areas shall be shielded from the lift platform to prevent injuries to limbs during operation of the lift. Pinching movements, shear areas or places where clothing or other objects could be caught or damaged shall be covered or in other ways protected to prevent injury.

**HAS BEEN CHANGED TO READ:**

**Platform Size And Construction**

The platform shall have a minimum clear width of 32 inches at the platform, a minimum clear width of 34 inches measured from 2 inches above the platform surface to 30 inches above the platform, and a minimum clear length of 52 inches measured from 2

inches above the surface of the platform to 30 inches above the surface of the platform **OR APPROVED EQUAL.**

The lift platform shall be of steel or aluminum construction and the surface shall be expanded metal or hole-punched metal grating. The platform surface shall be free of any protrusions over 1/4 inch high and shall be slip resistant. The lift platform at the floor edge shall be in a color contrasting with the vehicle floor covering, or brilliant white, brilliant yellow or brilliant orange striping shall be provided on the vehicle floor edge at the lift platform.

Wheelchair/mobility aid lift construction shall be a modular steel box frame type design providing rigidity independent of the vehicle body for reinforcement and lift alignment. The lift shall be tested by an independent testing laboratory (and the results signed and sealed by a registered Professional Engineer) to a minimum 1,100 pound lift capacity, and be capable of safely lifting a static load of 1,100 pounds minimum, continuous lifting capacity. The platform shall be capable of safely supporting a 1,000 pound load, and the lift shall be capable of smoothly raising and lowering on the platform any load between zero pounds and 600 pounds. The certification shall be submitted as part of the proposal.

The lift platform shall not deflect more than three degrees in any direction when tested as follows. A static load of 600 pounds shall be applied through the centroid of a 26-inch by 26-inch test pallet placed at the centroid of the platform. The platform shall be raised and lowered with this weight. During the lift operation the platform shall not deflect more than three degrees in any direction between the loaded position and its unloaded position. The testing shall be accomplished by an independent testing laboratory and the verification results signed and sealed by a registered Professional Engineer. This certification shall be included in the bidder's proposal.

Working parts, such as cables, pulleys, and shafts, which can be expected to wear, and upon which the lift depends for support of the load, shall have a safety factor of at least six, based on the ultimate strength of the material. Nonworking parts, such as platform, frame, and attachment hardware, shall have a safety factor of at least three, based on the ultimate strength of the material. All power units, operating joints, linkage and mounting points to the body/frame shall be certified by the manufacturer in a written test report as being adequate for this loading and having the safety factors specified. A copy of this test report shall be included in the bidder's proposal.

Under-floor areas shall be shielded from the lift platform to prevent injuries to limbs during operation of the lift. Pinching movements, shear areas or places where clothing or other objects could be caught or damaged shall be covered or in other ways protected to prevent injury.

**PAGE 119 THE SECTION THAT READS:**

## SPECIFICATIONS FOR A BELT-CHANNEL SYSTEM

The tie down system shall be Qstraint deluxe with “J” hooks and the slide and click system. A combination wheelchair/mobility aid/passenger securement system shall be provided for 2 wheelchair/mobility aid and passenger positions in each vehicle. The securement system shall be so designed, configured and installed to provide for accommodation of the broadest possible population spectrum of wheelchair/mobility aid sizes and designs of varying widths equipped with solid tires or large-section pneumatic tires, including the newest design lightweight wheelchairs with cambered wheels, and for electrically propelled wheelchairs. Proper use of the securement system, as designated by the manufacturer, shall not cause damage to any part of the wheelchair/mobility aid. Bidder shall provide detailed instructions on the proper use of the devices with each vehicle delivered.

The system shall be so designed and configured that the passenger and wheelchair/mobility aid are independently and securely fastened and restrained, with no dependence of one upon the other.

The Americans with Disabilities Act requires the following features:

Design Load. Securement systems on vehicles with Gross Vehicle Weight Ratings (GVWRs) of up to 30,000 pounds, and their attachments to such vehicles, shall restrain a force in the forward longitudinal direction of up to 2,500 pounds per securement leg or clamping mechanism and a minimum of 5,000 pounds for each mobility aid.

Location and size. The securement system shall be placed as near to the accessible entrance as practicable and shall have a clear floor area of 30 inches by 48 inches. Such space shall adjoin, and may slightly overlap, an access path. Not more than six inches of the required clear floor space may be accommodated for footrests under another seat provided there is a minimum of nine inches from the floor to the lowest part of the seat overhanging the space. Securement areas may have fold-down seats to accommodate other passengers when a wheelchair or mobility aid is not occupying the area, provided the seats, when folded up, do not obstruct the clear floor space required.

Mobility aids accommodated. The securement system shall secure all common wheelchairs and mobility aids and shall be easily attached by a person familiar with the system and mobility aid and having average dexterity.

Movement. When the wheelchair or mobility aid and its passenger is secured in accordance with the manufacturer's instructions, the securement system shall limit the movement of an occupied wheelchair or mobility aid to no more than two inches in any direction under normal vehicle operating conditions.

Stowage. When not being used for securement, or when the securement area can be otherwise used, the securement system shall not interfere with passenger or operator movement, shall not present any hazardous condition, shall be reasonably protected from vandalism, and shall be readily accessed when needed for use.

Seat belt and shoulder harness. For each wheelchair or mobility aid securement device provided, a passenger seat belt and shoulder harness, wheelchair or mobility aid users shall, also provide complying with all applicable provisions of 49 CFR part 571, for use. Such seat belts and shoulder harnesses shall not be used in lieu of a device that secures

the wheelchair or mobility aid itself.

The securement system shall secure all common wheelchairs and mobility aids and shall be easily attached by an operator familiar with the system and mobility aid, and having an average dexterity. To assist the operator in securing the wheelchair/mobility aid, the securement system shall have a ratcheting feature to allow a person of average strength to tighten the securement system. The system shall positively secure the wheelchair/mobility aid with two front, and two rear adjustable belt type hold-down assemblies. When the wheelchair/mobility aid/passenger is secured in accordance with the manufacturer's instructions, the securement system shall limit the movement of an occupied wheelchair or mobility aid to no more than two inches in any direction under normal vehicle operating conditions. Each hold-down assembly shall be attachable into channels that are recessed and flush-mounted into the vehicle floor. The tie-down anchorage assemblies shall fully satisfy the Q'straint Deluxe with Slide and Click Standards. The rear hold-down belt assembly(s) shall be equipped with a tightening clamp device to tension the belt, after the initial snug up.

A combination upper torso (shoulder) and lap belt assembly, that attaches directly into the rear wheelchair/mobility aid tie-down belt attachment hardware shall be provided as part of the system for use by wheelchair or mobility aid users. Such seat belts and shoulder harnesses shall not be used in lieu of a device that secures the wheelchair or mobility aid itself. The shoulder belt shall be attached to an upper anchorage point located on the side of the vehicle body at the appropriate height and longitudinal rearward displacement, in relation to the seated wheelchair/mobility aid passenger for maximum effectiveness, and shall be in accordance with all applicable provisions of ADA 49 CFR subpart B, 38.23 paragraph (D)(7) and the securement system manufacturer's specifications and instructions. The securement belts shall be easily identified and permanently marked as to their location of use as follows: "FRONT", "REAR", "LAP", "SHOULDER". A wall mounted storage system for belts other than the shoulder belt shall be provided on each vehicle at each securement position to keep them organized and clean. A Velcro tie strap to match the color of the belts shall be provided at each storage area to secure the belts to the wall when not in use and to prevent them from swinging when the vehicle is in motion. A Velcro tie strap to match the color of the belt shall be provided at each shoulder belt storage location to secure it to the wall when not in use and prevent it from swinging when the vehicle is in motion. In addition a storage container sufficient in size to hold a complete set of belts shall be securely attached to the floor in an accessible location to each securement position, but shall not cause a hazard as a result of the location. The storage units shall be located in a convenient location that does not interfere with, or cause an inconvenience to seated passengers.

Both the lap belt and shoulder belt assemblies shall be so designed that they incorporate provisions to be easily adjustable, and of sufficient length to accommodate passengers ranging in size from the 5th-percentile female to the 97.5-percentile male, and including persons of a very stocky nature and short and tall stature. The securement system shall also accommodate the above passenger population distribution when dressed in bulky winter clothing, with nearly equivalent securement effectiveness as is achievable and

practicable. Failure to fully satisfy these criteria shall deem the system to be in non-compliance with these specifications, and may be cause for rejection of the system by the Procuring Agency without further recourse on the part of the proposer.

When not being used for securement, or when the securement area can be used otherwise, the securement system shall not interfere with passenger movement, shall not present any hazardous condition, shall be reasonably protected from vandalism, and shall be readily accessed when needed for use.

The wheelchair/mobility aid/passenger securement system shall fully satisfy the dynamic testing criteria established by the UMTRI impact sled tests for 30 mph and 20g force conditions. The securement system and its attachments shall restrain a minimum force in the forward longitudinal direction of 2,500 pounds per securement leg or clamping mechanism and a minimum of 6,000 pounds for each mobility aid. All securement system components shall meet minimum static testing forces equal to:

- (a) Rear belt assembly 6,000 Lbs.
- (b) Front belt assembly 2,500 Lbs.
- (c) Lap belt assembly 2,500 Lbs.
- (d) Shoulder belt assembly 2,500 Lbs.
- (e) Shoulder belt anchor assembly 2,500 Lbs.
- (f) Floor insert anchor assembly 6,000 Lbs.

A set of clear, concise, user instructions for the operation of the securement system, printed on durable heavy paper material encased in plastic, shall be furnished with each securement system to remain in the vehicle and be fully functional during the designated life of the vehicle.

The Bidder and/or Contractor shall certify that the wheelchair/mobility aid/passenger securement/restraint system fully satisfies all applicable Federal and State Motor Vehicle Safety Standards. The wheelchair/mobility aid/passenger securement/restraint system, configuration and installation shall require approval of the Procuring Agency prior to vehicle production. Written documentation outlining test procedures and results shall be prepared by an independent testing laboratory and signed and sealed by a registered Professional Engineer certifying compliance with the requirements of this section. The Bidder and/or Contractor shall provide this certification prior to production of the vehicles. Without such certification the procuring agency has the right to void the contract and to assess liquidated damages to cover any and all costs associated with the delay in acquiring the vehicles necessary to provide for passenger service delivery.

HAS BEEN CHANGED TO READ:

#### SPECIFICATIONS FOR A BELT-CHANNEL SYSTEM

The tie down system shall be Qstraint deluxe with “J” hooks and the slide and click system **OR EQUAL**. A combination wheelchair/mobility aid/passenger securement

system shall be provided for 2 wheelchair/mobility aid and passenger positions in each vehicle. The securement system shall be so designed, configured and installed to provide for accommodation of the broadest possible population spectrum of wheelchair/mobility aid sizes and designs of varying widths equipped with solid tires or large-section pneumatic tires, including the newest design lightweight wheelchairs with cambered wheels, and for electrically propelled wheelchairs. Proper use of the securement system, as designated by the manufacturer, shall not cause damage to any part of the wheelchair/mobility aid. Bidder shall provide detailed instructions on the proper use of the devices with each vehicle delivered.

The system shall be so designed and configured that the passenger and wheelchair/mobility aid are independently and securely fastened and restrained, with no dependence of one upon the other.

The Americans with Disabilities Act requires the following features:

Design Load. Securement systems on vehicles with Gross Vehicle Weight Ratings (GVWRs) of up to 30,000 pounds, and their attachments to such vehicles, shall restrain a force in the forward longitudinal direction of up to 2,500 pounds per securement leg or clamping mechanism and a minimum of 5,000 pounds for each mobility aid.

Location and size. The securement system shall be placed as near to the accessible entrance as practicable and shall have a clear floor area of 30 inches by 48 inches. Such space shall adjoin, and may slightly overlap, an access path. Not more than six inches of the required clear floor space may be accommodated for footrests under another seat provided there is a minimum of nine inches from the floor to the lowest part of the seat overhanging the space. Securement areas may have fold-down seats to accommodate other passengers when a wheelchair or mobility aid is not occupying the area, provided the seats, when folded up, do not obstruct the clear floor space required.

Mobility aids accommodated. The securement system shall secure all common wheelchairs and mobility aids and shall be easily attached by a person familiar with the system and mobility aid and having average dexterity.

Movement. When the wheelchair or mobility aid and its passenger is secured in accordance with the manufacturer's instructions, the securement system shall limit the movement of an occupied wheelchair or mobility aid to no more than two inches in any direction under normal vehicle operating conditions.

Stowage. When not being used for securement, or when the securement area can be otherwise used, the securement system shall not interfere with passenger or operator movement, shall not present any hazardous condition, shall be reasonably protected from vandalism, and shall be readily accessed when needed for use.

Seat belt and shoulder harness. For each wheelchair or mobility aid securement device provided, a passenger seat belt and shoulder harness, wheelchair or mobility aid users shall, also provide complying with all applicable provisions of 49 CFR part 571, for use. Such seat belts and shoulder harnesses shall not be used in lieu of a device that secures the wheelchair or mobility aid itself.

The securement system shall secure all common wheelchairs and mobility aids and shall be easily attached by an operator familiar with the system and mobility aid, and having an

average dexterity. To assist the operator in securing the wheelchair/mobility aid, the securement system shall have a ratcheting feature to allow a person of average strength to tighten the securement system. The system shall positively secure the wheelchair/mobility aid with two front, and two rear adjustable belt type hold-down assemblies. When the wheelchair/mobility aid/passenger is secured in accordance with the manufacturer's instructions, the securement system shall limit the movement of an occupied wheelchair or mobility aid to no more than two inches in any direction under normal vehicle operating conditions. Each hold-down assembly shall be attachable into channels that are recessed and flush-mounted into the vehicle floor. The tie-down anchorage assemblies shall fully satisfy the Q'straint Deluxe with Slide and Click Standards. The rear hold-down belt assembly(s) shall be equipped with a tightening clamp device to tension the belt, after the initial snug up.

A combination upper torso (shoulder) and lap belt assembly, that attaches directly into the rear wheelchair/mobility aid tie-down belt attachment hardware shall be provided as part of the system for use by wheelchair or mobility aid users. Such seat belts and shoulder harnesses shall not be used in lieu of a device that secures the wheelchair or mobility aid itself. The shoulder belt shall be attached to an upper anchorage point located on the side of the vehicle body at the appropriate height and longitudinal rearward displacement, in relation to the seated wheelchair/mobility aid passenger for maximum effectiveness, and shall be in accordance with all applicable provisions of ADA 49 CFR subpart B, 38.23 paragraph (D)(7) and the securement system manufacturer's specifications and instructions. The securement belts shall be easily identified and permanently marked as to their location of use as follows: "FRONT", "REAR", "LAP", "SHOULDER". A wall mounted storage system for belts other than the shoulder belt shall be provided on each vehicle at each securement position to keep them organized and clean. A Velcro tie strap to match the color of the belts shall be provided at each storage area to secure the belts to the wall when not in use and to prevent them from swinging when the vehicle is in motion. A Velcro tie strap to match the color of the belt shall be provided at each shoulder belt storage location to secure it to the wall when not in use and prevent it from swinging when the vehicle is in motion. In addition a storage container sufficient in size to hold a complete set of belts shall be securely attached to the floor in an accessible location to each securement position, but shall not cause a hazard as a result of the location. The storage units shall be located in a convenient location that does not interfere with, or cause an inconvenience to seated passengers.

Both the lap belt and shoulder belt assemblies shall be so designed that they incorporate provisions to be easily adjustable, and of sufficient length to accommodate passengers ranging in size from the 5th-percentile female to the 97.5-percentile male, and including persons of a very stocky nature and short and tall stature. The securement system shall also accommodate the above passenger population distribution when dressed in bulky winter clothing, with nearly equivalent securement effectiveness as is achievable and practicable. Failure to fully satisfy these criteria shall deem the system to be in non-compliance with these specifications, and may be cause for rejection of the system by the Procuring Agency without further recourse on the part of the proposer.

When not being used for securement, or when the securement area can be used otherwise, the securement system shall not interfere with passenger movement, shall not present any hazardous condition, shall be reasonably protected from vandalism, and shall be readily accessed when needed for use.

The wheelchair/mobility aid/passenger securement system shall fully satisfy the dynamic testing criteria established by the UMTRI impact sled tests for 30 mph and 20g force conditions. The securement system and its attachments shall restrain a minimum force in the forward longitudinal direction of 2,500 pounds per securement leg or clamping mechanism and a minimum of 6,000 pounds for each mobility aid. All securement system components shall meet minimum static testing forces equal to:

- (a) Rear belt assembly 6,000 Lbs.
- (b) Front belt assembly 2,500 Lbs.
- (c) Lap belt assembly 2,500 Lbs.
- (d) Shoulder belt assembly 2,500 Lbs.
- (e) Shoulder belt anchor assembly 2,500 Lbs.
- (f) Floor insert anchor assembly 6,000 Lbs.

A set of clear, concise, user instructions for the operation of the securement system, printed on durable heavy paper material encased in plastic, shall be furnished with each securement system to remain in the vehicle and be fully functional during the designated life of the vehicle.

The Bidder and/or Contractor shall certify that the wheelchair/mobility aid/passenger securement/restraint system fully satisfies all applicable Federal and State Motor Vehicle Safety Standards. The wheelchair/mobility aid/passenger securement/restraint system, configuration and installation shall require approval of the Procuring Agency prior to vehicle production. Written documentation outlining test procedures and results shall be prepared by an independent testing laboratory and signed and sealed by a registered Professional Engineer certifying compliance with the requirements of this section. The Bidder and/or Contractor shall provide this certification prior to production of the vehicles. Without such certification the procuring agency has the right to void the contract and to assess liquidated damages to cover any and all costs associated with the delay in acquiring the vehicles necessary to provide for passenger service delivery.

I apologize for any inconvenience this may have caused.

You must return this Addendum, signed, with your RFB. Failure to do so may cause your bid to be considered non-responsive. RETURN TO OFFICE OF THE CITY CLERK, 11<sup>TH</sup> FLOOR PO BOX 1293 ALBUQUERQUE, NM 87103.

Sincerely,

G. Walter Jaramillo  
Senior Buyer

Purchasing Division  
xc: Ronn Jones, Purchasing Officer  
Sandra Vescovi, Contracting Supervisor  
City Clerk  
File RFB2005-124-GJ

\*\*\*\*\*  
\*\*\*ACKNOWLEDGED&RETURNED:WITH BID BY LETTER\_\*\*\*\*\*

---

SIGNATURE	PRINTED NAME	TITLE	COMPANY
-----------	--------------	-------	---------