STATE OF GEORGIA

(Department of Administrative Services, State Purchasing Division)

2023 TECHNICAL AND PERFORMANCE

SPECIFICATIONS

FOR

GEROGIA DEPARTMENT OF TRANSPORTATION (GDOT)

CUTAWAY SHUTTLE VAN

LINE ITEMS#12 (6-5A) AND #13 (6-5B) ON COST WORKBOOK V-3 E-6

NOTICE: This specification is specifically designed to provide GDOT shuttle buses for their federally managed program.

This specification is NOT intended to restrict competition. Manufacturers/Dealer's may bid their bus(es) in accordance with their standard manufacturing process. In the case where that process varies for this specification, Deviations must be submitted on the provided Request for Specification Deviation Document Form and Specification Deviation Certification and Compliance Form. Any deviation documented shall be "brand name, equivalent, or equal in performance" and must meet or exceed all FTA requirements (for FTA compliant vehicles), and all Federal, State, and Local requirements. The state may, at any time during the evaluation and/or contract period, require the bidders to provide proof that the deviation meets the "brand name, equivalent or equal" in performance.

Vendor Name: _____

The vehicle shall be equivalent to a Ford E-350 Cutaway Chassis, with dual rear wheel axle, or approved equal. Chassis must be new vehicle, under standard production by the chassis manufacturer.

The following shall indicate minimum requirements. All parts, accessories, equipment and safety features considered standard, whether mentioned or not shall be considered as required.

The contractor and/or vehicle shall comply with all applicable Federal Motor Vehicle Safety and Environmental Standards, Americans with Disability Act (ADA), Buy America, Disadvantaged Business Enterprise (DBE), Altoona Bus Testing, Federal Transit Administration (FTA) – Master Agreement and Bid Specifications.

A chassis model price increase will be considered when a model year change is specific to the automotive industry. The Contractor must provide, upon request, a copy of the invoice from the chassis manufacturer to the body manufacturer, indicating the current chassis model price at the time of the bid to be used in evaluating future chassis price increases. The Contractor shall provide a certification from the chassis manufacturer with each contract extension to justify the chassis model increase. The price may be adjusted only in the same amount as the price increase to the contract supplier and be of a nature that could not have been reasonably included in the cost in the original bid. The Contractor must submit the request and all necessary documentation along with the response for contract renewal. Approval of any such increase will be at GDOT discretion.

<table>
<tr><th></th><th>Description of Product Offered</th></tr>
<tr><td>Vendor Information: The equipment offered shall be equivalent or better than the indicated model list above. Vendors are advised to review all bid documents prior to filling out this worksheet. Vendor shall indicate exactly what product they are offering and detail the specifications in each of the following categories on the “Event Worksheet” Description of Product Offered. If you are bidding the exact model indicated, please respond the “Standard Equipment” or “Included Option”. If included option, please detail the specifications of the item.

If this information is not provided or it is incomplete, your bid may be considered non-responsive and may not be considered for award.</td><td><table><tr><td>Manufacturer:</td><td></td></tr><tr><td>Model #:</td><td></td></tr></table></td></tr>
<tr><td>1.0 BASIC VEHICLE</td><td></td></tr>
</table>

1.1 Ford, E-350 Cutaway Chassis, or approved equal, with a minimum 11,500lb. Gross Vehicle weight Rating (GVWR) 1.2 Vehicle shall comply with Federal Motor Vehicle Safety Standards (FMVSS) GVWR requirements. 1.3 A Catalytic Convertor Theft Protection System must be provided	
2.0 WHEELBASE 2.1 138 inches minimum for attachment I 2.2 138 inches minimum for attachment II	
3.0 BUMPER TO BUMPER 3.1 251 inches minimum	
4.0 ENGINE 4.1 Minimum 6.6-liter V-8	
5.0 TRANSMISSION 5.1 Automatic w/overdrive, heavy duty to meet needs of vehicle. 5.2 Original equipment manufacturer transmission oil cooler shall be provided	
6.0 STEERING 6.1 Power steering, cruise control and tilt steering	
7.0 BRAKES 7.1 Heavy duty dual hydraulic with power assist. Brake booster, hydro boost	
8.0 TIRES AND WHEELS 8.1 Tire shall be a minimum of LT 225/75R-16E with all season radial ply with steel cord reinforcement and highway type tread.	

8.2 All tires and wheel shall properly balanced and aligned. 8.3 A full-size spare tire/wheel shall be provided for both attachments I and II	
9.0 ALTERNATOR 9.1 Twelve (12) volts minimum, 195 AMP capacity minimum alternators and an automatic high idler. 9.2 The electrical legend shall be provided	
10.0 BATTERY 10.1 Minimum 1150 cold cranking amps 10.2 The mounting for the battery under the body shall be the stainless-steel slide tray	
11.0 FUEL CAPACITY 11.1 Minimum 30-gallon fuel tank 11.2 Each vehicle shall have a FULLL tank of fuel upon delivery	
12.0 SUSPENSION SYSTEM 12.1 Suspension shall be OEM standard 12.2 Additional suspension to the rear of the vehicle shall consist of the MOR/ryde system or approved equal. 12.3 An eccentric Castor/Camber pinch-bolt busing kit will be installed after body mounting 12.4 Front-end alignment shall be performed after kit installation and prior to delivery of vehicle 12.5 Certification of front-end alignment shall be provided at delivery	
13.0 EXHAUST SYSTEM	

13.1 Exhaust system shall exit street side of bus immediately behind left rear wheel and shall be routed as close as practical to the vehicle frame.	
14.0 BUMPERS 14.1 Front bumper to be chrome wrap-around type 14.2 Rear bumper shall be black painted steel minimum 11 gauge 9 inches wide and securely bolted to the vehicle frame rails	
15.0 WARRANTY FOR NEW VEHICLE 15.1 The vehicle chassis must have 36,000 miles or 36 month warranty 15.2 all other components will have a standard original equipment manufacturer warranty 15.3 No extended warranty shall be purchased	
16.0 WARRANTY FOR DETECTIVE PARTS 16.1 Any and all materials, specialties, equipment or accessories that prove defective in normal operation shall be replaced or repaired by the Contractor free of any and all cost to the vehicle operator, including materials, labor and transportation cost 16.2 Defective equipment or accessories warranty service shall be completed promptly by Contractor and will not exceed thirty (30) days from receipt of vehicle 16.3 Defective equipment or accessories will be replaced with the same OEM part or the most current version of said part	
17.0 MANUALS 17.1 One operating manual for the vehicle and one operating manual for the wheelchair lift (if equipped) shall be provided for each vehicle delivered	

17.2 One manual which outlines the conversion electrical system shall be provided 17.3 GDOT will accept manuals in print, on a CD or on a flash drive	
18.0 VEHICLE DELIVERY AND VEHICLE INSPECTION 18.1 The vehicle shall be delivered within 150 days after receipt of purchase order 18.2 Delivery shall occur at the Contractor's local location 18.3 Contractor's local location for vehicle delivery shall be within two (2) hours driving time from GDOT's central office 18.4 If Contractor does not have a local location, vehicle delivery shall be conducted at one of the following GDOT locations: A. Georgia Department of Transportation 25 Kennedy Drive Forest Park, GA 30297 B. Georgia Department of Transportation 4499 Riverside Drive Macon, GA 31210 18.5 The Contractor must contact GDOT Intermodal Fleet Manager and schedule a preliminary inspection of the vehicle 18.6 At the preliminary inspection, the GDOT Intermodal Fleet Manager will inspect the vehicle and indicate items that need to be corrected and/or fixed before vehicle delivery 18.7 GDOT will not take possession of the vehicle until items identified at the preliminary inspection are corrected and/or fixed	
19.0 TRAINING DVD 19.1 One DVD training video shall be provided for each vehicle equipped with a wheelchair lift	LINE ITEM HAS BEEN REMOVED
20.0 MATERIALS	

20.1 All materials used in conversion of the bus shall conform in all respects to American Society of Testing Materials, Society of Automotive Engineers, or similar association standards 20.2 All exterior and interior panels shall be riveted, welded or fastened to the body frame	
21.0 DOCUMENTS 21.1 The original invoice, MSO (Manufacturers Statement of Origin/Certificate of Origin) and the MV1 (Tag and Title Application) must be completed and presented to purchasing client and copies to documents GDOT Intermodal Fleet Manager at the time of vehicle delivery. 21.2 The MSO and MV1 shall indicate the purchaser name and address 21.3 Successful bidder must me all O.C.G.A 40-2-29 requirements relating to the dealer sale of the vehicle which includes providing a temporary operating permit. 21.4 The vehicle shall be title to the Intermodal purchasing client with Georgia Department of Transportation listed as the first lien holder: Georgia Department of Transportation 600 W. Peachtree Street NW Atlanta GA 30308	

BODY SPECIFICATIONS – GENERAL DIMENSIONS

22.0 LENGTH 22.1 251” minimum	
23.0 INTERIOR WIDTH 23.1 91” minimum	
24.0 INTERIOR HEIGHT 24.1 74” minimum 24.2 Vehicle must have a vehicle height decal	
25.0 AISLE WIDTH	

25.1 16” minimum	
26.0 WHEELBASE 26.1 138” minimum, Attachment I 26.2 138” minimum, Attachment II	
27.0 EXTERIOR COLOR 27.1 All painted exterior surfaces shall be white	
28.0 BODY 28.1 The bus body shall be the manufacturers standard body, steel or composite, and must have received a pass grade in the Altoona Test 28.2 The bus body shall meet all FMVSS safety standards, all Federal Transit Administration (FTA) requirements, and all Americans with Disabilities Act (ADA) requirements. 28.3 The body structure shall be built as an integral unit adequately reinforced at all joints and corners where stress concertation may occur to adequately carry required loads and withstand road shock. 28.4 The side and end framing shall be so designed and constructed that they will carry their proportion of the stresses around these openings. 28.5 All posts in body side and roof sections shall be of durable box construction securely fastened to the under-frame structure so the entire frame shall act as one unit without any movement at the joining. 28.6 The end post shall be designed to resist wear. 28.7 Roof construction shall be of sufficient strength to prevent vibration, drumming or flexing. The roof shall be one-piece design 28.9 The entire floor shall be jig-welded structure	

28.10 The roof structure support members shall be equivalent of 16-gauge hat section roof bows, 1-1/2” high x 3-3/8” wide, spaced on maximum 24” centers. 28.11 Fastening of the floor to roof and roof to sidewalls by any means other than welding will not be acceptable. 28.12 The body shall be bolted through the sub-floor structure to the chassis frame as recommended by the chassis manufacturer. 28.13 Welding of any body understructure to the chassis frame will not be permitted. 28.14 The sidewall and roof shall be joined at the roof gutter above the windows. 28.15 Side panels below the floor line shall be aluminum and easily removable for service and repair. 28.16 Inside walls and ceiling shall be insulated. 28.17 The insulation shall be a minimum 1” thick high-density polystyrene. 28.18 All nuts, bolts, clips, washers, clamps, and fasteners shall be zinc or cadmium plated or phosphate coated to prevent corrosion. 28.19 Wheel housings are to be constructed and adequately reinforced to prevent deflection. 28.20 Ample clearance shall be provided for tires under load and operating on both smooth and rough terrain. 28.21 Access doors shall be provided where necessary to service transmission, engine, radiator, battery, and air conditioning components. 28.22 The entire body frame under structure of the vehicle is to be fully undercoated with non-	

flammable resin-type material or equivalent, applied at the time of manufacture. 28.23 Any bright metal exterior trim shall be stainless steel, polished aluminum, or chrome plated.	
29.0 EXTERIOR MIRRORS 29.1 Will be a Rosco or approved equal, mirror mounting, left and right sides 29.2 Each mirror head shall include a standard and convex mirror	
30.0 EXTERIOR LIGHTING 31.1 Two (2) rear exterior lights 7" diameter, red in color shall be provided 31.2 The lights are to come on steady when the brakes are applied and flash when the passenger door is open 31.3 If vehicle is wheelchair lift equipped, the lights should flash alternately when the lift door is open 31.4 Exterior lighting shall meet all Federal and State regulations 31.5 The vehicle entrance shall have outside illumination of at least 1 foot-candle on street surface for a distance of 3 feet perpendicular to all points	
31.0 WINDOWS 31.1 The vehicle shall be an all window unit. All windows will comply with the FMVSS 217 31.2 The windshield will be a one piece assembly glazed with 3/16" tinted safety laminated safety glass with a density of tine in accordance with Automotive Service Association (ASA) standard for tinted safety glass	

31.3 The driver's window will be capable of opening by rolling down 31.4 Passenger side windows will be transit type, as opposed to school type, and will provide a view level extending 28" above the bus floor to the top window at approximately 64" above the bus floor 31.5 Vertical mullions between side windows including trim will not exceed 11" 31.6 Side and rear windows will be tinted a neutral color complementary to bus exterior 31.7 Maximum solar energy transmittance will not exceed 37%, as measured by ASTM E-424 and luminous transmittance will be no more than 31%, as measured by ASTM D-1003 31.8 Each window will be glazed with 1/8" tempered safety glass 31.9 Passenger side windows will be sealed type except that a top horizontal T-slider opening section will be provided 31.10 Opening section will be a minimum 6" in height and will provide a minimum viewing area of 56 square inches 31.11 Positive locking latches will be provided 31.12 A minimum of one emergency escape window will be provided on each side of the vehicle 31.13 A rear emergency door with an upper window and a lower window shall be provided 31.14 The doors shall be labeled and operating instructions will be clearly visible 31.15 Red marker lights shall be provided above each emergency escape window and shall illuminate when vehicle is operating	

31.16 All windows will be designed and installed in compliance with FMVSS 217 31.17 Side windows dimensions shall be a minimum 36” wide and 36” high or an approved equal 31.18 Transition windows will be provided in the area immediately in front of the passenger entry door 31.19 The upper window will have a minimum of 122 square inches viewing area, and the lower window will have a minimum of 377 square inches viewing area	
32.0 FRONT ENTRANCE DOORS 32.1 The driver’s door shall be equipped with a diamond plate running board securely supported and securely fastened to the vehicle. The step shall be Federal DOT approved 32.2 The passenger entrance door, located opposite the driver, shall be a two-leaf, outward opening type, operated electrically by the driver 32.3 The doors shall have a clear center opening width of 28” minimum and height of 80” minimum 32.4 The vehicle shall be equipped with a 14-gauge minimum steel doorframe 32.5 All components are to be of welded construction 32.6 Entry door must provide full visibility for the driver	
33.0 REAR ENTRANCE DOOR 33.1 The rear door is to be 34”x 60” in size or approved equivalent with an upper window tinted same as the passenger side windows and a lower window to allow sight immediately behind the vehicle for the driver 33.2 The windows shall be 20”W x 22”H minimum or approved equal	

33.3 The door is to be equipped with an emergency exit handle and a door ajar buzzer 33.4 A Vanguard Superviewer or approved equal, 8”x10”, shall be provided and mounted on the rear door window 33.5 The doors shall be labeled, and operating instructions will be clearly visible	
34.0 STEPWELL 34.1 The passenger entrance door shall have a lowered step-well constructed of 11-gauge minimum galvanized or stainless steel 34.2 All components are to be of welded construction 34.3 The distance from the ground to the bottom edge of the first step shall be a maximum of 12”+/- .5” 34.4 There shall be a maximum 9” rise in the steps 34.5 The steps will be fully recessed, enclosed, and protected from weather and other adverse conditions 34.6 Each step shall be covered with an abrasive non-slip step covering 34.7 All step edges and thresholds shall have a band of yellow color running the full width of the step which contrasts from the step tread surface, either light on dark and dark on light	
35.0 WHEELCHAIR LIFT AND PLATFORM 35.1 The interior side lift shall be equivalent to a Braun Ability model# NCL 1000-2 Century Series, or Federal DOT approved equivalent and shall have a 68” minimum head clearance 35.2 Wheelchair lift and accessories must meet ADA Part 49 CFR Part 38	

35.3 The platform shall be of steel construction with see-through grating 35.4 The platform shall have a minimum width of 34” and a minimum length of 54” 35.5 The side of the platform shall be a minimum of 3” measured at platform surface 35.6 The outward barrier roll stop shall be spring-loaded and a minimum of 10” high measured from the platform surface 35.7 A 1” passive inboard barrier shall be required on the platform 35.8 All boarding edges of lift platform shall have a band of yellow color running the full edge which contrasts from the lift surface, either light on dark or dark on light. Yellow reflective tape shall be mounted along the full exterior length of the side barriers 35.9 Dual handrails are to be provided and shall be of bolt-on design, 1-1/4” minimum diameter, minimum 30” high and withstand a 100-pound force in any directions, including vertical 35.10 Wheelchair lift safety belt restraints are to be provided 35.11 The wheelchair lift shall be of modular steel frame construction. 35.12 The design shall be of box frame construction providing rigidity without depending on the vehicle body for reinforcement and lift alignment 35.13 The frame and platform design shall have been tested to a minimum static load of 2400 pounds 35.14 The lift shall have a 1000-pound continuous lifting capacity	

35.15 The power supply shall be an electric hydraulic system, operating two (2) single acting cylinder 35.16 The hydraulic power pack pump shall be mounted inside the frame structure of the lift, maximizing floor and seating space 35.17 The hydraulic system shall be of gravity-down design, requiring no limit switches or bypass valves to stop the downward travel of the platform 35.18 There shall be no dual cylinder power down operation 35.19 An emergency backup pump shall be provided 35.20 The manual backup system is provided to ensure operation of the lift in case of electrical failure	
36.0 LIFT ACCESS DOOR 36.1 The lift access door shall provide a minimum of 68" of head clearance and shall be a minimum 66" wide 36.2 The door shall be securely attached to the vehicle and shall not leak water 36.3 All components are to be of welded construction 36.4 The vehicle shall be equipped with a wheelchair emblem on the rear of the vehicle	
37.0 WHEELCHAIR SECUREMENT SYSTEM 37.1 Wheelchair lockdown device will consist of a four-point tie-down system and a three point shoulder restraint belt Sure-Lok Retraktor Model or approved equal 37.2 Wheelchair ties must be recessed into the floor	

37.3 All wheelchair equipment shall comply with FMVSS 403 & 404 and meet the requirements of Part 38, Federal Register Volume 56, No. 173, Department of Transportation Part IV-Americans with Disabilities Act (ADA). Requirements of ADA shall supersede these specs www.ada.gov 37.4 All wheelchairs will be forward facing 37.5 Two (2) storage containers shall be provided and secured to store tie-downs when not in use	
38.0 LIFT CONTROLS 38.1 The lift control box shall be mounted on the interior side of the lift access door 38.2 It shall be equipped with a cord that is properly attached and secured to prevent damage to the cord during lift operation or interference with opening and closing of the door 38.3 The lift controls shall be interlocked with the transmission to ensure that the vehicle cannot be moved when the lift is not stowed and so the lift cannot be deployed unless the interlocks are engaged 38.4 The interlock system shall be Intermotive Model 501 with LED indicator light package or approved equal	
39.0 FINISHING PROCEDURES 39.1 All welds shall be ground smooth 39.2 All bare metal components shall be prepped with or equal to Ditzler Metal prep 79 and painted with Ditzler DAS 1980 primer sealer, and finished with Ditzler acrylic enamel paint that matches the vehicle	
40.0 RUSTPROOFING 40.1 This requires that a compound or sealant be applied to all appropriate interior and exterior surfaces of the vehicle	

40.2 Seams must be penetrated by the compound to retard rusting of the metal 40.3 All critical areas shall be treated 40.4 Critical areas include, but not limited to: gravel/water shields, suspension system, battery support, wheel wells, rocker panels, hidden boxed-in areas, interior of doors, exterior door bottom, pillars and clipped-on moldings 40.5 Care must be taken that the application does not interfere with any mechanical, electrical, or heat transfer details of the vehicle 40.6 The rust proofing system used shall be equivalent to or better than the Ziebart Class A Rust Protection System	
41.0 WATER TEST 41.1 A water test shall be conducted on each vehicle to insure that there are no leaks prior to delivery of the vehicle 41.2 A copy of the written test results shall be presented to GDOT Intermodal at the delivery of the vehicle 41.3 If water leaks become evident during the water test, the leaks will be repaired in a professional manner 41.4 Excessive caulking will not be acceptable 41.5 The vehicle will undergo additional testing to ensure that there are no further leaks 41.6 Copies of these additional test results shall also be presented to GDOT Intermodal at the time of delivery of vehicle 41.7 The vehicle shall be warranted against leaks for the period covered by the manufacturer's warranty	
42.0 INTERIOR	

42.1 The interior shall be insulated against the weather and operating noise 42.2 The sidewall and roof insulation will provide a minimum R-6 rating 42.3 Walls and headliner shall be Fiber Reinforce Plastic (FRP) material 42.4 Home type wall paneling or carpeting will not be acceptable 42.5 The interior walls and headliner shall meet the requirements of FMVSS 302	
43.0 SEATING 43.1 Passenger seating color shall be Regatta blue vinyl or approved equal 43.2 Seating and floor plans are shown on attachments I & II 43.3 The driver's seat shall be fully padded, deluxe bucket type of heavy-duty construction, with right side arm rest and reclining seat back easily adjusted forward and backwards 43.4 The seat shall be equipped with automatic locking retractable seat belt and shoulder harness	
44.0 SEATING POSITION – 13 PASSENGER PLUS DRIVER (See Attachment I) 44.1 Passenger seating shall consist of 5 (five) 2-passenger mid high seats and 3 (three) single mid high seats. Each seat must have a 17-1/2" wide seat cushion 44.2 All seats are to be forward facing and of fully padded constructions with regatta blue vinyl covering or approved equal 44.3 Seats shall be a minimum width of 35" per two-passenger seat and the seat back will be a minimum of 24" tall	

44.4 Padded seat backs with molded anti-vandal grab rails shall be provided 44.5 Seats shall be no more that 18” from the floor to the front edge of seat cushion 44.6 At least 9” of knee room shall be provided from the front edge of one passenger seat to the back of the seat in front 44.7 Aisle width between seats shall be a minimum of 12” 44.8 All passenger seats, including fold-away shall be Freeman USR (Under Seat Retractor) or approved equal 44.9 Each vehicle shall be equipped with two (2) seat belt extensions, maximum length available	
45.0 SEATING POSITIONS – 10 PASSENGER OR 8 PASSENGER WITH ADA REQUIREMENTS (See Attachment II) 45.1 Passenger seating shall consist of three (3) 2-passenger mid high seats, two singe mid high seats, and one (1) 2-passenger fold away seat forward facing 45.2 Two wheelchair positions shall be provided (see floor plan) 45.3 All seats shall be same specs as Attachment I 45.4 The fold-away seats shall be a 2-passenger forward facing located at the wheelchair area 45.5 All passenger seats, including fold-away shall be Freeman USR (Under Seat Retractor) or approved equal 45.6 Each vehicle shall be equipped with two (2) seat belt extensions, maximum length available **45.7 Attachment II Only: A retractable passenger seat belt and shoulder harness complying with all applicable ADA and FMVSS requirements**	

shall be provided for each wheelchair securement device 45.8 All seating shall meet/exceed the FMVSS No. 302	
46.0 PRIORITY SEATING 46.1 Each vehicle shall contain signs that indicate that seats in the front oof the vehicle are priority seats for persons with disabilities 46.2 Size and appearance of signs must meet ADA requirements	
47.0 FLOORING 47.1 The vehicle floor shall be a unitized welded box steel construction using 16-gauge, 2”x 2” box steel with full width cross members on 16” centers 47.2 A longitudinal 1/8”x 4” steel bar must be welded 27” from the outer edges by the floor sub frame providing the base for securement of track mount seat rails 47.3 The sub floor will be covered with a minimum of 5/8 inch exterior grade pressure treated plywood fastened to the frame with series of 10 x 24 Phillips head wafer screws in 12 inch centers 47.4 Seat track shall be welded to the wall and and floor structural members 47.5 The seat track, its mounting and the sub-floor must exceed FMVSS 207 and 210 requirements for seating 47.6 The floor must be bolted to the outriggers 47.7 The floor covering shall have a nonskid walking surface that remains effective in all weather conditions. The floor covering, as well as transitions of flooring material to the main floor	

and to the entrance and exit area, shall be smooth and present no tripping hazards. 47.8 Entrance/exit step tread shall include molded yellow nosing for passenger safety 47.9 Wall edges shall be caulked with silicone, black in color 47.10 Any areas on the floor that are not intended for standees, such as areas "swept" during passenger door operation, shall be clearly and permanently marked. The floor shall be easily cleaned and shall be arranged to minimize debris accumulation. A one-piece center strip shall extend from the vertical wall of the rear settee between the aisle sides of transverse seats to the standee line. If the floor is of a bi-level construction, then the center strip shall be one piece at each level. The covering between the center strip and the wheel housings may be separate pieces. At the rear door, however, a separate strip as wide as the door shall extend from the center strip to the outboard edge of the rear/exit area. The floor under the seats shall be covered with smooth surface flooring material. The floor covering shall closely fit the sidewall in a fully sealed butt joint or extend to the top of the cove.	
48.0 INTERIOR LIGHTING 48.1 The interior light shall be LED illumination 36" above the floor out 36" from sidewall 48.2 Lighting fixtures shall be located no more than 8" below top ceiling. Lights shall operate with or without the engine running 48.3 Step-well and lift area shall have LED illuminated on the step tread or unfolded lift platform	
49.0 INSTRUMENTS, INSTRUMENT PANEL AND CONTROLS 49.1 Chassis shall be equipped with the following instruments and gauges: a) speedometer b) odometer to give accrued mileage	

c) gauges: anmeter, oil pressure and water d) fuel gauge e) high beam headlamp indicator f) switches and controls for heater, defroster, air-conditioner for passenger compartment to be controlled by driver g) variable speed intermittent wiper control and windshield washer h) AM/FM radio with digital clock i) switches for passenger compartment lights j) all control knobs and switches shall be labeled 49.2 All instruments shall be easily accessible for maintenance and repair 49.3 Above instruments and gauges shall be mounted on the instrument panel clearly visible to the driver in normal seat position (not above driver's head) 49.4 Instrument panel shall have lamps of sufficient candle power to illuminate all instruments and gauges	
50.0 HEATING AND COOLING 50.1 A front heater and defroster are to be supplied. The unit is to be OEM factory installed and shall have the maximum BTU rating available 50.2 Auxiliary rear heater shall be a minimum of 35,000 BTU. The heater shall be located in the rear of the vehicle. The unit shall be out of the way of any passenger traffic 50.3 The front air conditioning system shall be an in-dash OEM 50.4 A separate rear auxiliary air conditioning system shall be provided 50.5 The rear air conditioning system shall have a skirt mounted condenser with a minimum of two (2) fans with a single compressor system and a minimum of 55,000 BTU/HR capacity	

50.6 The unit shall be installed and completely recessed into the vehicle skirt to protect coils and fans weather and road hazards 50.7 No part of the unit is to protrude below the body skirt and an access screen shall be provided for easy access to condenser coils from exterior of the vehicle 50.8 The rear mounted evaporator shall be a minimum of 55,000 BTU/HR 50.9 Rear air conditioning main output vent shall be adjustable up and down and side to side 50.10 The fan shall be controlled with a multi-speed fan and thermostatically controlled from the driver's area	
51.0 STANCHIONS AND ASSIST BARS 51.1 Padded vertical stanchion bars, a minimum if 1-1/4" in diameter, shall be provided for both sides of the front passenger entrance and behind the driver's seat 51.2 Horizontal stanchion bars with passed modesty panels shall be located on both the left side of the front passenger entrance and behind the driver's seat 51.3 The modesty panel will be vinyl covered and match the interior color of the vehicle 51.4 Both left and right sides of the step-well area shall have additional entrance assist rails 51.5 The rails are to be attached to the inside wall of the bottom step and to the stanchion bars at the top of the step 51.6 The padding on the stanchion bars shall be the full length of the bar and shall not twist or turn when handled	
52.0 INTERIOR MIRROR	

52.1 Will be a full-size mirror located above the driver's seat 6"x 16" day/night type, made of safety glass, rounded corners, protective edges and at least 22 square inches of clear vision, reflective surface area	
53.0 VISORS 53.1 Sun visor must be provided and shall be adjustable horizontally and vertically	

SAFETY EQUIPMENT

54.0 FIRE EXTINGUISHER 54.1 A dry chemical ABC classification type with a minimum 5-pound capacity shall be provided and securely mounted within the vehicle	
55.0 FIRST AID KIT 55.1 A ten (10) unit first aid kit shall be provided and securely mounted with in the vehicle	
56.0 BIOHAZARD CLEANUP KIT (SPILL KIT) 56.1 A biohazard cleanup kit shall be provided and securely mounted within the vehicle.	
57.0 REFLECTOR KIT 57.1 Three (3) Federal DOT approved portable warning reflectors shall be provided and secured inside the vehicle	
58.0 SEATBELT CUTTER 58.1 A seat belt cutter shall be installed in reach of the driver	
59.0 BACK-UP ALARM 59.1 A back-up alarm shall be installed to sound when vehicle is in reverse	
60.0 DOOR ALARM 60.1 A door alarm shall be provided that will be activated when the lift door or rear door is ajar	
61.0 OPTIONAL EQUIPMENT All optional equipment not identified but normally available to commercial accounts shall also be available to the State of Georgia at the dealer's wholesale price	

61.a BIKE RACK 61.a.1 Sportsworks DL2 two position bike rack	
61.b 6" VEHICLE LETTERING 61.b.1 The standard lettering for the vehicle shall consist of 6" medium font, blue in color, engineering grade vinyl 61.b.2 The amount of lettering will vary per vehicle 61.b.3 All lettering must be approved by GDOT Intermodal prior to installation	
61.c 3" VEHICLE LETTERING 61.c.1 The standard lettering for the vehicle shall consist of 3" medium font, blue in color, engineering grade vinyl 61.c.2 The amount of lettering will vary per vehicle 61.c.3 All lettering must be approved by GDOT Intermodal prior to installation	
61.d ROOF ESCAPE HATCH 61.d.1 A roof escape hatch to be located center of the top of vehicle	
NOTE: SEE SEATING DIAGRAM AT THE END OF THIS DOCUMENT	

OPTIONS

Option 1: SECURITY CAMERAS	**Document any Changes to the Specifications in These Columns Below.**
SECURITY CAMERAS SECURITY CAMERA OPTION 1: 6 cameras with DVR- Recording while vehicle is in service to include the panic button and specific SD card Camera locations- Front – rear Rear-front Viewing the driver	

Viewing the interior of the wheelchair lift Viewing out the windshield Exterior Curbside viewing down the bus towards the wheelchair lift	
SECURITY CAMERA OPTION 2: Is option 1 and add the WIFI antenna for live camera views while bus is in service	
SECURITY CAMERA OPTION 3: Is option 1&2 adding the Automatic Vehicle Locator system with specific needs of Live Tracking in Real Time	
SECURITY CAMERA OPTION 4: Is option 1, 2 & 3 and adding Passenger WIFI	
NOTE: If there are any charges from cellular companies the subrecipient/purchaser will be responsible for setting up their accounts.	

OPTION 2: MDVR SYSTEM	
MTData's Mobile Digital Video Recording (MDVR) solution is designed and built for heavy vehicles to monitor and manage a mobile workforce. Hardwired within the vehicle, the fleet tracking system with cameras integrates with your tracking unit to combine footage with map locations, speed and G-force readings. Enabling proactive management and response. The fleet camera system stores up to seven days of footage locally on the device and accesses ample cloud storage. It can be configured to send immediate alerts in the event of an accident, a triggered duress switch, camera failure or unit tampering.	
Specification	**Document any Changes to the Specifications in These Columns Below.**
8 Channel HD/IP Mobile DVR Specifications for Mass Transit Applications The eight (8) channel mass transit surveillance system requested should meet the following minimum requirements:	

The vendor is permitted to propose multiple systems within their response.	
MVDR: GENERAL REQUIREMENTS	**Document any Changes to the Specifications in These Columns Below.**
The MDVR must be constructed in a modular configuration with the modules for the hard drive and main control board which are fully removable on slide rails such that repair, and replacement may be completed without removing the MDVR from the vehicle. Onboard system components shall be modular, and entire MDVR replacement shall not be required.	
MVDR: SYSTEM REQUIREMENTS	**Document any Changes to the Specifications in These Columns Below.**
The MDVR must be capable of the following recording resolutions: DIGITAL: 1080P (1920x1080), 720P (1280x720) NTSC: 1080P, 720P, WD1 (928x480), WHD1 (928x240), WCIF (464x240), D1 (704x480), HD1 (704x240), CIF (352x240)	
The system must be capable of optimizing high quality video and recording time by selecting frame rates, recording quality and resolution for each camera independently.	
The system must have a 4 to 7 second brownout protection during a loss of power to protect media. Duration will be determined by power consumption at time of power loss.	
The front of the MDVR must have status indicator lights to include PWR, USB, ALM, REC, ERR, and NET. An optional light indicator box must be available for easy viewing by the driver.	
The system must also continue to record while being viewed remotely or wirelessly downloading video by multiple users.	
The MDVR system must operate utilizing an embedded Linux platform for stability and reliability.	

MDVR FEATURES	**Document any Changes to the Specifications in These Columns Below.**
The MDVR must have a mounted extension cable for connection to an optional touchscreen monitor used for setup and troubleshooting without removing the front door panel.	
The MDVR must have a “plug and play” connection on the rear panel for an onboard live monitor.	
The MDVR “panic button” located near the driver’s seat must have hard drive location “marking” capabilities and serve as a live recording indicator.	
The MDVR must have one alarm input, one output and eight (8) sensor inputs for marking events defined by the customer.	
The 3.5-inch SATA hard drive shall have a minimum storage capacity of 1TB of high quality video.	
The MDVR must have the capability of storing data on one M.2 SATA SSD, as an alternative to the 3.5-inch SATA hard drive.	
Once the hard drive is full, the system will overwrite the oldest data first.	
The hard drive must be easily accessible from the front panel.	
The hard drive housing must include a heater.	
The MDVR must have one (1) microSD card slot for redundant recording, as desired by the user. The microSD recorder must have separate settings to allow for increased recording time when in redundant mode.	
The MDVR must have a slot to accept one (1) SIM card for dual cellular network capabilities. This feature must be included within the MDVR housing.	
The MDVR must have a USB port on the front of the unit for removable storage to allow for downloading video or images directly from the MDVR or upgrading the firmware of the device, the CP4 monitor, IPC or GPS. The USB port must also accommodate a mouse or the Vulcan™ Series Easy Check device management software and Wi-Fi module.	
All recording on the MDVR must utilize H.264/H.265 compression.	

The MDVR must have the capability to connect to an Ethernet port at 10/100M/1000M, for connecting the MDVR to a wired Ethernet connection. This unit has 2 RJ45 connections for IP cameras.	
The MDVR must power up based on a 9-36V ignition trigger under continuous record, alarm record, motion record and schedule recording options. In addition, the MDVR must be able to be programmed to stay powered on and recording for up to 24 hours after the vehicle is off.	
The MDVR must be capable of onboard viewing, downloading video and setting up the MDVR via a laptop or touchscreen monitor directly connected to the MDVR.	
The HD cameras must connect directly to the rear of the MDVR with 4 pin aviation grade connectors.	
The MDVR must have the ability to adjust the brightness, contrast, color and saturation individually on each camera and must also be able to electronically mirror or flip the camera displays.	
The MDVR must have the ability to store alarm events without the events being overwritten.	
The MDVR must have an integrated 3-axis accelerometer and must be capable of tagging the video and/or sending alerts if the vehicle exceeds a pre-determined G-Force threshold. An additional connection must be available for an external accelerometer for use in driver behavior reporting.	
The MDVR must have the ability to provide the following, available for immediate download:	
A programmed channel snapshot, taken when the panic button is pressed or when an alarm or event is triggered, and	
Video clips, recorded in pre-defined lengths, of the camera view before and after the snapshot is taken.	
The MDVR must have the ability to detect video loss, motion or a camera being covered and be able to trigger an alarm or event independently.	
The MDVR must have the ability to upgrade the device firmware, CP4, IPC or GPS, either directly from a USB drive plugged into the	

MDVR or remotely using an active Internet connection.	
The MDVR will be capable of recording optional Virtual Synchronized Mapping™ as a permanently embedded video record simultaneously recorded with the video, providing a court-ready GPS map for evidence without the use of an Internet connection or the Google Maps™ mapping service.	
The MDVR must have a mounted extension cable for connection to an optional touchscreen monitor used for setup and troubleshooting without removing the front door panel.	
The MDVR must have a “plug and play” connection on the rear panel for an onboard live monitor.	
The MDVR “panic button” located near the driver’s seat must have hard drive location “marking” capabilities and serve as a live recording indicator.	
The MDVR must have one alarm input, one output and eight (8) sensor inputs for marking events defined by the customer.	
The 3.5-inch SATA hard drive shall have a minimum storage capacity of 1TB of high quality video.	
The MDVR must have the capability of storing data on one M.2 SATA SSD, as an alternative to the 3.5-inch SATA hard drive.	
Once the hard drive is full, the system will overwrite the oldest data first.	
The hard drive must be easily accessible from the front panel.	
The hard drive housing must include a heater.	
The MDVR must have one (1) microSD card slot for redundant recording, as desired by the user. The microSD recorder must have separate settings to allow for increased recording time when in redundant mode.	
The MDVR must have a slot to accept one (1) SIM card for dual cellular network capabilities. This feature must be included within the MDVR housing.	
The MDVR must have a USB port on the front of the unit for removable storage to allow for downloading video or images directly from the MDVR or upgrading the	

firmware of the device, the CP4 monitor, IPC or GPS. The USB port must also accommodate a mouse or the Vulcan™ Series Easy Check device management software and Wi-Fi module.	
All recording on the MDVR must utilize H.264/H.265 compression.	
The MDVR must have the capability to connect to an Ethernet port at 10/100M/1000M, for connecting the MDVR to a wired Ethernet connection. This unit has 2 RJ45 connections for IP cameras.	
The MDVR must power up based on a 9-36V ignition trigger under continuous record, alarm record, motion record and schedule recording options. In addition, the MDVR must be able to be programmed to stay powered on and recording for up to 24 hours after the vehicle is off.	
The MDVR must be capable of onboard viewing, downloading video and setting up the MDVR via a laptop or touchscreen monitor directly connected to the MDVR.	
The HD cameras must connect directly to the rear of the MDVR with 4 pin aviation grade connectors.	
The MDVR must have the ability to adjust the brightness, contrast, color and saturation individually on each camera and must also be able to electronically mirror or flip the camera displays.	
The MDVR must have the ability to store alarm events without the events being overwritten.	
The MDVR must have an integrated 3-axis accelerometer and must be capable of tagging the video and/or sending alerts if the vehicle exceeds a pre-determined G-Force threshold. An additional connection must be available for an external accelerometer for use in driver behavior reporting.	
The MDVR must have the ability to provide the following, available for immediate download:	
A programmed channel snapshot, taken when the panic button is pressed or when an alarm or event is triggered, and	
Video clips, recorded in pre-defined lengths, of the camera view before and after the snapshot is taken.	

The MDVR must have the ability to detect video loss, motion or a camera being covered and be able to trigger an alarm or event independently.	
The MDVR must have the ability to upgrade the device firmware, CP4, IPC or GPS, either directly from a USB drive plugged into the MDVR or remotely using an active Internet connection.	
The MDVR will be capable of recording optional Virtual Synchronized Mapping™ as a permanently embedded video record simultaneously recorded with the video, providing a court-ready GPS map for evidence without the use of an Internet connection or the Google Maps™ mapping service.	
MDVR WIRELESS CONNECTIVITY	**Document any Changes to the Specifications in These Columns Below.**
The MDVR must have two GPS connections on the rear panel: one for an optional active GPS antenna and one for an optional passive GPS antenna.	
The MDVR must include a port for an optional Wi-Fi or cellular antenna on the rear panel.	
The MDVR must have the ability to connect to one (1) internal cellular modem without requiring any external hardware other than antennas. The cellular connection must be able to be set to 3G/4G or a mix of the networks; must have a place to enter an APN number, user name and password; and must work with both CHAP and PAP certifications.	
The MDVR must be able to connect to a Pro 8™ Central Management System (CMS) server for live tracking, remote view, MDVR health, remote playback and remote video download.	
The MDVR must be able to switch from cellular download to Wi-Fi download when in range of the Wi-Fi network or be able to be programmed for video download using Wi-Fi only.	
MECHANICAL REQUIREMENTS	**Document any Changes to the Specifications in These Columns Below.**
The MDVR casing must be of extruded aluminum and built for MIL-STD-810F shock	

resistance and must operate between -40 degrees and 158 degrees Fahrenheit without additional enclosures.	
The MDVR must have user-selectable settings to shut down operations autonomously when temperature or voltage limits are exceeded. Temperature and voltage limits may be set by user, within the MDVR's recommended operating limits.	
The MDVR must be of the following dimensions: 13.7"L x 7.4"W x 3.9"H.	
MDVR ELECTRICAL REQUIREMENTS	**Document any Changes to the Specifications in These Columns Below.**
The MDVR must operate within a power input range of 9-36V DC and must be connected with a wire that is a minimum of 16-gauge, with inline fuses, and be internally and continually protected from power surges, voltage spikes and reverse polarity.	
A separate, external UPS must be available to regulate fluctuations in vehicle voltage and to provide for operation of all functions at full capacity in the event of an interruption in power to the MDVR.	
MVDR: ENVIRONMENTAL REQUIREMENTS	**Document any Changes to the Specifications in These Columns Below.**
The MDVR unit must have high and low temperature protection including a heater. An optional fan kit is required for use with HDD of 4TB+.	
The MDVR must have startup protection to prevent damage from voltage fluctuations.	
MVDR: PLAYBACK SOFTWARE	**Document any Changes to the Specifications in These Columns Below.**
Playback software must be provided without charge, including upgrades, for the life of the system.	
The playback software must be simple to use and, from one window, allow the user to access live or recorded video from multiple sources.	
The playback sources must include but not be limited to the following:	
An MDVR hard drive connected to a PC.	

An MDVR connected to the Pro 8 CMS server via an active Internet connection aboard the vehicle.	
A PC connected directly to the MDVR via the LAN aboard the vehicle or a server and a live stream from selected vehicles.	
The playback software must be capable of displaying video utilizing zoom, blur, selected camera views and selected microphone audio from all playback sources stated above. Organizing the display to pertinent and specific channel display must be done with a mouse click.	
The playback software must be capable of requesting wireless downloads, when equipped with an active Internet connection.	
The playback software must be capable of easy download for viewing by legal authorities and authorized parties.	
The video must be equipped with a watermark feature to alert the viewer to video alteration or manipulation.	
The playback software must utilize proprietary encryption to limit access to authorized parties.	
The playback software must be capable of converting video to AVI formats for common display.	
The playback software must be able to create “clips” of pertinent event time duration for storage and transmission on multiple media such as thumb drives, DVDs, etc.	
The playback software must display Google Maps™ mapping service and the vehicle’s GPS location, if the MDVR is equipped with optional GPS antenna, when the playback PC is connected to the Internet.	
The playback software must be capable of displaying Virtual Synchronized Mapping™, a GPS map of the vehicle location permanently embedded in the video recording, without Internet access, as court-ready evidence.	
MVDR: WARRANTY, SERVICE AND SUPPORT	**Document any Changes to the Specifications in These Columns Below.**
All hardware shall include a warranty of five (5) years parts and labor.	
Unlimited telephone and email technical support shall be provided at no additional charge for the life of the system.	

Additional extended warranty and service contracts will be available.	
END OF MVDR SPECIFICAATIONS	
OPTION 3: CMS CENTRAL MANAGEMENT SYSTEM	**Document any Changes to the Specifications in These Columns Below.**
Central Management System (CMS) is an optional upgrade to the software and includes additional features to enhance the functionality of the software. The following specifications are divided into Playback Software Requirements and Central Management System Requirements for your reference and should remain separate from each other in all requests and proposals.	
License-free playback software that is capable of video playback, calendar and event searches shall be provided to administration at no extra cost, and shall be compatible with Windows® 7, Windows® 8 and Windows® 10.	**Document any Changes to the Specifications in These Columns Below.**
The software shall include the following playback controls: pause/play, stop, rewind and fast forward up to x32 speed, slow motion playback, frame-by-frame playback, audio volume, snapshot, video export.	
The software shall allow users to select specific cameras to be displayed during playback.	
The software shall be capable of allowing camera channels to be rearranged within the playback screen.	
The software shall display the resolution and frame rate at the top of each camera channel.	
The software shall provide multiple layout options and window configurations of camera channels with the playback screen.	
The software shall allow users to double-click a camera channel to maximize its display in the playback screen for full-screen mode. While in full-screen mode, users shall be able to cycle through all camera channels.	
The software shall allow users to select date, time range and condition of the video when searching for available videos.	

The software shall include a slider bar that can be dragged directly to a particular point of the video. The timeframe represented by the slider bar shall be capable of being increased or decreased using magnifying lens icons located at the top of the slider bar.	
The software shall provide a calendar display for each month and adjacent month's video with available clips highlighted by video type (normal or alarm).	
The software must provide a security watermark indicator during playback.	
The software must be capable of timeline zoom to (five) 5 seconds.	
The software shall allow for the following selectable metadata to overlay on recorded video: date/time, speed, vehicle number and GPS coordinates.	
When the system is equipped with GPS, the software shall include a GPS map to display vehicle location, route, breadcrumb trail, and vehicle's sensor inputs synchronous to the video being played. Users shall be able to click on any point on the vehicle's breadcrumb trail on the map to jump directly to that time in the video.	
When equipped with GPS, the system shall provide historical software mapping display routes of the vehicle location and speed charts.	
When the system is equipped with GPS, the software shall be capable of connecting to prerecorded video by selecting a point on the map or selecting a point on the speed chart to view from that speed or location.	
Vehicle sensor inputs displayed below the map shall correlate with their corresponding location on the map such that when a sensor becomes active, it is highlighted at that point in the recording's timeline.	
The software shall include tabs in the playback screen to allow users to view map only, video only or both.	
To retrieve recorded video, the software shall provide searches by the following: event, time lapse, time and date and vehicle location.	
The software shall include an "Event" tab which displays all events and alarms that occurred during the open video segment. Users shall be able to double-click on an	

event to jump directly to that time in the video.	
The software shall include a “zoom in” button at the top of each camera channel to allow users to zoom in on any selected areas.	
The software shall include a “Blur” button at the top of each camera channel to allow users to select the areas of the camera’s image to blur out. Blurring shall be capable of being used in one or all camera channels simultaneously. Blurring shall be capable of being exported with video.	
The software shall be capable of saving a video clip as a Windows Media Player (.avi) file or saving a video as a self-executable format (.exe). However, our preferred method of saving is in proprietary codec format.	
Video clips saved using the self-executable format (.exe) shall be encrypted and should be viewed without the embedded software, providing the ability to easily transfer secure video evidence.	
The video clip function shall provide the option of saving a portion of the video clip (shorter in length and/or reducing the number of cameras) in order to make a smaller video clip from the original.	
The software shall feature the option to archive video clips requiring a username and password for reviewing.	
The software shall include a “Snapshot” button to save a single-frame still image in .bmp format from any user-selected camera.	
With optional PRO8CMS, the playback software must automatically connect to the backend Central Management System (CMS) for video and audio review and investigation.	
CMS: CENTRAL MANAGEMENT SYSTEM REQUIREMENTS	**Document any Changes to the Specifications in These Columns Below.**
The CMS shall provide various levels of user access rights that allow and restrict access to various functions.	
The system shall feature software for large-scale remote viewing and administrator functions for unlimited simultaneous users and for viewing up to hundreds of camera views at one time. The software shall allow for automated software upgrades and simultaneous updates to multiple sites.	

The CMS shall clearly display all connected assets (vehicles) for live viewing.	
The CMS shall be capable of live viewing any or multiple connected assets simultaneously.	
The CMS shall be capable of displaying 12 different screen formats for live view.	
The CMS shall be capable of arranging users into hierarchical groups that mirror an agency's organization.	
The CMS shall be capable of arranging vehicles into multiple groups.	
The CMS shall include a "Frame Information" tab which displays detailed metadata: firmware, agency name and vehicle number, specific accelerometer reading and GPS coordinates, vehicle speed, and device voltage and temperature.	
The CMS shall allow the system (when networked via cellular or Wi-Fi or both) to automatically send email or text notifications for any system event including the following: video loss, camera obstruction, hard drive "full status," etc.	
The CMS shall supply health information of the video system with error logs, reports and automatic notifications for the following: video blind events, video loss events, disk errors, disk temperature events, fan errors, recorder errors, disk almost full, and hard disk monitoring events.	
The CMS shall allow the system to send notifications to the vehicle driver or external systems for any system event including video loss, camera obstruction, hard drive "full status," etc.	
The CMS shall be capable of automatically sending notifications to a central location and shall support automatic fleet-wide email notification of system events as well as a fleet-wide health summary featuring camera and system health reports.	
With the CMS, the playback software will have the ability to playback video from the remote server, the asset (vehicle), the local hard drive, the directory or local storage.	
The CMS shall allow for easy fleet-wide searches and wireless download of video-based solely upon the date and a general map location.	

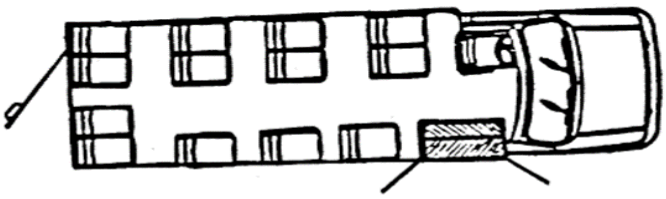
The CMS shall include an “Evidence” folder which allows users to label, categorize, organize and generate incident reports after reviewing critical video clips.	
The CMS shall display the current time and date on live video	
When events are detected, the CMS shall display the event information and allow users to access the remote server directly to search the image associated with the event, when equipped with Wi-Fi or cellular equipment.	
The CMS shall allow the user to connect to multiple units simultaneously and allow for viewing 64 camera views at one time, based on the number of cameras in the fleet.	
The CMS shall be capable of two-way audio with optional speaker and microphone and cellular connection.	
The CMS shall be capable of remote configuration of recorder settings while the vehicle and MDVR are running.	
The CMS shall be capable of remotely setting the streaming quality while the vehicle and MDVR are running.	
The CMS shall be capable of remotely setting the GPS post frequency while the vehicle and MDVR are running.	
The CMS shall be capable of sending SMS messages to the driver while the vehicle and MDVR are running.	
The CMS shall be capable of remotely restarting the recorder while the vehicle and MDVR are running.	
The CMS shall be capable of remotely formatting the hard drive while the vehicle and MDVR are running.	
The CMS shall be capable of taking remote snapshots of individual or all views and storing them locally for review.	
Image adjustments and alarm out controls shall be adjustable utilizing the CMS.	
The CMS shall be capable of archiving video as an evidence package to the server, allowing the user to name the event, record vehicle name, input key words for searching, driver name, overall description and screen snapshots.	
The CMS shall be capable of displaying and reporting the following: GPS, alarm, user log, device online/offline, offline user, mileage,	

continuous driver, online rate, video data traffic, panic button, motion alarm, last vehicle position, fence, I/O, vehicle patrol, RFID, recording unit temperature, and cellular data reporting capabilities.	
The CMS shall be capable of automated event video upload to a remote server.	
The CMS shall be capable of advanced backend capabilities for automatic download of video clips and the ability to classify event video data with wireless connections.	
The CMS shall be capable of searching saved, HDD or live video based on geo-fence setting, by vehicle speed range and by event or alarm.	
The CMS shall also be available as a downloadable app that can be installed onto any mobile device or tablet to stream live video and fleet tracking.	
END OF CENTRAL MANAGEMENT CENTER OPTION	

SHUTTLE VAN

FLOOR PLAN OPTION I

13 PASSENGER PLUS DRIVER



FLOOR PLAN OPTION II

10 PASSENGER PLUS DRIVER, OR
8 PASSENGER PLUS 2 WHEELCHAIRS PLUS DRIVER