

**Invitation for Bids (IFB) No. 2020-007
Mobile Command Center for the City of Coral Gables Police Department**

**TECHNICAL EVALUATION OF BID SUBMITTED BY: MBF INDUSTRIES, INC.
COMPOSITE EVALUATION SHEET**

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff																							
		Yes	No	Yes	No	Yes	No																						
2.2 VEHICLE CHASSIS DESIGN AND CONFIGURATION REQUIREMENTS																													
The Vehicle shall meet the following design and configuration requirements:																													
2.2.1 Vehicle Chassis	The Vehicle chassis shall be a new and untitled, Freightliner Chassis, M2-112, 410HP Cummins Turbo Diesel, Allison Transmission, 56,000 GVWR (NO SUBSTITUTION). Vehicle shall meet Title 49, US Code Chapter 301, FMVSS 209, Part 571, SAE J2422, REV 3: Crash Avoidance, Worthiness and Post-Crash Standards. At time of bid, Bidder shall provide manufacturer documentation demonstrating compliance with this standard.					Yes																							
2.2.2 Chassis Cab Configuration	<p>The Vehicle's Day Cab shall have air suspension driver and passenger seats. The Vehicle Chassis shall meet the following dimensions:</p> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Description</th> <th>Dimension</th> </tr> </thead> <tbody> <tr> <td>Wheel Base</td> <td>Maximum 320"</td> </tr> <tr> <td>Overall Vehicle Length</td> <td>Maximum 42' 9"</td> </tr> <tr> <td>Exterior Cab Length</td> <td>Maximum 112"</td> </tr> <tr> <td>Body Length</td> <td>Maximum 32' 5"</td> </tr> <tr> <td>Overall Height</td> <td>Maximum 13'</td> </tr> <tr> <td>Body Width</td> <td>Maximum 102"</td> </tr> <tr> <td>Interior Body Usable Width</td> <td>Minimum 96"</td> </tr> <tr> <td>Fuel Capacity</td> <td>Minimum 160 gal</td> </tr> <tr> <td>Wheel Size</td> <td>22"</td> </tr> <tr> <td>Rear Axle</td> <td>Tandem</td> </tr> </tbody> </table>	Description	Dimension	Wheel Base	Maximum 320"	Overall Vehicle Length	Maximum 42' 9"	Exterior Cab Length	Maximum 112"	Body Length	Maximum 32' 5"	Overall Height	Maximum 13'	Body Width	Maximum 102"	Interior Body Usable Width	Minimum 96"	Fuel Capacity	Minimum 160 gal	Wheel Size	22"	Rear Axle	Tandem					Yes	
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Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.2.3 Chassis Cab Additions	<p>The Vehicle shall be equipped with the following:</p> <ul style="list-style-type: none"> • Aero Dynamic wind faring • Custom fabricated cab radio console • Set of heavy duty mud flaps • Custom Lap-Top Mount for Panasonic CF-33 Toughbook ("NO SUBSTITUTION") • Single air horn mounted under cab 					Yes	
2.2.4 Chassis Cab Paint and Graphics	<p>Exterior paint will be urethane paint with a two (2) year warranty. Color and graphics shall be determined post award.</p>					Yes	
2.3 VEHICLE BODY DESIGN AND CONFIGURATION REQUIREMENTS							
The Vehicle's body shall meet the following design and configuration requirements:							
2.3.1 Re-Mountable Body	<p>The Vehicle's Body shall be an all-aluminum Re-Mountable Body, fabricated as one unit and built independently of the chassis. It shall be designed structurally to allow mounting as a shell unit and further constructed in a manner to allow the completed body to be remounted to a new chassis, should it be required.</p> <p>The modular re-mountable aluminum body shall be fabricated as a stand-alone unit and designed and built to allow the body to be mounted independently to the chassis. A UHMW Ultra-High Molecular Weight Polyethylene dissimilar metals barriers shall be placed between the aluminum body and steel chassis frame. Spacers will vary in depth depending upon the overall vehicle design height requirements. Once mounted the body shall be secured with hardened steel "U" bolts and torque tightened to mounting specifications.</p>					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	Yes	No	Yes
2.3.2 Body and Skirt Fabrication	The structures shall be all-aluminum modular bodies and manufactured utilizing an all-aluminum 5052-H32 alloy construction to ensure long-term durability, corrosion resistance and strength. The frame of the body shall be manufactured using 2" x 2" x 0.125" aluminum tube, with exception to the floor section which will be 2.50" x 3" x 0.349" 'I' Beams. All structural tubing to be welded together utilizing aluminum extrusions at roof line and corners. Roof line extrusions shall incorporate a drip rail. Upright structural tubes will be spaced no more than 16" on center for maximum strength. The under-floor supports shall be 6" 'I' Beams dependent upon vehicle chassis. All structural members are to be welded for maximum strength. Side body walls shall be fabricated with a single sheet of 0.125" aluminum, without vertical seams.					Yes	
2.3.3 Construction Method	2.3.3.1 Body Walls shall be constructed of 2" x 2" x 0.125" (6063-T52) aluminum tubing. Aluminum tubing shall not exceed 16" on center. Exterior body skin shall be 0.125" thick aluminum sheeting, providing maximum strength and damage resistance from everyday use. Exterior skin shall be bonded to the welded structure using a method of attachment that yields a seamless exterior surface; glues or liquid chemical bonding shall not be used. No rivets will be utilized in the attaching of the exterior skin to the structural frame. Structural frame will be reinforced by welded aluminum plates where necessary. All-aluminum door frame extrusions shall be welded into the structure.					Yes	
	2.3.3.2 Body Floor shall be constructed utilizing 3" I-Beam AL 6061-T6 on 12" centers. The underside of the floor assembly shall be sealed utilizing a minimum of .050 aluminum sheeting as a water intrusion barrier. The outer skin of the body will be 0.125" aluminum sheet for maximum strength and resistance to damage from normal use. The 0.125 outer skin shall be bonded to the welded structural frame using a method of attachment which yields a clean exterior surface. No glue or liquid chemical bonding shall be used. No rivets will be utilized to attach the outer skin to the structural frame. The structural frame shall be reinforced where necessary by welding in aluminum plates, tubes and sections. All door frames must be welded into the structural frame. Walls shall be fabricated with a single sheets of aluminum, without vertical seams.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.3.4 Plywood and Hardwood Utilization	Only NAUF (No Added Urea Formaldehyde) plywood shall be acceptable.					Yes	
2.3.5 Rear Angle of Departure	Bidder shall maximize the rear departure angle in accordance with the manufacturer's design criteria.					Yes	
2.3.6 Roof	Body Roof shall be constructed utilizing 2" x 2" x .125 6063-T52AL tubing on 12" centers/.125 thread plate taped. Roof constructed on 16" centers with less than 2" x 2" columns shall not be acceptable. The roof will be manufactured in 0.125" 3003-H22 aluminum tread plate, continuously welded to roof perimeter extrusions and capable of supporting the weight of personnel, equipment, camera tripods, cable, etc. Standard roof construction method will utilize heavy duty frame construction that allows you to fully occupy the roof with personnel without added structures or improved roof supports. Safety handrails will be installed.					Yes	
2.3.7 Warranty	A lifetime warranty must be provided on the structural integrity of the re-mountable all aluminum body.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.3.8 Expandable Section	Three (3) Slide Outs will be provided. One (1) rear street side and two (2) forward. Expandable body sections shall be installed as per mutually approved drawings by the City and the Bidder. The slide out sections will have reinforced structural support for the sidewall opening. The slide out section walls and roof shall be fabricated from 2" X 2" X 0.125" aluminum tube and 0.125" aluminum exterior skin. The interior of the expandable section will be finished with the same materials used in the main portion of the body.					Yes	
2.3.9 Water and Seals	Water proof rubber seals shall be attached to the slide out floor, roof and sides and overlap with corresponding water seals attached to the floor, roof and side walls of the body frame when in the closed position. The slide out exterior wall will be fabricated to nest into a recessed wall frame structure when in the closed position.					Yes	
2.3.10 Expandable Section Mounting	The expandable section will be supported from 4" steel "I" beam hanger system with 3" roller bearings and heavy-duty arms roof mounted. Floor mounting is not acceptable.					Yes	
2.3.11 Slide Out Cable Management	The slide out cable management chain way system is to be designed into the slide out overhead support mechanism. Chain way: Multi-link expandable cable management track allows the entire wiring harness to move in and out as the slide out is deployed without bending of wires, which prevents wire breakage from bending movements.					Yes	
2.4 VEHICLE CAB AND BODY EXTERIOR COMPONENTS							
The following exterior components shall be <i>installed</i> on the Vehicle Cab and Body:							
2.4.1 Awning	Three (3) color coordinated electric awnings, two (2) curbside and one (1) street side.					Yes	
2.4.2 LCD Back Up Camera	One (1) cab mounted monitor and rear-view camera system.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.4.3 Side View Cameras	One (1) curbside and one (1) street side camera, tied to the LED Back up monitor at the drivers' location.					Yes	
2.4.4 Stabilizing Jacks	A set of four (4) stabilizing jacks. These jacks will be attached to the chassis frame rails with grade 8 fasteners. Each of the jacks will have a rating of 25,000 pounds. They will be adjustable from 0" to 20" and will be electronically self-leveling.					Yes	
2.4.5 Roof Access Ladder	One (1) roof ladder, fabricated as 1" X 2" X 1/8" wall aluminum tubing. Ladder rungs to be 2" x 1.062 x .125 mill finished and finished per above listed paint specifications. The ladder will be lockable and restricted so as not to allow unauthorized access					Yes	
2.4.6 Emergency Lights	<ul style="list-style-type: none"> • Six (6) Whelen Combo LED Emergency/Scene lights model# M9V2 • Eight (8) Whelen LED 3" x 7" emergency lights • Two (2) Whelen 3"x7" LED scene lights • Two (2) Whelen LED grill lights • One (1) Siren w/light control • Two (2) Speaker 100w • One (1) set LED tail, turn & marker lights • One (1) LED Whelen Custom Duo Tri Color Legacy light bar mounted on an antenna platform with Carbide APM Control Module with Control Control Head • One (1) green roof mounted command strobe light • Eight (8) underbody ground lights 					Yes	
2.4.7 Air Conditioning Units	Six (6) Coleman Roughneck, OR EQUAL , 15,000 BTU roof mounted A/C units with 5,600 BTU heat strips, with a ducted drop ceiling. The ducting shall be configured to sufficiently cool the Electronic Racks with forced air.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.4.8 Entry Steps and Handrail	The curbside entry door shall have a fold out step which shall fold below floor level in the compartment and fold down for deployment with attachable handrails fabricated of 1 ¼" diameter Mill finish, .125 wall thickness pipe with couplings and safety pin. Fabricated with NFPA tread-plate and LED safety lights. Designed to support up to 500 lbs.					Yes	
2.4.9 Exterior Compartment Slide Out Tray	Two (2) all aluminum slide-out trays shall be included in the curbside exterior compartment.					Yes	
2.4.10 Rear Bumper	One (1) full body width bumper shall be custom fabricated with a 9" x 3" steel frame and 1/8" diamond plate tread-plate facing and shall extend beyond the body 10" for protection and shall not be flush mounted.					Yes	
2.4.11 Rear Hitch	One (1) Class V hitch shall be welded to the frame of the vehicle. All trailer electrical hook ups shall be located in the bumper or the body of the vehicle.					Yes	
2.4.12 Rub Rails	Curbside and street side marine grade aluminum rub rails.					Yes	
2.4.13 Drip Rails	Aluminum drip rails over all compartment and entry doors.					Yes	
2.4.14 Exterior Workstation	Two (2) exterior workstations with a removable stainless-steel shelf, 42" LED monitor and compartment, data, phone and electrical connections. One (1) removable white board on the street side of the vehicle. Specific location to be determined post award.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.4.15 Rear License Plate Provision	Provisions shall be provided for mounting of the license plate and tag light.					Yes	
2.4.16 Windows	All door and side body windows shall be tinted and include black out covers.					Yes	
2.4.17 Mast System	One (1) 56ft and one (1) 48' Hilo mast system with mast heads, compressor and 1.25" nycoil.					Yes	
2.4.18 Mast Cameras	Two (2) 360° all weather camera shall be installed. Final configuration shall be determined during the Vehicle manufacturing and production period. <ul style="list-style-type: none"> • High definition 1080i/720p. • 16:9 widescreen format. • 0.05° preset repeatability accuracy. • P2P antenna in a motorize Pole that tilts and rotates 360 degrees. • 20 or 30X optical zoom lens. • Hydrophilic "self-cleaning" glass window. • Wide Dynamic Range (WDR) and DeFog modes • Electronic Image Stabilization mode 			Yes			
2.4.19 I/O Panel	An Input/output (I/O) panel on the curbside vehicle body. This panel shall be protected with a weather proof door that latches and locks in two positions, one fully closed and the other partially open to provide protection for the land lines.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.4.20 Exterior Electrical Outlets	Five (5) 120VAC GFCI duplex outlets with weatherproof covers on the exterior of the body, two (2) street side, two (2) curbside and one (1) at the rear of the vehicle.					Yes	
2.4.21 Auto Eject/Night Service	An Auto Eject 3-pin 30 amp 120 volt pin and sleeve contact shore power assembly, cover, and plug shall be installed. The 12-volt unit shall eject the shore power cord away from vehicle path upon sensing engine start; after ejection, the weatherproof cover snaps into position over inlet. The unit shall have a waterproof sculpted cover with no sharp edges and back enclosure with watertight cable fittings, which protect mechanism from road contamination. The unit shall sequence energizing of the Auto Eject, eliminating terminal arcing when connecting and disconnecting power cord.					Yes	
2.4.22 Winegard TRAV'LER Direct TV	One (1) Winegard TRAV'LER antenna with two (2) HD-SAT RX Direct TV satellite Receivers.			Yes			
2.4.23 SAT System	One (1) Freedom flyaway .75 dish system. W/ Carbon fiber tripod, Carbon fiber dish reflectors, Carbon fiber smart boom, Buc, Modem, Dc voltage supply for Hughes modem, Spare parts kit, Stakes and rock bag, Android smart phone with app, 220w/h Battery, Solar panel, Skb 3i-2015, W/1 year warranty. The system must be capable of 10 Mbps download and 5 Mbps upload. It must be able to provide an internet gateway for our mobile network to reach the communications center. Service must support 5 concurrent voice calls inbound/outbound including phone number and service plan for 1 year. Must include 4 InReach Mini Garmin Communicators.			Yes			
2.4.24 Amplified TV Antenna	One (1) HD-8000 off air TV antenna shall be provided for local stations.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.4.25 Antenna Rail	One (1) roof mounted 2"X3" aluminum antenna rails with side access for antenna mounts.					Yes	
2.4.26 Antenna/Light Bar Platform	One (1) custom fabricated aluminum forward mounted antenna/light bar platform.					Yes	
2.4.27 Dome Security Camera	One (1) exterior dome cameras on the vehicle body at body entry door. One (1) ONSSI 8 TB NVR, OR EQUAL , recorder shall be included.					Yes	
2.4.28 Command Light	One (1) Knight Series, OR EQUAL , LED 6 pack with remote lift and lower capabilities and back light option. Tested up to 90 MPH winds. NFPA 1901 Compliant. All weather conditions and a 5-year warranty.					Yes	
2.4.29 Vehicle Undercoating	Dual Purpose Rustproofing Compound (Black)					Yes	
2.5 VEHICLE BODY EXTERIOR COMPARTMENTS AND DOOR SPECIFICATIONS							
The Vehicle must be equipped with the below listed storage compartments. Vehicle doors shall meet the specifications outlined below.							
2.5.1 Curbside	2.5.1.1 Double door storage compartment (forward) 2.5.1.2 Double door storage compartment with two (2) pull-out trays 2.5.1.3 Single flip-down door for entry/exit steps 2.5.1.4 Double door storage compartment (aft) 2.5.1.5 Single flip-up door Input/Output ("I/O") panel access 2.5.1.6 Single flip-down door for standing access to the back of equipment racks 2.5.1.7 Single flip-up door for access to the back of the equipment racks 2.5.1.8 Single flip-up door for exterior LED monitor					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff		
		Yes	No	Yes	No	Yes	No	
2.5.2 Street Side	2.5.2.1 Single door storage compartment (forward) 2.5.2.2 Single door battery compartment 2.5.2.3 Single door storage compartment (aft) 2.5.2.4 Double door generator compartment 2.5.2.5 Double door shore power and mast controls compartment 2.5.2.6 Single flip-up door for exterior workstation.					Yes		
2.5.3 Storage Compartment Specifications	All storage compartments shall be manufactured in 0.125" welded aluminum tread plate for maximum strength, durability and corrosion resistance. The compartments shall be fabricated from 0.125" aluminum sheet and be "Sweep out" design with 2" framed doors with double seals.					Yes		
2.5.4 All Entry and Storage Compartment Door Specifications	All doors will be manufactured of 0.125" aluminum extrusions and 0.125" aluminum plate continuously welded and structured with 0.125" 2"x2" square tubing. Personnel entry doors will be insulated with a minimum of 2" sprayed urethane foam. The doors will incorporate automotive quality door closers and anti-bust locks. The doorjamb extrusion shall be welded to the body wall structure. Two striker pins shall be installed in each entry doorjamb. A Tri-Mark all metal Chrome paddle handle shall be installed inside and out. The handles, latches and striker pins must pass Federal Motor Vehicle Safety Standards ("FMVSS") 206 and comply with FMVSS 302.					Yes		
	2.5.4.1 Gaskets Passenger and compartment door gaskets shall be bulb typed, designed to match the doorjamb extrusions, and shall be extruded with material to satisfy ambient temperature extremes. There shall be no interruptions in the gasket for door locks, latches or hinges. Gaskets shall be miter cut at the corners and sealed with "3M" weather strip adhesive.						Yes	
	2.5.4.2 Hinges All exterior hinges used for entry and compartment doors shall be stainless steel, continuous, w/3" open dimension and a ¼" diameter hinge pin. Hinge mounting holes shall be slotted to allow door adjustment in two planes. Holes shall be drilled and tapped in door and jamb extrusions to accept truss head style machine screws (stainless steel).						Yes	

		Jason Swift		Nelson Gonzalez		Randy Hoff	
Specification Section	Requirements	Yes	No	Yes	No	Yes	No
2.6 VEHICLE BODY INTERIOR FINISHES							
The Vehicle Body interior finishes shall be as follows:							
2.6.1 Insulation Walls and Ceiling	The vehicle body will be completely insulated with a minimum of 2" CFC-free urethane foam sprayed insulation factor of not less than R-14. All gaps and penetrations within the floor, ceiling and walls will be sealed using a 50-year sealant.					Yes	
2.6.2 Floor	All seams and screw holes will be filled with 3M Bondo, OR EQUAL, and sanded smooth. The floor will be covered with commercial grade heavy duty vinyl flooring in a color to be decided during the Vehicle manufacturing and production period.					Yes	
2.6.3 Floor Insulation	Spray foam insulation shall be applied between the body frame support structures and covered on the interior with ¾" plywood and the finished flooring. Sheet aluminum shall be installed below the body structure and chassis frame rails to seal the insulated area.					Yes	
2.6.4 Walls	Walls and ceiling to be ½" furniture grade plywood screwed to the aluminum wall structure. The walls will be finished with 26 oz. carpet in a color to be decided.					Yes	
2.6.5 Interior Partition Walls	Interior partition walls shall be constructed out of aluminum tubing covered in plywood and wall finish. Bulkhead walls without a pocket door shall be 2' x 2" x 1/8" and with pocket doors shall be a combination of 1" x 4" x 1/8" and 1" x 1" x 1/8". Wood interior partition walls shall not be acceptable.					Yes	
2.6.6 Cabinet Construction	Interior cabinets and bench seating shall be constructed of ¾" thick furniture grade plywood. Cabinets shall be glued and screwed together. All cabinet interiors shall be finished with a white laminate cabinet liner. Cabinet exteriors shall be finished in "Formica" or equal 0.040" laminate in a color to be determined. Latches shall be flush mount Southco lever latches (positive latching). Overhead cabinet doors shall be covered with whiteboard.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.6.7 Cabinets and Workstations	Storage cabinets and workstations shall be installed per mutually approved drawings between the City and the Bidder during the Vehicle manufacturing and production period. Overhead storage cabinets shall be installed above the base cabinets.					Yes	
2.6.8 Drawer Construction	All sides, fronts and bottoms shall be fabricated from ½" Finish Grade Plywood. The drawers shall be glued, nailed and constructed with rabet joints to eliminate drawer separation.					Yes	
2.6.9 Interior Security	Positive lock closures for securing all drawers, tables, TV, chairs, doors, or other items within the interior of the unit shall be installed.					Yes	
2.6.10 Counter Tops	All work surfaces, conference tables and counter tops shall be Avonite, OR EQUAL, medical grade hard-surface with a 16-hour stain resistance. Color to be determined.					Yes	
2.7 VEHICLE BODY INTERIOR LIGHTING AND OUTLETS							
The Vehicle Body interior lighting and outlets shall be as follows:							
2.7.1 Interior LED Lighting	RED/WHITE Flush mounted 8" round LED lights shall be installed throughout the vehicle. These lights shall be switched at the electrical Control Panel and operate from the 12 VDC system and not require the generator or shore power.					Yes	
2.7.2 Under Cabinet Lighting	RED/WHITE LED lights shall be mounted at the overhead cabinets for each workstation.					Yes	
2.7.3 Outlets	The Bidder shall maximize 120VAC duplex outlet locations at all workstations conference areas. Exact locations to be determined during the Vehicle manufacturing and production period.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff		
		Yes	No	Yes	No	Yes	No	
2.8 VEHICLE BODY INTERIOR COMPONENTS								
The following interior components shall be <i>installed/included</i> in the Vehicle Body:								
2.8 VEHICLE BODY INTERIOR COMPONENTS	<ul style="list-style-type: none"> • One (1) wall mounted 57" Mondopad, OR EQUAL • One (1) 7-person conference table with center data trough and seven (7) roll around chairs. • One (1) curbside slide-out with three (3) tinted windows and 2 wall mounted 32" LED monitors • One (1) countertop with access to the rear of Input/Output ("I/O") panel and a V-Mux controller, OR EQUAL. • One (1) divider wall with windowed pocket door • One (1) street side wall mounted whiteboard • One street side slide-out with three (3) tinted windows • CAT6A wiring during the Vehicle manufacturing and production period. • Phone wiring per specifications paragraph 2.10.13 of this section. • All high voltage and low voltage wiring per National Electric Code (NEC) NEC. • One (1) curbside entry/exit door • One (1) wall mounted fire extinguisher • One (1) curbside workstation with a roll around chair • One (1) City provided Xerox Workstation • Wall mounted tie-down straps for the printer • One (1) divider wall with windowed pocket door • One (1) curbside galley with three (3) base cabinets and drawers, coffee maker, microwave, full size refrigerator and an overhead cabinet • One (1) event clock • Three (3) curbside 40RU Mid-Atlantic, OR EQUAL, equipment racks with ducted A/C. • Two (2) seated workstations with two (2) roll around chairs, two (2) 27" LED monitors, overhead cabinetry, two (2) pencil drawers and a whiteboard at the rear wall. • Three (3) street side in-slide-out seated workstations with three (3) roll around chairs, three (3) 32" LED monitors, overhead cabinetry, three (3) pencil drawers and windows at both ends of the slide-out. • One (1) 32" LED monitor on the forward divider wall. • A full size RV style stainless steel refrigerator. • Three (3) five (5) pound ABC fire extinguishers strategically placed throughout the vehicle. • A set of three (3) reflective safety triangles 							
						Yes		

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.8 VEHICLE BODY INTERIOR COMPONENTS	<ul style="list-style-type: none"> Operator and repair manuals. One (1) Dell Latitude 5490 attached to the Mondopad, OR EQUAL, in the Conference section. 					Yes	
2.9 VEHICLE CAB AND BODY ELECTRICAL AND POWER SYSTEMS							
The Vehicle's electrical and power systems shall meet the following requirements and configurations:							
2.9.1 Multiplex Electrical System	One (1) solid state integrated multiplex electronic system provided for control of designated vehicle components, increased diagnostic capabilities and programmable functionality. System shall include one (1) cab and one (1) interior body mounted control panel. Control system are to include monitoring of the following: Entrance doors, compartment doors, slide outs, stabilizer jacks, exterior lights, emergency lights, chassis component monitoring and 12-volt lighting system. Must be Society of Automotive Engineers (SAE), National Fire Protection Association (NFPA), National Marine Electronics Association (NMEA) and Recreational Vehicle Industry Association (RVIA) approved.					Yes	
2.9.2 12 Volt DC Wiring	Proper wire sizes shall be determined for each circuit. All 12 VDC wiring shall be color coded and routed through split loom cable covers.					Yes	
2.9.3 Battery System	The vehicle shall be equipped with a dual battery system. The vehicle starting battery is discussed in the chassis portion of these specifications. The auxiliary battery selected to support the conversion load shall be a group 8-D AGM with a rating of 1450 CCA and 245 Amp hours.					Yes	

Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.9.4 Battery Paralleling – Battery Boost – Emergency Start Switch	A dash-controlled system shall be provided to parallel the main and auxiliary batteries for increased engine cranking capability. The jump switch shall be located at the driver's position.					Yes	
2.9.5 Power Converter	One (1) 120 VAC to 12 VDC power converter shall be provided to support the 12 VDC electrical load and charge the batteries during generator or shore power operation. The minimum rating for the converter shall be 80 Amps.					Yes	
2.9.6 120 Volt AC Wiring	Wire sizes shall be determined for each circuit with a minimum of 14 Ga. wires used in the vehicle. All 120 VAC wiring shall be routed through cable raceways. All wiring shall be installed in accordance with the National Electric Code.					Yes	
2.9.7 Generator	2.9.7.1 One (1) 30KW 120/240VAC 60Hz water-cooled Kubota, OR EQUAL , diesel powered generator shall be provided. The entire compartment will be sound proofed to attenuate noise to the maximum degree possible.					Yes	
	2.9.7.2 Block and Pan Heater - The generator shall be equipped with engine block and oil pan heaters.					Yes	
	2.9.7.3 Shut Down System - The generator shall be equipped with sensors that will activate the generator shut down system on low oil pressure and high-water temperature.					Yes	
	2.9.7.4 Remote Start - The generator shall include a remote Start/Stop Preheat switch and hour meter located in the vehicle power distribution panel.					Yes	
	2.9.7.5 Fuel Supply - Fuel supply for the generator shall be from the chassis fuel tank. The system shall be designed and installed so as to leave a minimum of ten gallons of fuel in the tank when the generator runs out fuel.					Yes	

		Jason Swift		Nelson Gonzalez		Randy Hoff	
Specification Section	Requirements	Yes	No	Yes	No	Yes	No
2.9.8 Power Distribution Panel	The Power Distribution Panel shall consist of an anodized aluminum panel equipped with appropriately sized Heinemann, OR EQUAL, circuit breakers for both 120 VAC and 12 VDC applications. A power transfer switch shall be located in the panel for selection of either generator power or shore power. The panel shall also contain meters for monitoring voltage, amperage and frequency. There shall be an audible over-voltage alarm in the panel to sense and warn of high voltage output from the generator.					Yes	
2.10 VEHICLE CAB AND BODY COMMUNICATION EQUIPMENT AND CONFIGURATION REQUIREMENTS							
The Vehicle's communication equipment must meet the outlined requirements below and shall be configured as specified.							
2.10.1	During the pre-wire phase, the Bidder will install all necessary wiring and cables for satellite, phone, data, audio, video, intercom, radios and types of systems per the agreed specifications.					Yes	
2.10.2	Any mast head mounted equipment or devices shall be installed and reviewed by the Bidder in advance to insure appropriate Nycoil utilization.					Yes	
2.10.3	The Bidder shall provide cable access points in the vehicle's body for future cable runs.					Yes	
2.10.4 Communications Wiring	Recessed power supply and A/V/C shall be provided at the conference table. Location to be determined post award.					Yes	
2.10.5 Communication Equipment Rack	The equipment racks (2) shall be Mid-Atlantic specifically designed to give a universal mounting platform for all standard-sized 19" rack mountable devices with a 300 lb. weight capacity. The standard height of these racks are 40RU (rack units) or 70 inches and able to meet most major manufacturers' specifications for mounting requirements with CAT6A cable throughout the vehicle for communication cables. In addition to the front access, the body of the vehicle will have exterior access doors with LED lights to service the equipment rack. The rack depth shall be 30 inches. The rack(s) will have air duct vent on top in order to provide ample forced air ventilation. All metal fixtures within the body and cab shall be electrically bonded in accordance with Military Standard MIL-STD-188-124B.					Yes	

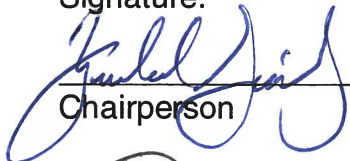
Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.10.6 Roof Mounted Antennas	Antenna rails on the roof shall be the access point to communicate via Radio Frequency (“RF”) patch panel with the radios. Antenna positions to be determined during the Vehicle manufacturing and production period and designated for the Vehicle design requirements.					Yes	
2.10.7 Wire Chase	Wire and cable raceway shall be provided overhead for easy access. Interior ceiling access points shall be provided in the drop ceiling for accessing and running future cables.					Yes	
2.10.8 Patch Panel	One (1) Panduit or equivalent patch panel shall be provided as required per equipment. Bidder will provision an outdoor rated Patch panel with CAT6A and Multi-Mode and Single-Mode (“MM/SM”) fiber. The patch panel will be connected to another patch panel in one of the equipment racks. Patch panel will have a minimum of 12 CAT6A ports, 4 Pairs of MM and 4 Pairs of SM fiber.					Yes	
2.10.9 Individual Work Station Connections	Each workstation shall be provided with wall mounted data, phone and electrical connections. Each station will be provisioned with a monitor and a computer (Dell Optiplex 3060 MFF, NO SUBSTITUTION). Specific requirements & locations to be determined.					Yes	
2.10.10 Mondopad	An InFocus® 57” HD Mondopad™, OR EQUAL , with built-in Windows PC. Capable of digital interactive whiteboard and document annotation, video conferencing and full copy of Windows Office.					Yes	
2.10.11 Cellular Service	Dual carrier cradle point router and data plan for one (1) year including roof mounted cellular signal enhancer antenna.			Yes			

		Jason Swift		Nelson Gonzalez		Randy Hoff																																																																													
Spec. Section	Requirements	Yes	No	Yes	No	Yes	No																																																																												
2.10.12 Radios and Antennas	The following Communications equipment, must be installed and configured by the Bidder. Exact location shall be determined post award. NO SUBSTITUTION allowed on the below listed equipment.	Yes																																																																																	
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Specification Section	Requirements	Jason Swift		Nelson Gonzalez		Randy Hoff	
		Yes	No	Yes	No	Yes	No
2.10.14 Switching and Security	A Cisco L3 OR EQUAL services license and Checkpoint firewall appliance with total security license.			Yes			
2.11 ALARM SYSTEM							
The Vehicle's alarm system shall meet the outlined requirements below and shall be configured as specified.							
2.11.1 Alarms	The vehicle will be provisioned with two (2) hardwired smoke and CO detectors.					Yes	
2.11.2 Interlock	All entry doors, bunker storage doors, generator compartment doors, shore power input compartment door, stabilization jacks, awnings, satellite dishes, slide outs and any other external compartments shall be wired to an interlock system. This interlock will activate when any of the connected devices are in the deployed position and will sound an alarm until they are put into their stowed position.					Yes	
2.12 TRAINING							
	Bidder agrees to provide operator training to City staff. The training will be provided by a competent trainer for activities to take place within the City of Coral Gables. Training will be provided at no additional cost to the City. Bidder maintains liability for trainer during the training phase. Training plan shall include but not limited to: 1. General operations. 2. Safety practices. 3. Pre/Post trip inspections. 4. Maintenance requirements.					Yes	

Signature:


 Chairperson


Print Name:

Yusbel Gonzalez

Date:

7/22/2020

Signature:


 Reviewed by

Print Name:

Eduardo Hernandez

Date:

7/22/2020