

Type I Ambulance Specifications

Fort Atkinson Fire Department 04/12/2022

One (1)

167" TYPE I AMBULANCE MODULE

is normally supplied with standard production vehicles or components.

Bidder Complies YES _____ NO _____

Single Source Manufacturer

To simplify warranty coverage and to assure a consistent level of quality throughout the vehicle, a manufacturer is desired that is able to produce the major components for the ambulance (excluding chassis). Major components are defined as but not limited to: the complete module body, the paint process, the interior cabinets, and the cushions.

The highest degree of quality, both in materials and in the manufacturing process, is required for the emergency medical vehicle being proposed. Attention shall also be focused on American made products and suppliers.

Bidder Complies YES _____ NO _____

One (1)

SERVICE SUPPORT AND AVAILABILITY

Service will be a major factor in the award of this proposal. Convenience and experience will be determining factors in determining acceptable service. A service facility within a reasonable radius will be required. Personnel who perform the training shall be trained by the manufacturer.

Please include the following:

Facility name and address

Distance to the service facility

Name(s) of the service technicians

Mobile Onsite Service Available (Circle one) Yes or No

Bidder Complies YES _____ NO _____

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Quality Assurance

To ensure the purchaser that proper engineering and production control guidelines have been implemented the ambulance manufacturer shall employ an integrated quality and process control program including specific process controls for facets of the manufacturing process deemed to be "critical". These critical elements of the process shall be documented and that documentation shall be available not only to manufacturing personnel but also to customers who visit the facilities. The critical elements shall be denoted on the vehicle control document, which accompanies the vehicle through the manufacturing process. A sample of this document shall be available upon request. A continuous series of inspections shall be performed and signed off on the vehicle control document.

The sign off shall include such areas as:

1. Visual inspection of the body, welds, and exterior attachments.
2. Visual and mechanical inspection of the HVAC lines, cables, grommets, valve connections, clamps, mounting brackets and belts.
3. Visual inspection of cabinets, sliding/hinged cabinet doors, flooring, walls, headliner, and cushions.
4. Visual inspection of exterior paint and finish.
5. Operational inspection of all electrical systems. This testing must consist of a battery voltage, electrical load, alternator output, emergency lighting, non-emergency lighting, siren, exhaust fan, HVAC, and all optional equipment required by this specification. The current and total load requirements of each device tested must be noted on an inspection sheet.
6. The oxygen and vacuum systems shall be tested both prior to and after installation. All documentation shall be recorded.
7. All chassis fluids shall be checked and filled to capacity. All doors, locks, latches, windows and tires shall be inspected for proper operation or condition.

The completed vehicle must be test driven for a minimum of ten miles on different terrain. All operational components including any noises shall be documented and repaired if necessary. Upon completion of all tests the vehicle shall be water spray tested and checked for any leaks.

Bidder Complies YES_____ NO_____

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WARRANTY

The proposal shall include all printed warranties that are required in the following detailed specification. All Vehicles shall be covered by a minimum of five individual warranties. All warranties shall be from the manufacturer as opposed to a distributor or a service center. This will protect the purchaser from a false warranty

The Five Warranties Include:

1. Ambulance Modular body: Shall be Lifetime with unlimited miles
2. Ambulance Conversion: Shall be for a period of five years or 60,000 miles.
3. Interior Cabinet: Shall be Limited Lifetime, unlimited miles.
4. Electrical: Touch module components shall be for Ten years or 100,000 miles.
5. Paint Process: shall be for a period of six years with unlimited miles. The first three years 100%, paint and labor, with an additional three years, paint, and labor pro-rated.

Bidder Complies YES _____ NO _____ If deviating, explain why.

One (1)

FUEL AT DELIVERY

The ambulance shall have a full tank of fuel at the time of delivery to the purchaser.

Bidder Complies YES _____ NO _____

One (1)

BODY STYLE

The modular body shall be designed and fabricated with the following key elements in mind:

1. The greatest possible load carrying capacity.
2. The safety of all EMS providers and patients shall be of paramount concern.
3. The body design, including construction materials and fabrication techniques shall be proven to be durable.
4. The ambulance body shall be easily retrofitted to a new chassis at the original manufacturing facility.
5. The ambulance body shall meet all current testing requirements.

The ambulance manufacturer shall design and construct its own bodies, and maintain a design staff at its manufacturing facility. Vehicle manufacturers who design and build their own bodies

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and who have the expertise within their facility will possess a greater capacity to handle a custom project of this type and insure a finished product of the highest standards and quality.

Bidder Complies YES _____ NO _____

One (1)

TYPE I BODY

Body exterior shall be approximately 167 3/4" long x 96" wide x 90" high. Overall vehicle length, including bumpers, shall be approximately 25' 2". Overall vehicle height, ground to top of module, shall be approximately 114".

The cab to module connection shall provide a pass-thru space with a minimum dimension of 11" x 14". The metals used for the pass-thru must match the cab metal. Aluminum cabs shall have aluminum framing and sheet metal. Steel cabs shall have steel tubing and sheet metal.

The cab rear window shall be removed. The opening shall be filled using the appropriate sheet metal, sized to cover the old window opening in the back wall of the cab. The pass-thru opening shall be cut through the center of this sheet. The sheet shall then be welded to the cab rear window opening. The entire sheeting assembly shall then be sealed, primed and painted per the paint specifications listed in this document to match the cab paint color.

An extruded EPDM closed cell rubber boot shall then be attached to the rear of the pass-through opening to seal the opening between the module and cab.

Bidder Complies YES _____ NO _____

*****CHASSIS*****

One (1)

TYPE I CHASSIS

The chassis shall be a Ford Model F-450 4x4 Dual Wheel Super Duty Chassis Cab, 2022 or current model year.

The engine shall be a 7.3L EFI V8 TBD HP and TBD ft-lb Torque.

The transmission will be the TorqShift 10-Speed Automatic.

The chassis shall include the Ford Ambulance Prep Package #47L and be modified to meet the Ford QVM standards.

Gross Vehicle Weight Rating: 16,500 LBS

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Wheelbase: 193"

Cab to Axle Dimension: 108"

Front axle will be: 7,000 LBS

Rear axle will be: 12,000 LBS

Fuel tank shall be: 40 gallons

The cab interior shall have OEM heavy duty rubber flooring.

Bidder Complies YES _____ NO _____

One (1)

CHASSIS OPTION

Ford Chassis to include OEM Aluminum Wheels.

Bidder Complies YES _____ NO _____

One (1)

CHASSIS OPTION

The chassis shall have the Ford XLT value package (17V). This shall include the following features:

- Auto Lock/Unlock
- Power adjustable pedals (Not available on regular cab)
- Eight Way Powered Driver's Seat
- SecuriCode Keyless Entry Keypad on Driver's side

Bidder Complies YES _____ NO _____

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One (1)

CHASSIS OPTION

Ford Chassis to include OEM option code 21N, Navigation System.

Bidder Complies YES _____ NO _____

One (1)

SUSPENSION OPTION

The suspension shall be Liquid Spring Suspension which utilizes a compressible liquid contained in the struts and secondary volumes. The liquid within the struts, and in conjunction with the secondary volumes, provide the spring and damping forces. Valving, in conjunction with an ECU, shall be configured to control the spring rates and damping. A hydraulic pump, coupled to a motor and controlled by the ECU, shall regulate vehicle height. The ECU shall process and utilize data derived from speed sensor, brake sensor, height sensors, and steering sensor.

Bidder Complies YES _____ NO _____

One (1)

SUSPENSION OPTION

There shall be Liquid Spring Suspension installed on the Front End of the chassis which utilizes a compressible liquid contained in the struts and secondary volumes. The liquid within the struts, and in conjunction with the secondary volumes, provide the spring and damping forces. Valving, in conjunction with an ECU, shall be configured to control the spring rates and damping. A hydraulic pump, coupled to a motor and controlled by the ECU, shall regulate vehicle height. The ECU shall process and utilize data derived from speed sensor, brake sensor, height sensors, and steering sensor.

Bidder Complies YES _____ NO _____

One (1)

WHEEL OPTIONS

The OEM spare tire shall be shipped loose in the completed ambulance.

Bidder Complies YES _____ NO _____

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One (1)

MIRROR OPTIONS

OEM dual arm heated / remote side view type mirrors shall be located on each door of the cab and shall include a blind-spot mirror.

Bidder Complies YES _____ NO _____

One (1)

CAB OPTIONS

Manufacturer O.E.M. AM/FM/CD stereo radio shall be installed with two speakers in the driver's cab and shall include a digital clock.

Bidder Complies YES _____ NO _____

One (1)

CAB OPTIONS

A low voltage throttle manager shall be installed as part of the ambulance package. All safety interlocks must be in place for the throttle to activate the high idle function.

Bidder Complies YES _____ NO _____

One (1)

CAB OPTIONS

There shall be a Streamlight Waypoint LED hand held spot light located in the vehicle cab. A 12v outlet shall also be provided to plug the light into.

Bidder Complies YES _____ NO _____

One (1)

CAB CONSOLE

A custom driver's control panel console shall be installed. This console shall be designed to allow easy access from either cab seat. This console shall be manufactured out of wood and a color coordinated laminate. The console shall include a switch and siren area, radio control area, map storage, and cup holders. The exact design and layout for the console shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

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One (1)

SUSPENSION OPTION

There shall be an auto dump feature added to the suspension system. This auto dump shall be tied to the secondary rear door and include a safety cutoff switch mounted to the primary rear door.

Bidder Complies YES _____ NO _____

One (1)

BATTERY OPTION

The ambulance shall be equipped with 3 MATCHING batteries minimum. One or two batteries shall remain under the chassis hood with the rest located in an exterior compartment. The exact location shall be determined at the pre-construction conference. No Exceptions on qty of batteries will be allowed.

Bidder Complies YES _____ NO _____

One (1)

MANUALS

A complete ambulance manufacturer's owner's manual shall be included with vehicle. The manual will include wiring diagrams as well as a wiring narrative about the vehicle. Also included will be all additional manufacturer instructions for the options provided.

Bidder Complies YES _____ NO _____

One (1)

CUSTOM LEATHER HEATED SEATS WITH ARMREST

The OEM seats shall be covered by an aftermarket vendor with leather and add heated and armrest option to both the driver's seat and passenger seat. Color to match interior of cab.

Bidder Complies YES _____ NO _____

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One (1)

MODULAR BODY

Design

Due to the unique requirements of individual EMS agencies, the design of a custom module body is integral to ensure a safe and efficient work environment. Modular body construction methods and materials must be certified in compliance with AMD Standard 001, "Static load test for ambulance body structure". In order to meet this need, a fully staffed engineering department is required to integrate the needs of individual agencies into a precisely and properly designed vehicle. The design and fabrication of the vehicle shall keep safety and reliability as the most important features. Therefore, the modular body must be completely designed, fabricated, and assembled by the final stage manufacturer.

Bidder Complies YES_____ NO_____

Computer Design Standards

The standard and optional equipment required shall be incorporated into a 2D drawing using computerized drafting software. These 2D drawings shall ensure that all of the equipment and options have been included in the vehicle to be produced. The 2D drawings shall also be used in bid presentations and for customer approval. These preliminary drawings shall then be converted to 3D for production purposes using 3D computerized drafting software. This software shall incorporate a feature that allows for visualization of multiple layers of the vehicle being designed. This shall be used to determine tube size, tube thickness and location. It shall also determine the openings necessary for exterior compartments, light placement, side and rear entry doors and any other items needed to meet the specification. This level of software is mandated so a true 3D representation of the completed vehicle can be evaluated for accuracy and conflicts. This will make sure that production of the vehicle will be efficient as well as being reproducible. Upon the completion of this step, the information will be transferred to frame generator software in order to program the CNC machine used to cut the sheet metal for the vehicle and to provide an accurate cut list for programming a computerized band saw used to cut the necessary sized tubing needed to assemble the modular body.

Bidder Complies YES_____ NO_____

Construction

All body panels, structures, and extrusions shall be fabricated of ALL ALUMINUM materials using alloys and thicknesses consistent with the load requirements of the vehicle. Exterior panels shall be fabricated from 5052-H32 sheet aluminum, a highly corrosion resistant marine grade alloy, with minimum 2.2% magnesium and having an ultimate tensile strength of 33,000 PSI. Exterior body extruded framing members shall be fabricated from 6063-T6 grade aluminum

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with minimum 0.8% magnesium and minimum 0.4% silicon, having an ultimate tensile strength of 35,000 PSI. The aluminum sheets and extrusions will have a varying thickness, depending on the use, as described later in the specification.

Bidder Complies YES _____ NO _____

Module Mounting

The modular body shall be mounted using outrigger type mounts and rubber puck style spacers with steel sleeves. The rubber puck shall be of a two-piece design with an upper puck and a lower puck containing a metal tube extending above it. The lower puck is installed under the "L" of the outrigger and the metal tube extends through the outrigger. The upper puck is then placed back onto the tube of the lower puck. Metal caps are then placed on both upper and lower pucks to provide a firm platform for attaching the body to the mount. A minimum # 8 grade bolt and locking nut shall be used. There shall be a minimum of 10 mounting points. These mounting points shall utilize existing OEM frame rail holes whenever possible.

Bidder Complies YES _____ NO _____

One (1)

FINISHED HEADROOM

The interior of the patient compartment will provide 74 inches of finished headroom from floor to ceiling.

Bidder Complies YES _____ NO _____

One (1)

PASSTHROUGH WINDOW

The chassis cab to module pass through shall be a Polycarbonate window to the patient compartment. It shall be a minimum of 14" wide. This shall be a sliding window that latches open and closed only from the cab side. The track provided shall be rattle free.

Bidder Complies YES _____ NO _____

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One (1)

VENTS

There shall be an additional Perko style vent for the powered exhaust system mounted next to the standard vent, high on the ambulance body.

Bidder Complies YES _____ NO _____

One (1)

WHEEL WELL TRIM

There shall be one-piece, stainless-steel wheel well trim rings installed around the rear body cutout above the rear wheels. These trim rings shall provide an aesthetically pleasing rounded opening as well as provide impact and paint protection. Housings shall attach to the modular body utilizing stainless steel bolts. Fastener inserts shall be applied between the fender and the modular body.

FORMED SHEET METAL, RUBBER, OR FIBERGLASS FENDERS ARE NOT ACCEPTABLE.

Bidder Complies YES _____ NO _____

One (1)

FUEL FILL HOUSING

Chassis OEM fuel-fill assemblies shall be utilized. A cast aluminum fuel fill protector shall be recessed into the body above and behind the street side rear wheel well.

Bidder Complies YES _____ NO _____

One (1)

LOWERED FRONT BODY SKIRT

The ambulance module body skirts ahead of the rear wheels on both the passenger side and the driver's side shall be dropped 3" lower than the rear module skirt.

Bidder Complies YES _____ NO _____

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MODULE DOORS AND WINDOWS

One (1)

MODULE ENTRY DOOR REFLECTORS

There shall be two (2) 3M 2" x 7" tape style red reflectors mounted on each of the side and rear module entry doors, one in the upper half of the door and the other on the lower half of the door.

Bidder Complies YES _____ NO _____

One (1)

MODULE SIDE ENTRY DOOR

The side entrance door shall be full height. It shall be equipped with a heavy-duty gas dampening hold open device that shall hold the door open at 90 degrees.

Bidder Complies YES _____ NO _____

One (1)

MODULE SIDE ENTRY DOOR THRESHOLD

The side patient entry door shall have a threshold with Black/Yellow Safety Anti-Slip tape installed.

Bidder Complies YES _____ NO _____

One (1)

SIDE ENTRY DOOR WINDOW

Side entry door shall be equipped with a manufactured, 16" x 20", non-opening, safety plate window in an aluminum frame with dark tint providing 80 percent light filtering.

Bidder Complies YES _____ NO _____

One (1)

REAR MODULE DOORS

The ambulance module shall have a minimum of 56 inches of pass thru height at rear doors. The rear doors shall also have Grabber style hold opens with replaceable rubber catches. The

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Cast Products "Grabber" style hold opens shall be installed on each door with the appropriate socket being installed on the rear body wall attached to a 2 x 2 aluminum support tube.

Bidder Complies YES _____ NO _____

One (1)

REAR ENTRY DOOR WINDOW

Both rear entry doors shall be equipped with a manufactured, 16" x 20", non-opening, safety plate window in an aluminum frame with dark tint providing 80 percent light filtering.

Bidder Complies YES _____ NO _____

One (1)

DOOR ASSIST HANDLE

Both rear entry doors and the side entry door shall be equipped with exterior chrome assist handles. They shall be installed on the exterior of the door in the area of the door handle

Bidder Complies YES _____ NO _____

One (1)

ENTRY DOOR HANDLES

The side and rear entry doors shall be equipped with Tri-Mark free float handles with chrome exterior and Black Pocket. A nonskid easy-grip surface shall be applied to the backside of the handle to permit a gloved or wet hand from easily gripping the handle. The right rear and the side entrance doors shall be lockable from inside or outside.

There shall be a rubber gasket installed between the paddle handle and the door. All screws shall be coated with an anti-corrosive paste prior to application. All entrance doors and exterior compartment doors shall be keyed alike.

Bidder Complies YES _____ NO _____

One (1)

ENTRY DOOR HANDLES

Both rear entry doors will have an exterior and interior door handle.

Bidder Complies YES _____ NO _____

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One (1)

ADDITIONAL DOOR RELEASE

On the side and rear entry doors there shall be a manual rotary latch release system that will allow the rotary to be manually activated in the rare event of a broken activation cable. The activation handle for this system shall have an amber plastic cover to be readily visible in an emergency. There shall be (6) of these release handles located on the inside of the doors, (1) adjacent to the upper and lower rotary latches in each of the (3) entry doors.

Specifications they must follow:

Must be cycle Tested a minimum of 500 cycles

Frozen linkage load test: freeze latch trip lever

Impact test

Torque test on mounting fasteners.

Extreme temp function test

Corrosion Test: 500 hours

Must meet FMVSS 206

Must Meet FMVSS 302

Bidder Complies YES _____ NO _____

One (1)

LATCH ACTIVATION

All exterior module doors shall have a pre-stressed shielded cable as the means to activate door latches and door rotaries. The shielded cable shall have machine crimped ends. The ends shall be crimped at a 100-psi setting and be subject to a minimum 175 peak load, lb./ft. "Loctite" shall be applied on both ends.

Bidder Complies YES _____ NO _____

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One (1)

MODULE DOOR PANELS

All module door interior panels shall be installed using stainless steel, fine thread, flathead machine screws with locking cage nuts. All machine screws shall be dipped in ECK anti-corrosive coating prior to assembly. All areas that will not accommodate a cage nut shall be a minimum quarter inch thick and be tapped. The use of self-tapping screws will not be allowed.

Bidder Complies YES _____ NO _____

Three (3)

MODULE DOOR PANELS

Each modular entrance door shall have removable .100" aluminum inside access panel to facilitate latch adjustment or repair. The lower interior panel shall be .100 smooth aluminum plate. The upper interior door panels shall be .100" aluminum covered with laminate. They shall be recessed into the door extrusion and attached using stainless flathead machine screws and locking cage nuts. All machine screws shall be dipped in ECK anti-corrosion coating prior to assembler. All areas where a locking cage nut cannot be applied, a stainless-steel machine screw will be taped into a minimum .250 aluminum. Interior door panels that are not recessed could have sharp edges and increase the probability of contamination by blood borne pathogens. The use of self-tapping fasteners or rivets will not be accepted. No Exceptions.

Bidder Complies YES _____ NO _____

One (1)

SIDE DOOR STEPWELL

A formed aluminum side entrance door stepwell shall be recessed into the body and be lined with bright aluminum tread plate on all exposed surfaces. The step well shall be lighted.

Bidder Complies YES _____ NO _____

One (1)

EXTERIOR COMPARTMENTS

The exterior compartments shall be formed from a minimum .090" aluminum sheet. The compartments shall be welded to the body floor and sidewall structure for strength and rigidity. All corner seams shall be welded and caulked.

Bidder Complies YES _____ NO _____

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Module Compartment Doors

All doors shall be a minimum of 3" thick, framed by aluminum extrusions of labyrinth design. The door jamb extrusions shall be made from 6063-T5 aluminum. The door frame extrusion will be continuously welded to the wall skin and a minimum, two-inch square framing extrusion. The door frame extrusion shall be level with the side and rear body skin. In addition to the extrusions reinforcing each outer door pan, the extrusions themselves shall be reinforced through a dual joining method. Each mitered corner, where the framed corners join, shall be fitted with an angled gusset and an exterior .125 door pan. The corners shall then be welded and finished smooth. The door facing and the edge shall be a single .125 skin. All doors shall include 2" foam plank insulation. Doors that employ square tube and box pan sheet construction are not acceptable.

The compartment door jamb shall be welded to a minimum 2" x 2" tube. The door jamb trim shall also be welded on the interior where each door pin is located. All doors shall mate with the doorframe extrusion, forming a gasket area for the pneumatic door seal. The exterior door panels shall be formed to surround the extruded perimeter framing and be welded in place. Door corners shall be welded and ground smooth. The maximum space between each of the three-quarter welds shall be fifteen inches. Interior panels shall be recessed into the extruded frame and screwed into place using stainless steel flat head machine screws and locking cage nuts. All areas that will not accommodate a locking cage nut will have screw holes tapped into a quarter inch of aluminum.

Bidder Complies YES _____ NO _____

Compartment Door Hardware

Doors shall have rotary latches with stainless steel, slam style paddle handles. A nonskid easy-grip surface shall be applied to the backside of the handle to permit a gloved or wet hand to easily grip the handle.

There shall be a rubber gasket between the paddle handle and the door. All door latch posts shall be adjustable. All compartment doors shall be keyed alike and lockable with a double bit key.

A continuous Clean Seal #50512 door gasket shall be installed 360 degrees around the entire door.

Stainless Steel sill plates shall be installed on all inner and outer doorsills.

All doors, except the battery compartment, and the rear oxygen storage door (if applicable) shall have a heavy-duty gas dampener style hold open device.

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The battery compartment, as a minimum shall open near 180 degrees. It shall be equipped with rubber bumpers to protect the doors and finish.

Each door shall have a continuous stainless-steel hinge with a .250" pin. Hinges shall be slotted for adjustment and attach to the door with .250" stainless steel truss head bolts for easy removal and cleaning. The truss head bolts shall be mated with a machine applied nutsert. Hinges shall not be riveted to body or doors. A dielectric barrier to include both "Eck" and an anti-corrosive tape shall be provided between the hinge and the doorframe. All single compartment doors on sides shall be front hinged for safety and convenience.

All doors taller than the belt line shall have two (2) latches and Nader pins.

Compartments requiring double doors shall provide frame latching for the second door. Doors that latch to each other shall not be acceptable. Each door shall have an exterior latch.

Bidder Complies YES _____ NO _____

Door Seals

The door seals must be EPDM hollow core and provide a 360-degree uninterrupted seal with a full 1/2" of compression. Door latches shall be inboard of the seal, therefore protecting latches from dirt, moisture, and weather deterioration.

Seals shall be mounted in a way to protect them from abuse. All door latch Nader pins shall be adjustable.

Inner and outer sills of the compartment doorframes shall be trimmed with formed brushed stainless-steel plates to protect painted surfaces. They shall be applied with adhesives. No mechanical fasteners may be used.

Bidder Complies YES _____ NO _____

Venting

In order to prevent airlock inside compartments, all exterior equipment storage compartments shall be vented. There shall be two black powder coated aluminum vents in each compartment, one left side, and one right side. All vents shall be above the floor line to prevent dust from entering the compartment. The only exception (unless otherwise specified) shall be the oxygen compartment, which may have a vent in the door and/or below the floor line. All vents below the floor line shall have a scotch-brite style filter installed to help prevent moisture

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and dust from entering the compartment. Other vents in compartment doors will not be acceptable.

Bidder Complies YES _____ NO _____

One (1)

COMPARTMENT DOORS

There shall be one 3M, 2" x 7", tape style, red, reflector mounted on each compartment door that is half height or lower. Doors over half height shall have two reflectors, one in the upper half of the door and one in the lower half of the door. The reflectors shall be installed vertically, to wrap around the outer labyrinth of the door extrusion.

Bidder Complies YES _____ NO _____

One (1)

COMPARTMENT DOORS

All compartment door interior panels shall be polished diamond plate aluminum. They shall be recessed into the door extrusion and attached using stainless flathead machine screws and locking cage nuts. All areas where a locking cage nut cannot be applied, a stainless-steel machine screw will be tapped into a minimum .250 aluminum. The machine screws shall be dipped in ECK anti-corrosion coating prior to installation. Where a tapped screw is used, it will be coated with Loctite before installation.

Interior door panels that are not recessed could have sharp edges and increase the likely hood of contamination by blood borne pathogens. The use of self-tapping fasteners or rivets will not be accepted. No Exceptions.

Bidder Complies YES _____ NO _____

One (1)

DOOR SWITCHES

Door jamb switches for interior lights, exterior compartment lights, door ajar lights and rear load lights shall be magnetic style with ground wire trigger activated relays. This method of wiring eliminates hot wires running into door jams and therefore any amp load on the switch itself.

Bidder Complies YES _____ NO _____

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EXTERIOR COMPARTMENTS

All exterior compartments shall be lined with a blended component polyurethane/polyurea coating. This coating shall have a minimum thickness of .0625" in low wear areas and .125" to .188" in all other areas. The material shall be nonporous and allow for easy cleaning. It must be highly resistant to scratching and scuffing.

The minimum performance specifications for this coating material are:

- | | | |
|----|--------------------------|------------|
| 1. | Shore "A" Hardness | 55 + |
| 2. | Tensile Strength | 3,025 PSI |
| 3. | Elongation at Break | 275% |
| 4. | Tear Strength | 475 PLI |
| 5. | Compaction/Impact Factor | 52,000 PSI |

This material shall be sprayed on all exterior compartment walls, floors and ceiling surfaces and finished in a mottled texture to minimize slippage; it shall provide a water/air tight seal and superior noise suppression. The polyurethane/polyurea Lining will not crack, peel or warp and will resist scratches. The color of this material shall be medium gray.

Bidder Complies YES _____ NO _____

One (1)

EXTERIOR COMPARTMENT LIGHTING

All exterior module compartments, except the battery compartment, shall have TecNiq brand LED strip lighting, Model E41-W010-1, (2) vertical strip (or acceptable equivalent) per compartment. The appropriate size of the standard lengths listed below will be used depending on the height of the compartment.

- Ultra-thin 3/16" strip
- 12VDC Not to draw any more than .40A per yard (white)
- 30 Lumens per LED
- Low-Profile surface mount adhesive design
- High flexibility conforms to irregular surfaces
- Over 50,000 hours of life
- High quality LEDs don't change color over time
- 180 Degree output
- 10 Year Limited Warranty
- Standard lengths are 9", 18", 31.5", 54" and 72"

Bidder Complies YES _____ NO _____

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EXTERIOR COMPARTMENT VENTS

All exterior compartments shall be vented using a 9" x 12" or 6" x 15" black texture coated .125" aluminum vent covers. All vents shall be installed above floor line. The only exception shall be the oxygen compartment which shall be vented below floor level. A Scotch Brite filter shall be installed in addition to the vent cover to prevent moisture and dirt from entering the oxygen compartment. All compartments shall have at least one vent with additional vents as necessary, depending on the compartment size, to allow for easy closure of the compartment door.

Bidder Complies YES _____ NO _____

One (1)

CURBSIDE COMPARTMENTS

There shall be a curbside front compartment with inside/outside access. This compartment shall be full height. Actual compartment size shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

CURBSIDE COMPARTMENTS

The inside/outside right front compartment shall have one fixed and two adjustable PVC shelves.

Bidder Complies YES _____ NO _____

One (1)

CURBSIDE COMPARTMENTS

The inside/outside right front compartment shall have a smooth interior laminate lining.

Bidder Complies YES _____ NO _____

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CURBSIDE COMPARTMENTS

There shall be a curbside front exterior battery compartment located below the curbside front inside/outside access compartment. The compartment shall have a slide out tray capable of holding two batteries. The heavy-duty slides shall lock in the extended and retracted positions. The vertical hinge side of the door shall have a stainless guard attached. The actual size shall be determined at the pre-build conference.

Bidder Complies YES _____ NO _____

One (1)

CURBSIDE COMPARTMENTS

There shall be a full height backboard compartment located at the curbside rear of the modular body. A full height, fixed, aluminum vertical divider and fixed, aluminum horizontal shelf are included. The divider and shelf shall be polyurethane/polyurea coated. Actual compartment size shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

STREETSIDE COMPARTMENTS

There shall be a full height streetside front storage compartment. Actual compartment size shall be determined at the pre-construction conference. Compartment shall include (1) oxygen caddy/lift system.

Bidder Complies YES _____ NO _____

One (1)

STREETSIDE COMPARTMENTS

There shall be a double door, streetside front intermediate storage compartment. Actual compartment size shall be determined at the pre-construction conference. Compartment shall include (1) full-length adjustable shelf.

Bidder Complies YES _____ NO _____

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One (1)

STREETSIDE COMPARTMENTS

There shall be a streetside double door rear compartment. Actual compartment size shall be determined at the pre-construction conference. Compartment shall include (1) full width adjustable shelf.

Bidder Complies YES _____ NO _____

One (1)

COMPARTMENT OPTION

An exterior compartment shall have a notch installed in it to allow for intrusion from cabinetry on the inside of the module. The exact location and dimensions of the notch shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

*****REAR STEP AND BUMPER ASSEMBLY*****

One (1)

Module Rear Bumper

There shall be a heavy-duty bumper extending to each side of the step. The under carriage shall be constructed of 4-inch aluminum channel and tubing, bolted to the chassis frame rails with a minimum of ten bolts. The bumper framing shall be reinforced with an additional 4-inch aluminum support coming out from the chassis frame rails at a 45-degree angle to the outside corners of the bumper. The entire assembly shall be spaced out from the rear kick plate a minimum of one inch.

There shall be a 45" wide by 10" deep passenger step at the rear of the body. It shall be constructed of open face "Grip-Strut" safety grating, rigidly framed and supported. The rear step shall be hinged to allow it to be folded against the rear of the body.

End sections outboard of the step shall be perimeter reinforced and covered with .125 aluminum diamond tread. All corners shall be TIG welded. The outside corners of the covers shall be tapered 15 degrees to minimize bumper dragging.

Bidder Complies YES _____ NO _____

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One (1)

REAR BODY OPTION

The vertical surface at the rear of the modular body, between the rear step and the bottom of the rear door opening, shall be faced with 3003 polished aluminum diamond plate. This panel shall be the width of the module. The rear kick panel shall be attached using stainless steel, flathead, countersunk machine screws. The screws shall be tapped and dipped into "ECK" anti-corrosion coating prior to installation. The body plate, where the diamond plate kick plate is in contact with it, shall also be coated with ECK anti-corrosion coating prior to installation. The top edge of the rear kick panel shall be sealed using auto body sealant.

At least 70% of the rear body shall be covered with 3M brand red and Yellow reflective chevrons part numbers as follows: 3M Diamond Grade Reflective (RED) Part #938-72 and 3M Diamond Grade Reflective (Fluorescent Yellow/Green) Part# 983-23 as designed and approved at the pre-construction meeting.

Bidder Complies YES _____ NO _____

IMPACT RAILS, STONE SHIELDS AND RUNNING BOARD

One (1)

IMPACT RAILS

The impact rails shall consist of a three-component system. The three components are the impact rail, the impact rail base, and the impact rail end caps. The impact rail is a 6063-T5 custom extruded, anodized aluminum "C" channel, 3" by 1.5" x 0.125". The edges of this "C" channel shall have a half arrow style notch. The impact rail base shall be a 6063-T5 extruded aluminum "C" channel, 2 3/4" x 1/2" x 0.125". The edges of this "C" channel shall have the mirror image, half arrow style notch, designed to mate with the impact rail. The impact rail end caps shall be cast aluminum design with a three-tab collar to insert into the impact rail, so it is flush with the rail and provide mounting tabs to secure the cap to the rail. The cap design shall curve through an approximate 2.5" radius to provide a pleasing look where the impact rails end.

The impact rail base shall be mounted through the 0.125" body skin and into the 3" x 2" x .125" rectangular aluminum tube which is the lower structural member of the body framing. ECK anti-corrosion coating shall be brushed on the entire surface of the back of the impact rail base where it is in contact with the modular body as well as the machine screws used to mount it. The impact rail shall be snapped in place on top of the impact rail base by engaging the half arrow notch on the impact rail base with the notch on the impact rail. This system of notches allows for the rail to be securely attached to the base but provide some "give" to reduce damage from minor impacts. To finish off the system, the end caps shall be installed by using stainless steel machine screws coated with the ECK anticorrosion coating. The only exposed

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mounting hardware allowed are the four stainless steel machine screws needed to secure the end caps to the impact rail.

Rails shall be designed to absorb impact, minimize body damage, and to be easily replaceable. For this reason, the lower body tube described above must continuously back all impact rails. The rails shall be installed along the entire length on both sides of the lower modular body.

RUB RAILS MUST BE ALUMINUM TWO PIECE EXTRUSIONS. BREAK FORMED "C" CHANNEL OR OTHER FABRICATED RUB RAILS WILL NOT BE ACCEPTABLE.

RUB RAILS ATTACHED ONLY TO THE SKIN OR VERTICAL SUPPORTS WILL NOT BE ACCEPTABLE.

Bidder Complies YES _____ NO _____

One (1)

RUNNING BOARDS

Bright finished 0.125" aluminum diamond plate running boards shall be installed on both the curbside and streetside below the cab doors. Running boards shall incorporate front splash shields as well as a center grip strut surface for additional traction.

Bidder Complies YES _____ NO _____

One (1)

MUD FLAPS

The chassis shall have heavy-duty rear rubber mud flaps with metal stabilizers installed in the rear wheel well area.

Bidder Complies YES _____ NO _____

One (1)

FRAME RAIL COVER

There shall be 0.100", bright finished, aluminum diamond tread frame rail cover full width between cab and module to cover the frame rails.

Bidder Complies YES _____ NO _____

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One (1)

STONE GUARDS

There shall be 0.100", bright finished, aluminum diamond tread stone shields, 36" high, wrapped around each front lower corner of the body and extending to just inside the cab width. The entire back of the shields shall be brushed with ECK anti-corrosion coating prior to installation. After installation, the edges shall be sealed.

Bidder Complies YES _____ NO _____

One (1)

STONE GUARDS

There shall be 0.100", bright finished, aluminum diamond tread stone shields wrapped around each rear lower corner extrusion of the body. The corner stone shields shall extend to the height of the rear kick plate. The entire back of the shields shall be brushed with ECK anti-corrosion coating prior to installation. After installation, the edges shall be sealed.

Bidder Complies YES _____ NO _____

ELECTRICAL SYSTEM

One (1)

ELECTRICAL CONTROL SYSTEM REQUIREMENTS

A Microcomputer and Microprocessor based electrical system, with driver's and attendant's control panels, shall be supplied and installed by the ambulance manufacturer. The system architecture shall be of the master – slave style. This is important so that the slave modules can be replaced without the need to be reprogrammed. This will reduce time needed for replacement as well as reduce inventory requirements. The system shall be located in a main electrical compartment containing all main electrical components for ease of troubleshooting and repair. Only systems manufactured independently will be considered. **NO "IN HOUSE" SYSTEMS PRODUCED BY THE AMBULANCE MANUFACTURER WILL BE CONSIDERED.**

The system shall incorporate a fully programmable design allowing the purchaser to select and define how the system will operate now and into the future. All electrical and electronic components shall be selected to minimize electrical loads, thereby allowing the vehicle's generating system to not only meet the vehicle's electrical load requirements but to maintain an adequate reserve generating capacity. The system shall include automatic load management and automatic high idle control. The electrical system shall be a "Touch Screen" System or an equivalent. The technology used is to preserve the life of the system by removing current loads

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before it disconnects. The electrical system must have a quick start of twenty seconds. The system must incorporate the ability to add, remove or reposition buttons, on the same screen and have optional provisions to automatically switch between Primary or "Pursuit" Modes and Secondary or "On Scene" modes through inputs from the chassis for automatic control, or manual control through the screens. The Emergency Master sequencing, Primary/Secondary operations, and Load Management functions must be user selectable. The system must have a fully interlocked, auto throttle control.

Bidder Complies YES _____ NO _____

System Testing Standards

The system will be thoroughly tested to ensure dependability in a variety of different elements. The testing shall include the following:

- 1 - Thermal Stability Testing to include non-powered resistance to cold testing, low temperature operating testing and high temperature operating testing.
- 2 - Highly Accelerated Life Testing to meet standards; MIL-STD-810G and SAE J1455.
- 3 - Highly Accelerated Stress Screening to meet standards; MIL-STD-810G and SAE J1455.
- 4 - Thermal Shock Testing meeting standards; MIL-STD-810G Method 503.5 and IEC 60068-
- 5 - Vibration Testing meeting standards; MIL-STD-810G Method 514.6, SAE J1455, and ISO 16750-3.
- 6 - Mechanical Shock Testing meeting standards; MIL-STD-202G Method 213B, and ISO 16750
- 7 - Immersion Testing meeting standard; ISO 20653.
- 8 - Controls Durability Testing including set Duration, Actuation Force, Cycle Rate, Temperature, Operational Status and Monitoring.
- 9 - Fluid Contamination Testing meeting standards; SAE J1455 and MIL SPEC 461F.
- 10 - Salt Spray testing meeting standards; MIL-STD-810F and Method 509.4 ASTM B117.
- 11 - Dust Testing meeting standard; MIL-STD-810F.
- 12 - Power/Temperature/Humidity Testing to meet standard; MIL-STD-810F.
- 13 - Solar Radiation Testing meeting standards; SAE J1960 and ASTM G 155.

Bidder Complies YES _____ NO _____

Front Control Screen

The front control screen shall be a color LCD touch screen with instant-on technology and programmable switch functions. At the bottom of the screen there shall be five hard coded "hot" buttons. These five "hot" buttons shall guarantee control of critical functions in the rare event of touch screen failure. The screen must be IP67 rated and tested and must be able to interface with up to four perimeter cameras. In an effort to give the driver the ability to assist

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with rear patient control, the rear screen controls must be able to be selected as a page on the front control screen. All alarms, both visual and audible, must be present in the front screen. Alarms must include compartment and patient doors, oxygen, medical air low pressure warning. All emergency master functions must be available in the front screen. The front touch screen must include the following: volts, message center, door open indicators, emergency master, module disconnect, shore power indicator, emergency master sequencing and load management. The front control screen must also auto revert to main page after 10 seconds of no input.

Bidder Complies YES_____ NO_____

Rear Control Screen

The rear control screen shall be a color LCD touch screen with instant-on technology and programmable switch functions. There shall be five hard coded "hot" buttons. These five "hot" buttons shall guarantee control of critical functions in the rare event of touch screen failure. The screen must be (IP67) rated and tested. The system must allow for additional rear screens to be installed and be able to function independently. The screen must have definable switches/buttons. The rear screen must have complete heating and air conditioning (HVAC) controls. There must be automatic operation of the HVAC system, regulated by a "set" temperature. The system shall select heat or cool based on set and actual temperature. Manual controls of the HVAC system can also be selected if needed. The rear screen must have provisions for tank displays (O2/Medical Air) as necessary. The combinations of available tanks are: one O2 tank, two O2 tanks, or one O2 tank and one Medical Air tank. There must also be a low-pressure warning for O2 /Medical Air with an alarm override function.

Bidder Complies YES_____ NO_____

System Master Control Module

The system start shall be activated by cab door open circuit, or remote activation and be fully ready to function within 20 seconds.

The system shall be scalable and allow for the ability to expand the number of outputs. The expansion of the system will be accomplished through the addition of output modules. The system will include (1) camera for back-up/reverse and will allow for up to three additional video cameras. It must also have provisions for full screen camera display, automatic full screen camera in reverse as well as integrating a built-in turn signal display option. The system must allow for full programmability by the manufacturer, where they can create and select only the required number of outputs. Programmability shall also include control panel switch placement.

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The system must have real time monitoring of all critical functions and must have the following protections built in:

- Full reverse voltage protection
- Full RFI protection
- Full over voltage protection
- Full transient protection
- Full under voltage protection
- Protection during a brown out voltage scenario
- Protection during slow rise or recovery mode
- Protection against voltage stutter Protect from failure of relay boards.

The system must allow for full programmability by the manufacturer, where they can create and select only the required number of outputs. Programmability shall also include control panel switch placement. The system must survive the initial crank voltages down to seven volts without experiencing a computer reboot. There must be multi-leveled brightness and audio controls. Operating temperature range must be from -40 F to 158 F. Screens must connect to system network via a two-conductor cable using "J 1939 CAN" protocol. The system shall also incorporate easy to read diagnostic LEDs allowing the user to determine if the system is functioning properly. These will include input status, module status and output status LED's.

The system shall also include:

- Programmable Emergency Master Sequencing for Pursuit and On-Scene modes.
- Primary battery disconnect
- Programmable Load Management
- Automatic Climate Control, with Pulse Width Modulated (PWM) fan control and 1 temperature sensors.
- Climate Control must have intelligent automatic control, via the monitoring of temperature differentials between actual temps and set points.
- Robust communications
- Twisted pair cabling
- Cancels out electromagnetic interference
- Differential signaling
- Automatic Throttle Control output.
- Easy to read LED diagnostics.
- High Speed "J 1939 Compliant CAN Bus"

Bidder Complies YES _____ NO _____

System Power Module

The Power Modules shall have solid state current limiting protection. Each power module shall be equipped with its own diagnostic LED's including Communication Status, Module Status and

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Output Status LED's. These LEDs are useful in quickly determining the status of each output. The power modules shall be easily exchanged, with minimal work for the service personnel, without the need for reprogramming. This shall aid in ease of repair and reduction in parts inventory.

Bidder Complies YES _____ NO _____

System WIFI Module

The electrical system shall have, as standard, a password secured self-contained Wi-Fi module. This Wi-Fi module will host its own web page accessible from any Wi-Fi enabled device. The web page will allow access to the following:

- Power locks,
- Climate control
- Perimeter flood lights
- "Real time" access to the status of each input and output in the system.
- Maintenance and instructional videos
- Scheduled maintenance reminders
- System event log.

Bidder Complies YES _____ NO _____

System Wire Harnesses

All wiring and cable assemblies shall be totally encased in protective, convoluted, high temperature, 300-degree flame resistant, automotive type, polyethylene loom or equivalent braiding. Wiring which is routed near potentially sharp edges shall be protected by grommets or edge guard material. All wiring shall be permanently color-coded and permanently embossed with number and function codes, spaced every 4 inches on each wire. Wiring labels that are glued or otherwise attached to the wire shall not be considered permanent and will not be acceptable. All wiring used shall be copper with GXL thermoplastic insulation rated to 125 degrees Centigrade. **Within the main harnesses, where there is a necessary splice, the connection must be made using a cold friction ultrasonic weld process to make a permanent, lasting connection.** The splice shall be protected using heat shrink tubing. **Splices within the main harnesses using butt connectors shall not be acceptable.** All splices and terminals provided shall comply with SAE J163, J561, or J928 as applicable. All wiring between the cab and module shall be connected to a terminal block located in an exclusive wire terminal interior cabinet. This exclusive interior electrical cabinet shall limit the access by EMS providers and provide a clean/dry environment for all electrical control components.

Bidder Complies YES _____ NO _____

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High Idle Control

A Manufacturer's throttle control device or equivalent shall be installed. It shall be preset so that when activated it will operate the engine at a speed necessary to maintain proper system voltage. The device shall operate only when the vehicle is in "park" and the parking brake is engaged. The device shall disengage when the service brake pedal is depressed, or the transmission is placed in gear. The device shall automatically reengage when the service brake is released, or the vehicle is again placed in "park" and the parking brake engaged. (When allowable, the above the throttle system shall interface with the Electrical Control System)

Bidder Complies YES _____ NO _____

Ground Straps

A single ground connection shall exist between the system and the vehicle chassis. Two copper-strand, plated, woven type ground straps with crimped and soldered lugs shall be installed between modular body and chassis frame. Two copper-strand, plated, woven type ground straps with crimped and soldered lugs shall be installed between cab and chassis frame. One copper-strand, plated, woven ground strap with crimped and soldered lugs shall be installed between the engine and the chassis frame.

Bidder Complies YES _____ NO _____

One (1)

Rear Touch Pad Controls

There shall be an additional rear touch pad that shall include operation from eight to thirty-two volts. Rear touch pad must have complete HVAC (heating and air) controls. There shall be a display screen for O2, temperature and fan speed.

Bidder Complies YES _____ NO _____

One (1)

BACKUP ALARM

A backup alarm shall be installed and shall activate when the vehicle is placed in reverse gear. It shall automatically reset when the vehicle is taken out of the reverse gear. This switch controlling the alarm shall be capable of being set prior to going in reverse, allowing the backup alarm to not activate. The model shall be an ECCO 575 back up alarm.

Bidder Complies YES _____ NO _____

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One (1)

SHORELINE INLET

The ambulance shall be equipped with a 2-wire plus ground 110-volt AC wiring system that is separate and distinct from the vehicle's 12-volt DC system. There shall be a shoreline inlet with heavy-duty Hubbell cover installed. The inlet shall be located on the streetside of the ambulance body above the streetside exterior intermediate compartment unless otherwise specified. The inlet shall be properly marked "110-125-volt AC, 60 HZ, 20 Amps". A separate mating plug shall be shipped loose with the delivered vehicle. The 110-volt system shall incorporate two (2) separate circuit breakers that can be used as master disconnect switch. One (1) breaker shall be rated at no less than 20 amps and utilized to power the onboard battery charger and protect the shore inlet system. A separate breaker, rated at no less than 15 amps shall be wired to the vehicles interior hospital grade duplex outlets. These outlets shall be GFCI protected.

Bidder Complies YES_____ NO_____

One (1)

INVERTER

A Kussmaul 091-263-12-1500 Auto Power 1500 Inverter/Charger shall be provided and installed. It shall have the following features:

- 1500-Watt continuous power, 4500-watt surge
- 55-amp (Max) battery charger
- 20 amp Auto Eject Shoreline w/Deluxe Cover & Bar Graph Display
- Built in automatic load transfer relay
- Automatic low battery shutdown
- Power Save mode
- UL 458 Listed
- Meets NFPA 1917, KKK specification

Bidder Complies YES_____ NO_____

One (1)

INVERTER

All necessary 12 VDC and ground cables plus switching for the attendant control panel shall be provided for future installation of an inverter. The inverter utilized will incorporate an internal transfer relay which disconnects the inverter with shore power applied.

Bidder Complies YES_____ NO_____

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One (1)

POWER PORTS

The patient action area shall be furnished with a combination dual 2.1-amp USB port with integral 20-amp cigarette style outlet.

This circuit shall also include a diode isolator to isolate medical equipment and medical equipment batteries from any electrical spikes and surges that the remainder of the ambulance electrical system may impose.

Bidder Complies YES _____ NO _____

One (1)

POWER PORTS

The inside/outside cabinet shall be furnished with a combination dual 2.1-amp USB port with integral 20 amp cigarette style outlet.

This circuit shall also include a diode isolator to isolate medical equipment and medical equipment batteries from any electrical spikes and surges that the remainder of the ambulance electrical system may impose.

Bidder Complies YES _____ NO _____

One (1)

POWER PORTS

An additional 20-amp cigarette style outlet shall be provided.

This circuit shall also include a diode isolator to isolate medical equipment and medical equipment batteries from any electrical spikes and surges that the remainder of the ambulance electrical system may impose.

The exact quantity and location of the additional outlet(s) shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

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One (1)

125 VOLT OUTLETS

An Interior duplex outlet shall be installed in the action area. An indicator light shall be included at the outlet to indicate when 125v AC power has been applied. This 125v AC system, including wiring and associated equipment, shall comply with AMD Standard 009.

Bidder Complies YES _____ NO _____

One (1)

125 VOLT OUTLETS

An Interior duplex outlet shall be installed in the R.F.S. Cabinet. An indicator light shall be included at the outlet to indicate when 125v AC power has been applied. The outlet shall be labeled "125v AC". This 125v AC system, including wiring and associated equipment, shall comply with AMD Standard 009.

Bidder Complies YES _____ NO _____

Two (2)

125 VOLT OUTLETS

An additional Interior duplex outlet shall be installed in the vehicle. An indicator light shall be included at the outlet to indicate when 125v AC power has been applied. The outlet shall be labeled "125v AC". This 125v AC system, including wiring and associated equipment, shall comply with AMD Standard 009. The exact quantity and location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

IV WARMER

A 12-volt Smithworks IV fluid warmer (or equivalent) tray shall be installed and mounted in an interior cabinet. The exact location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

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One (1)

POWER DOOR LOCKS

Side entry & rear entry doors shall have power locks installed. These power locks shall be activated with OEM door locks and be thermally protected with a pulsed signal.

Bidder Complies YES _____ NO _____

Five (5)

POWER DOOR LOCKS

A designated exterior door shall have a power lock installed. This power lock shall be activated with OEM door locks and be thermally protected with a pulsed signal. The quantity and location of the additional door locks shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

POWER DOOR LOCKS

A hidden, power door lock switch shall be installed in the license plate enclosure on the rear of the body. This switch shall be used only for the unlock feature.

Bidder Complies YES _____ NO _____

One (1)

SPEAKERS

There shall be two Kenwood or equivalent speakers recessed into the center ducted A/C tract in the module body. The speakers shall be hooked to the OEM AM/FM radio system and shall include a volume control located in the primary action area unless otherwise specified.

Bidder Complies YES _____ NO _____

One (1)

REAR VIEW CAMERA

A Rostra rear view observation system shall be installed. The system includes cabling for F-Series OEM Built in Dash Monitor Viewing. White Camera head shall be surface mounted above the module rear entry doors.

Bidder Complies YES _____ NO _____

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INTERIOR LIGHTING

One (1)

INTERIOR LIGHTING

An oxygen compartment light shall be installed and controlled from the action area control panel.

Bidder Complies YES _____ NO _____

One (1)

INTERIOR LIGHTING

A Whelen 3SC0CDCR 3" round, surface mount, Super LED light shall be installed in the side door step-well. This light shall illuminate when the side door is open.

Bidder Complies YES _____ NO _____

One (1)

INTERIOR LIGHTING

The patient compartment shall be illuminated by eight TecNiq model E08 LC00-1 with chrome trim, recessed into the patient compartment headliner and mounted to a .125 aluminum plate.

The left and right banks of lights shall each have their own "high" and "low" switch positions.

Bidder Complies YES _____ NO _____

One (1)

INTERIOR LIGHTING

The patient action area shall be illuminated by a TecNiq 12-volt LED strip light.

Bidder Complies YES _____ NO _____

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One (1)

CENTER STRIP LIGHTING

Four (4) TecNiq model E30-LOS0-1 LED lights shall be installed in the ceiling of the patient compartment. They shall be evenly spaced down the center strip of the vehicle.

Bidder Complies YES _____ NO _____

Two (2)

INTERIOR LIGHTING

A Whelen model OSR00SCR red LED light shall be mounted on the rear head cushion. This light shall illuminate when the vehicle brake is applied. The exact quantity shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

INTERIOR LIGHTING

Two Whelen model OSA00SCR amber LED lights shall be mounted on the rear head cushion, one to the left side and one to the right side of the cushion. One light shall illuminate when the corresponding turn signal on that side is activated. The exact quantity shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

INTERIOR LIGHTING

There shall be a Blue LED strip light installed at the top of the rolled floor the length of both side walls. A dimmer switch shall be included and be mounted in the action area just below the electrical switch panel.

Bidder Complies YES _____ NO _____

*****EXTERIOR LIGHTING*****

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One (1)

TAIL LIGHT OPTION

There shall be (2) Whelen Model M6BTT M6 Series "LED" stop/tail lights with chrome trim bezels installed. The actual location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

TAIL LIGHT OPTION

There shall be (2) Whelen Model M6T M6 Series "LED" populated amber turn signals with chrome trim bezels installed. They shall be programmed to flash sequentially in the direction of the arrow. The actual location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

LICENSE PLATE HOUSING

The rear license plate housing shall be a recessed style Cast Products or comparable housing. It shall include two clear LED license plate lights. The actual location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

TAIL LIGHT OPTION

There shall be (2) Whelen Model M6BUW M6 Series LED backup lights with chrome trim bezels installed. The actual location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

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One (1)

SCENE LIGHTING

There shall be two reverse activated, Whelen Model M7ZC M7 series rear load lights with chrome trim bezels installed. These lights shall also be controlled by the front control panel. The actual location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

SCENE LIGHTING

There shall be four Whelen Model M9LZC M9 series Super LED scene lights installed. Two scene lights shall be installed on each side of the module body. All scene lights shall have bright chrome flanges. The right-side scene lights shall illuminate when the side entry door is opened. Switching for the side scene lights shall be included in the front control panel.

Bidder Complies YES _____ NO _____

One (1)

SCENE LIGHTING

The right-side scene lights shall come on when the side entry door is opened.

Bidder Complies YES _____ NO _____

One (1)

TAIL LIGHT OPTION

Specified rear emergency warning lights shall activate when the vehicle brakes are applied. The exact lights that are to be activated shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

ICC MARKER LIGHTS

The required exterior ambulance body corner ICC lights shall be Federal Signal Commander Series LED lights. They shall be installed above the drip rail extrusion.

Bidder Complies YES _____ NO _____

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One (1)

REAR D.O.T. LIGHT

There shall be a red Innovative Slimline ICC light mounted above the rear doors. It shall be mounted above the drip rail. The mid sections are to be wired thru the brake light circuit.

Bidder Complies YES _____ NO _____

One (1)

RADIO POWER

The ambulance shall include three power point studs located in the interior electrical compartment. The studs shall include a full-time hot, ignition hot, and ground. They shall be rated and protected for a maximum of 20 amps.

Bidder Complies YES _____ NO _____

One (1)

ANTENNA OPTIONS

One RG58U antenna coaxial cable, with a KE-794 base, shall be installed. This cable shall have a 36" service loop. The exact mount location, quantity and cable termination shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

ANTENNA OPTIONS

A KE-794 antenna base with coax cable, shall be installed on the roof of the patient compartment and terminate in the ambulance module. This cable shall have a 36" service loop. The exact location, termination point, and quantity shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

*****SIRENS AND EMERGENCY LIGHTING*****

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One (1)

SIREN OPTION

There shall be a Whelen Model number 295 HFS2 siren system installed. Actual location for the control head shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

SIREN SPEAKERS

There shall be (2) Federal ES100C thru bumper siren speakers installed. They shall be installed behind cutouts in the front bumper. The installation opening shall be covered with the The Federal Signal P/N MSFMT-EF grill.

Bidder Complies YES _____ NO _____

One (1)

WARNING LIGHT OPTION

There shall be four Whelen M9 Series Super LED side module warning lights installed. They shall be mounted, (2) on each side of the body, at the top upper outside corners, but below the drip rail. Each light shall include the chrome flange option. The exact model number, color and lens color shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

WARNING LIGHT OPTION

There shall be two Whelen M9 Series Super LED rear module warning lights installed. They shall be mounted, (2) on the rear of the body, at the top upper outside corners, but below the drip rail. Each light shall include the chrome flange option. The exact model number, color and lens color shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

Rear Module Warning Lights

There shall be one Whelen model number M9 Series "LED" center rear module warning light installed.

Bidder Complies YES _____ NO _____

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One (1)

GRILLE LIGHT OPTION

There shall be two Whelen ION wide angle, surface mounted Super "LED" warning lights installed on the grille area of the chassis. The exact model number, color and lens color shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

INTERSECTION LIGHT OPTION

There shall be two Whelen M7 Series Super "LED" warning lights installed, one on the forward area of each chassis front fender. The exact model number, color and lens color shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

UPPER FRONT MODULE WARNING LIGHTS

There shall be (7) Whelen M9 Series Super "LED" front module warning lights installed, evenly spaced, across the upper front wall of the module body. The lens on each light shall be clear. The exact model number, color and location of each light shall be determined at the pre-construction conference

Bidder Complies YES _____ NO _____

One (1)

STAGGERED FRONT WALL WARNING LIGHTS

Front Module Warning Light Layout to Be Non-Standard Straight Line

Bidder Complies YES _____ NO _____

One (1)

TRAFFIC ADVISOR OPTION

There shall be a Whelen model TAL85 47" LED traffic advisor installed on the rear of the ambulance body. The location for the control head shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

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Two (2)

WARNING LIGHT OPTION

There shall be a solid color Whelen ION Series Super LED light installed. The chrome flange option shall be included. The exact model, quantity and location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

Two (2)

WARNING LIGHT OPTION

There shall be a Whelen M6 V-Series, solid color, Super LED light installed. The exact model, quantity and location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

WARNING LIGHT OPTION

There shall be (2) Whelen M9 Series, solid color, Super LED lights installed on the rear of the body so that they will show through the windows on the rear doors when the doors are open. The exact model, quantity and location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

*****PATIENT COMPARTMENT*****

One (1)

CABINET CONSTRUCTION

Cabinets shall be constructed of Formaldehyde free, furniture grade exterior-rated hardwood plywood. The plywood shall be made from a deciduous wood with the face, core and back all being the same species. A melamine bonding glue shall be used to join the 7-ply together. The exposed layers shall be hardwood on both sides of the sheet. The layers shall be 99% void free. Cabinet interiors and exteriors shall be covered with high pressure plastic laminate at least 28 mils thick. All cabinets shall be constructed using both glue and screws for maximum strength. Screws shall be a maximum of 10" from each other. All exterior chamfered corners shall have a 6063-T5 aluminum extrusion installed. This extrusion shall be screwed in-place from inside the cabinet.

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Because of the superior sound dampening and insulating qualities of plywood cabinetry, aluminum or other metal cabinetry will not be accepted.

Bidder Complies YES _____ NO _____

Cabinet Doors

The cabinet openings shall have sliding polycarbonate doors, hinged doors, or a combination of both. The sliding doors shall slide in felt / nylon lined 4-sided aluminum extrusions that completely surround each opening and are removable. Each sliding door shall have a full height, beveled corner extruded aluminum handle on the outer edge. This shall provide additional strength and rigidity. All hinged doors shall have a polished stainless-steel hinge with .125" pin diameter.

Bidder Complies YES _____ NO _____

Impact Protection

All exterior corners subject to abuse shall have an extrusion installed for added durability and rounded for occupant safety. A 6063-T5 aluminum radius shaped corner with inside X-frame shall be used on any corner not protected by a padded vinyl covered cushion. The use of this extrusion will allow the cabinet exterior corners to be attached from the inside, thereby eliminating the use of screws on the cabinet face.

Bidder Complies YES _____ NO _____

Cabinet Shelves

All cabinets over 14" high shall have fully adjustable shelves. The shelves shall be made of glossy PVC to help eliminate issues caused by blood-borne pathogens. All shelves shall be fastened to the adjustable track to eliminate rattle. A polished aluminum lip shall be provided on all shelf outer edges.

Bidder Complies YES _____ NO _____

Fit and Finish

Mitered joints throughout the interior conversion shall have a gapless, hairline fit. Sliding polycarbonate door assemblies shall be scratch free and all edges shall be smooth and free of saw marks and sharp edges. Cabinet to cabinet joints shall not require more than a 7/32"

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diameter welting to create a finished and well fit look. Cabinets shall fit tightly against the ceiling as well.

Bidder Complies YES _____ NO _____

Sub-Floor

A PVC material that is a closed-cell, matte-finish surface with a fine cell structure shall be installed. The thickness shall be 1/2" or 3/4" depending on cot litter securing system being used. This PVC material shall meet or exceed 650222these application requirements:

- Chemical and corrosion resistance
- Moisture resistance, low water absorption
- Low flammability (UL-940VO)
- Thermal and sound insulation – absorbs vibrations and oscillations

Bidder Complies YES _____ NO _____

Patient Compartment Testing

The vehicle shall meet or exceed AMD Standard 006, "Sound Level Test Code for Ambulance Compartment Interiors" and AMD Standard 007, "Carbon Monoxide Levels for Ambulance Compartment Interiors".

Bidder Complies YES _____ NO _____

Warranty

The interior cabinet warranty shall be a Lifetime Limited, unlimited miles.

Bidder Complies YES _____ NO _____

One (1)

MODULE BODY HEADLINER

The ambulance module headliner shall be high gloss, two-piece, smooth thermoplastic sheets. One sheet on each side of the center strip in the ceiling. This material shall be fire retardant with significantly higher impact resistance and be resistant to corrosive chemicals and cleaning solutions. It shall meet Fungus resistance testing in accordance with ASTM G-21 and bacteria resistance testing in accordance with ASTM G-22, Procedure B.

Bidder Complies YES _____ NO _____

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One (1)

CABINET OPTION

There shall be quarter inch clear polycarbonate sliding cabinet doors on all interior cabinets. The sliding door handle shall be made from an aluminum extrusion and shall run the full height of the polycarbonate door. The door handle corners shall be cut at forty-five degrees.

Bidder Complies YES _____ NO _____

One (1)

STRYKER FLOOR PLATE

There shall be a Stryker center mounted universal track system installed. This includes floor structure with tapping blocks, pre-wire with 10-gauge power and ground with a 15 Amp circuit breaker that will be powered by shoreline or battery on power. The power and ground are run to inside the track. Will Include Power & Performance Load Floor Plate Kit #6390-700-001 - (Needs to Include Track Cover) and Push Rail Floor Mount Only [Stryker](#) Part# 6360-30-11. Also Includes Hardware Kit F09053.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

There shall be a left rear overhead cabinet with a speed load style, polycarbonate door installed. The bottom of the cabinet is to be sweep-out style. The cabinet door frame shall be secured at the top by a full-length piano hinge. The entire frame shall hinge upward and be held in place by gas piston hold-open devices. The cabinet frame shall be held in the down position by two spring-loaded dead bolt style slide catches. The vertical ends of the speed load framed cabinet will have EPDM rubber foam to protect the handles from damage. All speed load cabinets that are taller than 23" and wider than 32" shall have a 1/8" x 1-1/2" anodized aluminum support.

Bidder Complies YES _____ NO _____

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One (1)

CABINET OPTION

There shall have an additional angled end cabinet installed at the front end of the left rear overhead cabinet. It shall have a side hinged, framed, polycarbonate door. The actual dimensions shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

There shall be a cabinet above the side CPR seat with a top hinged, frameless, 3/8" thick polycarbonate door installed.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

There shall be an overhead cabinet installed above the action area with speed load style polycarbonate doors. The bottom of the cabinet is to be sweep-out style. The cabinet door frame shall be secured at the top by a full-length piano hinge. The entire frame shall hinge upward and be held in place by gas piston hold-open devices. The cabinet frame shall be held in the down position by two spring-loaded dead bolt style slide catches. The vertical ends of the speed load framed cabinet will have EPDM rubber foam to protect the handles from damage. All speed load cabinets that are taller than 23" and wider than 32" shall have a 1/8" x 1-1/2" anodized aluminum support. The actual dimensions shall be decided at the pre-build conference.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

The overhead cabinet above the action area shall have an additional angled end cabinet installed to the rear side of it. It shall have a side hinged, framed polycarbonate door.

Bidder Complies YES _____ NO _____

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One (1)

CABINET OPTION

A storage cabinet shall be installed on the left side of the interior module, below the overhead cabinet. This cabinet shall be to the rear of the telemetry area with framed, sliding polycarbonate doors installed. The sliding door handle shall be made from an aluminum extrusion and shall run the full height of the polycarbonate door. The door handle corners shall be cut at forty-five degrees. The vertical ends of the framed cabinet will have EPDM rubber foam to protect the handles from damage. The cabinet shall include (2) adjustable shelves.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

The attendant's action area shall have a slanted panel to accommodate the switches and the radio. The actual dimensions shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

There shall be a cabinet, with polycarbonate sliding doors, installed below the primary action area. Included in this option is a notch in the exterior compartment to allow for this cabinet. The actual dimensions shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

CPR SEAT OPTION

A seat approximately 21" wide with rear hinged lid, allowing for storage under the seat, shall be recessed into the street side cabinet wall directly rearward of the main action area. A structurally reinforced steel frame encompassed 7" torso form fitted backrest providing user stability, support, proper ergonomics, and safety in the event of an impact in a side facing seat. The design will assist in positioning an individual to better absorb an impact, whether it be a frontal, side, or rear. The Contoured Lumbar Backrest has been tested to meet SAE Safety Standards. There will be left and right thigh protection cushions. All cushions shall be covered with heavy-duty vinyl. There shall be no piping on the cushions to accumulate contaminated material. All seams shall be sealed to repel contaminants. An IMMI 4-Point seat belt

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appropriately secured to the side wall shall be provided. Upper cabinets shall have left and right head protector cushions to match the seat cushion.

Bidder Complies YES _____ NO _____

One (1)

ATTENDANT'S SEAT OPTION

There shall be a high back, Valor Vac, captain's chair-type, attendant seat with integrated child safety seat at the front of the patient compartment. This seat shall be covered with color coordinated heavy-duty vinyl covering with minimal seams for ease of cleaning. The seat shall include a 4-Point seat belt. The seat shall have a fore and aft adjustment on heavy duty sliding tracks and shall be mounted on a pedestal/swivel base. This seat shall meet all FMVSS requirements.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

A storage cabinet shall be installed on the left front wall behind the rear facing attendant seat. Access shall be gained from behind the attendant seat. This cabinet shall be for storage of the module electrical components.

Bidder Complies YES _____ NO _____

One (1)

RIGHT FRONT CABINET OPTION

A storage cabinet shall be installed on the right front wall consisting of equally sized upper and lower sections. The upper section shall be designed so that equipment can be accessed from either the patient compartment, through two, side hinged, 3/8", unframed, heavy polycarbonate doors or through an exterior compartment door.

Bidder Complies YES _____ NO _____

One (1)

RIGHT FRONT CABINET OPTION

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A storage cabinet shall be installed on the right front wall consisting of equally sized upper and lower sections. The lower section shall be designed so that equipment can be accessed from either the patient compartment, through two, side hinged, 3/8", unframed, heavy polycarbonate doors or through an exterior compartment door.

Bidder Complies YES_____ NO_____

One (1)

RIGHT FRONT CABINET OPTION

There shall be a cabinet mounted above upper right front stack cabinet. The cabinet shall have a top hinged, laminated, wood door installed. The actual dimensions shall be determined at the pre-construction conference.

Bidder Complies YES_____ NO_____

One (1)

RIGHT FRONT CABINET OPTION

There shall be a cabinet mounted above upper right front stack cabinet. The cabinet shall have a top hinged, laminated, wood door installed. The actual dimensions shall be determined at the pre-construction conference.

Bidder Complies YES_____ NO_____

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One (1)

SQUAD BENCH OPTION

The ambulance shall be equipped with a squad bench approximately 73" long by 22" wide. The squad bench lid shall have a 2" foam cushion. Three, structurally reinforced, steel frame encompassed, 7" form fitted backrests, providing proper ergonomics and safety in the event of an impact shall be supplied. They shall be located in the right-side wall, facing to the side along the length of the squad bench. The design will assist in positioning an individual to better absorb an impact, whether it be a frontal, side or rear. This contoured lumbar backrest system shall be tested to meet SAE Safety Standards.

All cushions to be covered with heavy-duty vinyl and shall be installed with industrial grade, plastic hook and loop Velcro for easy removal and cleaning. There shall be no piping on the cushions to accumulate contaminated material. All seams shall be sealed to repel contaminants. A total of three IMMI 4-Point seat belts appropriately secured to the side wall shall be provided. The squad bench lid shall be two piece, with a divider, and have two heavy-duty, gas piston hold-open devices. The lids shall be attached to the bench with a continuous hinge. The lids shall have a self-latching, stainless steel, paddle style-latching device.

Three sets of encased restraints shall be installed on the squad bench to be used to secure a patient on a backboard to the bench. Retractors shall be installed against the outer wall.

Bidder Complies YES_____ NO_____

One (1)

SQUAD BENCH OPTION

The head end of the squad bench shall have a full height, net style restraint installed. The net shall be mounted using a minimum of four points.

Bidder Complies YES_____ NO_____

One (1)

SQUAD BENCH OPTION

There shall be a headrest covering the wall directly behind the squad bench, above the restraint system for the seating positions. This headrest shall be a minimum of 2" thick, have PVC bases and shall be constructed of high-density foam and heavy-duty automotive grade vinyl. There shall be no piping and all seams shall be sealed to help prevent contamination.

Bidder Complies YES_____ NO_____

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One (1)

SQUAD BENCH CABINET

There shall be a two-section cabinet located over the squad bench. Each section shall have a top hinged, 3/8", heavy polycarbonate door. There shall be a pad under the cabinet for head protection. The actual layout shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

GLOVE BOX OPTION

The side door head pad shall include a recessed area for a three glove boxes. The glove box holder shall be made from ABS plastic and include a clear, top hinged, Polycarbonate door.

Bidder Complies YES _____ NO _____

One (1)

GLOVE BOX OPTION

There shall be a cabinet to hold glove box(es). There shall be a top hinged Polycarbonate door over the cabinet area. The Polycarbonate door shall include a cut out for each box in the cabinet. The exact location and number of boxes shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

GRAB RAIL

There shall be a formed, 2" diameter, aluminum, overhead assist rail. It shall be located over the main patient care area. This grab rail shall be 100" in length. The exact location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

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One (1)

GRAB RAIL

There shall be a formed, 2" diameter, aluminum, overhead assist rail. It shall be located over the squad bench. This grab rail shall be 100" in length. The exact location shall be determined at the pre-construction conference.

Bidder Complies YES_____ NO_____

One (1)

ASSIST RAIL

There shall be "L" shaped, 2" diameter, aluminum entrance door assist rails installed on the side and both rear entry doors. The "L" shall start horizontally under the door window and turn at a 90-degree angle down alongside the hinge side of the window to provide safe entry from the street level and safe exit from the patient floor.

Bidder Complies YES_____ NO_____

One (1)

ASSIST RAIL

There shall be a formed, 2" diameter, brushed stainless steel assist rail. It shall be located at the right rear wall.

Bidder Complies YES_____ NO_____

One (1)

IV OPTION

There shall be two CPI Model IV2008 recessed rubber, non-swinging type IV hangers, that fold flat when not in use, mounted in the ceiling over the lower portion of the patient area. They shall be bolted to the roof framing structure. The exact location and quantity shall be determined at the pre-construction conference.

Bidder Complies YES_____ NO_____

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One (1)

CABINET OPTION

There shall be stainless Southco M1 cabinet latches installed on all interior cabinet doors.

Bidder Complies YES _____ NO _____

Two (2)

CABINET DRAWER

There shall be an interior cabinet drawer installed. The drawer shall be made from .125 aluminum and have a wood face. The actual dimensions and location shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

CABINET OPTION

There shall be a laptop computer drawer installed below the action area. The drawer shall be made from .125 aluminum and include a wood face. It shall include a Poly, flip up cover for protection. The actual dimensions shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

CLOCK OPTION

There shall be a BRG brand, LED Digital clock mounted in the rear head cushion. It shall include the following features:

- 2" High numbers, including hours, minutes, and seconds
- 12/24-hour programmable display
- 12-Volt operation

Bidder Complies YES _____ NO _____

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One (1)

SHARPS / WASTE OPTION

There shall be bottom hinged door that trash and sharps containers shall be attached to. The actual location and types of containers shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

SUCTION OPTION

There shall be a slide out drawer for the suction container. The drawer front is to be clear polycarbonate, with corners cut out for hose accessibility. This drawer is to be located below the primary action area.

Bidder Complies YES _____ NO _____

One (1)

INTERIOR LAMINATE OPTION

The interior laminate color shall be Folkstone Celesta Matte 692-58.

Bidder Complies YES _____ NO _____

One (1)

CUSHION OPTION

The seating cushions shall be seam sealed, use high density foam for the cushion material and shall have a PVC base. The cushion shall be installed with heavy duty hook & loop for easy removal for cleaning. The vinyl color shall be Oxen Maroon OX-4568.

Bidder Complies YES _____ NO _____

One (1)

CABINET WELTING

There shall be color matched, automotive grade welting placed between cabinet sections and along the top of the cabinets where they meet the body headliner. The color is to be Maroon.

Bidder Complies YES _____ NO _____

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One (1)

COUNTER TOP OPTION

The counter top is to be of a solid surface material, Corian brand preferred.

Solid polymer components

- Solid surface is defined as nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum tri-hydrate filler and pigment.
- Cast, nonporous, filled polymer, not coated, laminated or of composite construction with through body colors meeting ANSI Z124.3 or ANSI Z124.6, having minimum physical and performance properties specified.
- Thickness of Material to be ½", 3 pieces to create the 1-1/2" thick top with 1" Lip, giving the option of an accent stripe.
- Superficial damage to a depth of 0.010 inch (.25 mm) shall be repairable by sanding and/or polishing.
- Form joints between components using manufacturer's standard joint adhesive without conspicuous joints.
- Does not support microbial growth.

Bidder Complies YES _____ NO _____

One (1)

COUNTER TOP OPTION

The counter top is to include an accent stripe, made up of the solid surface material. The accent stripe color shall be Dove.

Bidder Complies YES _____ NO _____

One (1)

FLOORING OPTION

The flooring shall be Lonseal brand. The style and color of the flooring shall be Loncoin II Flecks #150 Onyx.

Bidder Complies YES _____ NO _____

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One (1)

CABINET OPTION

An angled style cabinet for the second rear control panel shall be installed. Actual location and layout shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

LOCKING DOOR TOP RFS

The top RFS door above the ALS cabinet shall have a locking latch.

Bidder Complies YES _____ NO _____

*****PATIENT COMPARTMENT ENVIRONMENTAL SYSTEMS*****

One (1)

EXHAUST FAN

A power exhaust vent fan shall be installed in the rear upper corner of the street side cabinet wall. The fan shall be controlled from the rear control switch panel. The exterior vent shall be filtered and located on the streetside exterior wall of the modular body, in the rear upper corner, below the drip rail. The combination of the front fresh air intake vent and the rear powered exhaust vent shall provide efficient cross through patient compartment ventilation.

Bidder Complies YES _____ NO _____

One (1)

ENVIRONMENTAL OPTION

A Pro Air brand, Model 940, HVAC system (or equivalent) shall be used. The unit shall have as a minimum 32,000 BTU cooling, and 35,000 BTU heating with a 650 CFM fan.

There shall be a digital thermostat to select interior temperature. The heat or air conditioner mode shall be selected automatically by the temperature setting of the thermostat.

An electrically controlled valve shall automatically turn on the flow of hot water to the rear heater whenever the thermostat is adjusted to call for heat, and off whenever the thermostat is adjusted to call for air conditioning. All clamps shall be of a type approved by the HVAC manufacturer. All hoses are to meet the Ford QVM regulations. The HVAC exhaust shall be

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ducted down the center ceiling strip. There shall be a **minimum** of six round adjustable ducts, arranged in pairs, evenly spaced along the ceiling center strip. The internal ducting shall be engineered to allow for an evenly distributed flow of air to all of the vents.

Bidder Complies YES _____ NO _____

One (1)

ENVIRONMENTAL OPTION

A 12-volt, centrifugal, liquid pump shall be installed in the module heater supply hose. The pump shall boost the flow capacity of the engine coolant.

Bidder Complies YES _____ NO _____

One (1)

ENVIRONMENTAL OPTION

The vehicle shall have a Pro-Air Model 106 auxiliary AC condenser installed under the module body.

Bidder Complies YES _____ NO _____

One (1)

INSULATION PACKAGE

There shall be two-inch thick, non-deteriorating, high density, "Yellow Certifoam" plank used as insulation. The thermal resistance of the insulation shall hold a five-year aged value of 11.2 R at 25 degrees F mean temperature. The importance of using the aged value, as it relates to the initial "R" values, is that over a five-year period, the initial R value will deteriorate and overestimate the long-term insulating ability.

This Insulation shall be placed between all framing to include the module body walls, floor, ceiling, and patient doors. There shall also be a 4-mil vapor barrier placed in the module walls, ceiling, and patient doors. This vapor barrier shall serve a moisture barrier for the changing outside environment.

Bidder Complies YES _____ NO _____

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An acoustic dampening material shall be installed on all (4) sides of the side entry step well and both wheel wells. This material shall include the follow characteristics:

- * Vinyl wear surface with 1/2 lb./sf PVC barrier
- * 1/4-inch Nitrile/PVC decoupler
- * Flammability MVSS-302
- * Service Temperature -40 F to 220 F
- * Chemical Resistance Excellent for most acids, mild alkalis, oils, and grease

Bidder Complies YES _____ NO _____

A thermal heat & sound insulation product featuring 100% synthetic fiber felt that provides sound and comfort control as well as a high-tech foil heat barrier that blocks 70% of radiant heat up to 1500° F. shall be installed on the underside of the aluminum .050 flooring. The material shall include the following characteristics:

- * Lightweight, durable shield
- * Reduces sound
- * Absorbs vibration
- * Protects from radiant heat
- * Provide an extra layer of insulating padding.
- * Flame retardant
- * Minimum of 3/8 of an inch thick

Bidder Complies YES _____ NO _____

A non-permeable sound dampening material that is moisture resistant for additional insulation shall be installed in addition to the four mil. vapor barrier. This insulating material shall be installed in all walls. The closed cell neoprene shall include the following characteristics.

- * Soft, expanded, closed cell foam rubber
- * Flame resistant - FMVSS 301 self - extinguishing
- * Service temperature of -40 to 250 degrees F

Bidder Complies YES _____ NO _____

One (1)

UNDERCOATING

The ambulance module shall be undercoated with automotive grade under-coating. All chassis manufacturer recommendations shall be followed.

Bidder Complies YES _____ NO _____

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One (1)

REFRIGERATOR OPTION

The Dometic Model CD-030 refrigerator drawer with locking system shall be provided and installed. The location and installation requirements shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

OXYGEN SYSTEM

The oxygen system shall be capable of storing and supplying a minimum of 3000 liters of oxygen. A suitable high-pressure hose shall be provided. The hose shall be certified to meet 250 psi and have a 1000-pound burst rating.

Bidder Complies YES _____ NO _____

The entire oxygen system shall be subjected to a 200-psi leak test for a minimum two hours. A certification label shall be located in the oxygen compartment.

Bidder Complies YES _____ NO _____

One (1)

OXYGEN SYSTEM OPTION

There shall be one Ohio style oxygen outlet located on the back wall of the primary action area.

Bidder Complies YES _____ NO _____

One (1)

OXYGEN SYSTEM OPTION

There shall be one Ohio style oxygen outlet located in the ceiling of the module, in the area above the patient's head.

Bidder Complies YES _____ NO _____

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One (1)

OXYGEN SYSTEM OPTION

There shall be one Ohio style oxygen outlet located on the right interior wall at head of squad bench midway between the squad bench and the ceiling.

Bidder Complies YES _____ NO _____

One (1)

OXYGEN SYSTEM OPTION

Access to the oxygen cylinder gauge shall be provided through a hinged, 7" x 16", Lexan door with a passive latch mechanism. The door shall be located on the inside of the patient compartment opposite the exterior oxygen compartment.

Bidder Complies YES _____ NO _____

One (1)

OXYGEN SYSTEM OPTION 1

An "M" size, oxygen cylinder storage cradle shall be mounted in the streetside front compartment. The oxygen cradle shall have three web style restraining straps with ratchet attachments and a front retaining yoke. The bracket shall be securely bolted to a five-inch aluminum channel which shall be welded to the compartment wall allowing for added strength and safety.

The oxygen cylinder storage cradle installation must meet or exceed AMD Standard 003, Oxygen Tank Retention System.

Bidder Complies YES _____ NO _____

One (1)

OXYGEN SYSTEM OPTION 2

Oxygen bottle lift assist system shall be installed in D1 compartment

Cost _____

Bidder Complies YES _____ NO _____

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SUCTION SYSTEM

One (1)

SUCTION OPTION

A permanent on-board suction system shall be installed. The system shall include a quick disconnect outlet mounted on the back wall of the primary action area and a 12-volt GAST suction pump to be mounted in the power distribution cabinet. The system shall be controlled from the primary action area switch panel.

Bidder Complies YES _____ NO _____

One (1)

SUCTION OPTION

An Ohio style suction outlet shall be mounted on the back wall of the recessed suction area.

Bidder Complies YES _____ NO _____

One (1)

SUCTION OPTION

A permanent on-board suction system shall be installed. The system shall include a quick disconnect outlet mounted on the back wall of the primary action area and an electric suction pump. The system shall be controlled from the action area switch panel. The suction regulator and adjustment valve shall be a wall mounted SSCOR 22000 brand. The collection bottle shall be a wall mounted disposable Bemis (or equivalent) collection bottle. Both units shall be mounted on the back wall of the primary action area.

Bidder Complies YES _____ NO _____

One (1)

SUCTION OPTION

The suction canister and bracket shall be mounted in a recessed compartment below the action area.

Bidder Complies YES _____ NO _____

PAINT

Type I Ambulance Specifications

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One (1)

PAINT PROCESS

The ambulance manufacturer shall use an Epoxy Primer and Polyurethane Topcoat paint system. All paint contains a film forming component, a solvent thinner, and a pigment.

One (1)

PAINT OPTION 1

The chassis standard color shall be OEM white.

Bidder Complies YES _____ NO _____

One (1)

PAINT OPTION 1

The module body shall be painted to match the chassis OEM STD white color.

Bidder Complies YES _____ NO _____

PAINT OPTION 2

The chassis and module standard color shall be Two-Tone (Pierce Red #90 /White #10 or equivalent)

Cost: _____

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One (1)

CUSTOM STAR OF LIFE AND BODY WRAP

There shall be a customer Black and Red Star of Life Scotchlite wrap with striping on the side of the body and chassis. Pictures available upon request. Or simply add \$4000 allowance for this option on your bid.

Bidder Complies YES _____ NO _____

One (1)

PAINT OPTION

The Nader pins for the compartment and entry doors on the modular body shall not be painted. They shall be installed after the paint process is completed.

Bidder Complies YES _____ NO _____

Three (3)

STRIPING

There shall be two color, Scotchlite reflective chevron striping applied to the inner panel of each of the modular body doors. Each stripe in the chevron shall be 4" wide. The actual number of doors, design and colors shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

EMBLEMS AND DECALS

One (1)

DECALS

Manufacturer shall install the Custom Department identifier consisting of the following.

40 characters Each side 6" minimum gold ¼ turned vinyl

15 characters front of module

40 characters rear of module

4-digit unit numbers front, bac and both sides of module

All gold ¼ turned vinyl

16" Black Reflective Vinyl

FAFD plus 4-digit unit number on roof of module

Bidder Complies YES _____ NO _____

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One (1)

DECALS

No smoking and Fasten seat belt decals shall be installed. The exact location where the decals are to be installed shall be determined at the pre-construction conference.

Bidder Complies YES _____ NO _____

One (1)

DISINFECTION SYSTEM

Installed on the ceiling shall be a ceiling mounted disinfection light system

Bidder Complies YES _____ NO _____

PATIENT COT OPTION (INCLUDE IN THE COST OF THE AMBULANCE)

A Stryker Power Load Cot Fastener System, model 6390, shall be included and installed.

Bidder Complies YES _____ NO _____

PATIENT COT OPTION (LIST THIS PRICE SEPERATELY AS AN OPTION)

There shall be a Stryker Power-PRO XT 6506 (HI CONFIG) included and shipped with the completed ambulance

Bidder Complies YES _____ NO _____

Price: \$ _____

One (1)

DELIVERY

Finished Ambulance to be delivered directly to Fort Atkinson Fire Dept.

Please note estimated delivery date of completed unit _____

Bidder Complies YES _____ NO _____