# **Bids – New Type III Ambulance**

The Town of Falmouth, Maine is accepting sealed bids for a new type III ambulance. Attached are the specifications for the requested ambulance and a draft contract used by the Town of Falmouth.

To submit a bid, please provide a sealed envelope with 2 copies of the proposal (sealed bids) to Chief Howard Rice Jr. no later than April 10<sup>th</sup> at 5:00 p.m. Faxed, e-mailed or bids received after that date and time will be rejected. Bids should include the cost of the proposed ambulance with each or any of the two (2) proposed options. Companies may submit multiple bids.

Submit bids to: Chief Howard Rice, Jr.

Falmouth Fire-EMS 8 Bucknam Road Falmouth, ME 04105

The Town of Falmouth reserves the right to accept or reject any and all bids at any time for any reason.

If you have any questions, please contact Chief Howard Rice at (207) 781-2610 or <a href="mailto:hrice@falmouthme.org">hrice@falmouthme.org</a>.

# TECHNICAL BID SPECIFICATIONS FOR A NEW TYPE III AMBULANCE



FALMOUTH FIRE - EMS

8 BUCKNAM ROAD

FALMOUTH, ME 04105

The following specifications describe an Ambulance suitable for use by Falmouth Fire-EMS. These specifications are intended to provide a common standard to which all parties may bid. For this reason, all Bidders must respond to each individual item by indicating: "YES" = 100% COMPLIANCE or "NO" – DO NOT COMPLY / EXCEPTION / CLARIFICATION. For each item, please circle "YES" or "NO".

Any exceptions, variations, deviations and clarifications to these specifications must be set forth on an attached sheet entitled "EXCEPTIONS TO THE SPECIFICATIONS" and made part of the Bidders proposal. They should include page number and description as they are referred to in the bid specifications.

# **SERVICE REQUIREMENTS:**

It is the intent of this agency to assure that parts and service are readily available for the emergency vehicle herein specified in accordance with these bid specifications. To insure proper service, the bidder shall include a list of authorized service centers within the New England region. Technicians MUST be factory trained and EVT certified in the operation and repair of all the equipment supplied with full authorization from the manufacturer.

Bidder Understands and Will Supply Exactly as Written? YES

# **GENERAL INFORMATION:**

The specification details the needs of this department relevant to the chassis requirements, exterior modular body design, and interior cabinet design and vehicle options as specified.

The purpose of these specifications is to provide a set of minimum general requirements and test parameters for the manufacture of an emergency medical care ambulance. The Bidder is responsible for understanding that this specification establishes the essential criteria for design, performance, equipment and appearance of the ambulance.

Bidder Understands and Will Supply Exactly as Written? YES NO

It is the intent of these specifications that the manufacturer of this vehicle has the ability to manufacture a completed vehicle with the exception of the chassis, within their own manufacturing facility. The basic modular body must be built in the manufacturer's facility and shall not be the product of a subcontractor or any company other than the manufacturer. Accessories such as light bars, sirens and other add on components are not considered as basic components of the modular body. The ambulance manufacturer must have significant experience in the construction of modular ambulance bodies.

Bidder Understands and Will Supply Exactly as Written? YES NO

The ambulance and the allied equipment required by this specification shall be the manufacturer's current commercial ambulance model of the type and class specified. The ambulance shall be complete with the required options and accessories as specified herein. Items will be furnished with such modifications as may be necessary and specified to enable the ambulance to function reliably and efficiently in a strenuous, sustained operation. The design of the vehicle and the specified options shall permit accessibility for servicing, replacement and adjustment of components and accessories with minimum disturbance to other components and systems. The term "heavy-duty" as used, shall describe equipment or items that are in excess of the usual quality or capacity that is normally supplied with standard production vehicles or components.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

This is an engineer, design, construct and delivery type specification and it is not the intention of this agency to write out vendors or manufacturers of similar or equal equipment of the types specified. It should be noted, however, that this specification is written around specific needs of this agency. With the intent to standardize certain components, in numerous places specific brand names of components are listed and are required to be included within the bidder's proposal. This has been done to establish a certain standard of quality.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

Bidder must furnish, at minimum, all information as requested as part of the bidder's proposal package. The Bidder shall supply one (1) complete set of custom engineer approved detailed drawings on the vehicle as proposed, a work order on the vehicle as proposed, a complete list of any / all deviations from the bid specifications, and descriptive literature specifications covering the products offered. All drawings shall include measurements of the compartments and cabinets.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

For ease of comparison, all bid proposals must be submitted in the same order as these specifications.

Bidder Understands and Will Supply Exactly as Written?

YES

These bid specifications shall serve as the part of the contract between the bidder and this agency. Final inspection of the vehicle will be accomplished using these specifications along with any listed accepted deviations to determine compliance.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

All bid prices shall be complete and include warranty and delivery of the completed vehicle to this agency. Payment will be made upon delivery and acceptance of the vehicle and equipment specified herein.

All bid prices and conditions must be specified on the Bid Proposal Form. Bid prices shall be valid for, at minimum, 30 days from the date of the bid opening, or as otherwise specified in the bid proposal. Payment in full will be made as the unit is received, inspected and found to comply with these specifications. The vehicle shall be free of damage upon delivery and acceptance.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

The bidder's proposal packet shall include a copy of the ambulance manufacturer's current insurance certificate.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

The bidder's proposal packet shall include copies of all proposed warranties listed in these following detailed specifications. The minimum acceptable required warranties are: Modular Structural Warranty, Interior Cabinet Warranty, Electrical Warranty, Conversion Warranty and Paint Warranty. The bidder shall include a copy of these warranties within the proposal package.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

The manufacturer shall provide a "Lifetime" limited warranty on the all-aluminum modular body structure. 'Lifetime' shall not be restricted to any number of years but shall mean for the time period that the original purchaser shall own and operate the vehicle. Terms and condition of the warranty shall be per the manufacturer's published warranty documentation.

Bidder Understands and Will Supply Exactly as Written?

YES

The manufacturer shall provide a "Lifetime" limited warranty on the interior cabinet structure and workmanship. 'Lifetime' shall not be restricted to any number of years but shall mean for the time period that the original purchaser shall own and operate the vehicle. Terms and condition of the warranty shall be per the manufacturer's published warranty documentation.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

The manufacturer shall provide an extensive electrical warranty. The base electrical warranty shall be free from defects in material and workmanship for a period of 10-years or 100,000-miles whichever occurs first and "Lifetime" for the electrical harnesses and installation. 'Lifetime' shall not be restricted to any number of years but shall mean for the time period that the original purchaser shall own and operate the vehicle. Any touch screen shall be limited to a 4-years or 100,000-mile normal operation warranty. Terms and condition of the warranty shall be per the manufacturer's published warranty documentation.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

The manufacturer shall provide a product conversion warranty. The product conversion warranty shall be for a period of 5-years or 60,000 miles whichever occurs first. Terms and condition of the product conversion warranty shall be per the manufacturer's published warranty documentation.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

The manufacturer shall provide a paint warranty. The paint application on the ambulance module shall be warranted by the manufacturer to the original owner for a minimum period of 6 years. The warranty shall be pro-rated as follows: (100% for years 1 to 3: 50% for year 4: 25% for year 5: 10% for year 6). If under the paint warranty, a failure occurs within the paint system, included under the warranty shall be the removal and installation of any striping or lettering per these bid specifications.

It shall be noted that this agency -- being located in the Northeast / New England area and susceptible to snow / icy conditions from September through May -- has no control over the type of material applied to the road surface (being composed of magnesium, calcium chloride, sand, salt or other substances) to prevent freeze-up and free the road's surface from ice and / or snow.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **WARRANTY SURETY:**

To simplify warranty coverage and to assure a consistent level of quality throughout the manufactured vehicle, the manufacturer shall design and manufacture the major components for the ambulance (excluding chassis). Major components are defined as, the module body, exterior compartment doors, exterior compartments and the interior cabinets. The highest degree of quality, both in materials and in the building processes is required for the emergency medical vehicle being proposed.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **DELIVERY:**

The bid proposal shall include the maximum number of calendar days to construct and deliver the completed ambulance from time of bid award.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# CHASSIS AND EQUIPMENT CHASSIS MANUFACTURER:

New model year Ford E450 Cutaway Cab / Chassis 7.3 V8 Gasoline Engine 350 HP and 468 ft-lb Torque Engine Block Heater Ford Cutaway Insulation Package Ford Electronic 6-Speed Transmission. 4.56 Limited Slip Rear Axle 50 States Emissions Preferred Equipment Package #782

Dual Heat / Dual A/C

Message Center

Exterior Upgrade Package Interior Upgrade Package

Ford Ambulance Prep Package #47A Gross Vehicle Weight Rating: 14,500 lbs.

Wheelbase: 158"

Cab To Axle Dimension: 100" Front Axle Will Be: 5,000 lbs. Rear Axle Will Be: 9,600 lbs.

55-Gallon Fuel Tank

OEM Heavy Duty Rubber Flooring in Cab Interior

Bidder Understands and Will Supply Exactly as Written?

YES

#### TYPE III BODY:

The body exterior shall be approximately 167.75" long x 96" wide x 90" high. The patient compartment aisle shall be a minimum of 48 inches wide. The exterior body compartments shall be a minimum of 19 inches deep. Overall vehicle length, including bumpers, shall be approximately 22' 6". Overall vehicle height, ground to top of module, shall be approximately 109".

Bidder Understands and Will Supply Exactly as Written? YES NO

# **SWAY BAR OPTIONS:**

The standard OEM rear axle sway bar shall be removed and replaced with a sway bar made of 4140 "chromoly" steel with bushings made of polyurethane. A ROADMASTER brand rear axle anti-sway bar is preferred.

Bidder Understands and Will Supply Exactly as Written? YES NO

# WHEEL OPTIONS:

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

Bidder Understands and Will Supply Exactly as Written? YES NO

#### MIRROR OPTIONS:

OEM dual arm type mirrors shall be located on each door of the cab and shall include C - Better Convex mirrors. The mirrors shall also be controlled by a remote switch.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **CAB OPTIONS:**

Manufacturer's O.E.M. radio shall be installed with speakers in the chassis cab.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **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 Understands and Will Supply Exactly as Written? YES NO

# **CAB OPTIONS:**

There shall be a Stream light Waypoint LED hand-held spotlight located in the vehicle cab. A 12V outlet shall also be provided to plug the light into.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **CAB CONSOLE:**

A custom driver's control 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 radius corners shall be an aluminum extrusion. The console shall include a switch and siren area, radio control area. And (2) Large Cup Holders. This Console Will Be Vortex Lined. A mount for an IPAD (RAM or HAVIS) shall be installed on the passenger side of the console (exact location to be approved by the fire department).

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **CAB CONSOLE OPTIONS:**

The front touch control panel shall have a 15 degree wedge installed between the console and the panel to assist in viewing the screen and to aid blocking the sun from the screen.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **CAB OPTIONS:**

A Bosch digital engine hour meter shall be provided and mounted on the driver's side of the custom console.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **MAP LIGHT OPTIONS:**

A Whelen 6" Round Red/Clear Map light shall be supplied and mounted in the headliner of the cab. The location is over the passenger seat.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **TIRE CHAIN OPTIONS:**

The ambulance vehicle shall have On-Spot Tire Chain system installed. Shall include a guarded style switch mounted on the console, and a polyurethane covered cage and shelf for the pump / compressor. The location for the compressor / cage is in the D-2 compartment.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **BATTERY OPTION:**

The ambulance shall be equipped with a matching third battery. The battery shall be located in an exterior compartment on a H. D. slide out tray. The location shall be In the P-2 compartment.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **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 Understands and Will Supply Exactly as Written?

YES

NO

# **AUDIBLE ALARM:**

Two audible alarms shall be provided in the cab. (1) Alarm to sound when the unit is placed in drive gear and the voltage drops below 11.5 volts for 120 seconds. (1) Alarm to sound when unit is placed in "PARK" and reminding operator to set the E-Brake to engage the fast idle.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **VISUAL ALARM:**

A visual alarm shall be provided in the cab ceiling between the sun visors. (1) 2" Whelen Red LED Light #TOROOFRR to flash indicating an open entrance / compartment / cab door. And (1) 2" Whelen Amber LED Light #TOAOOFAR to flash indicating that the E-Brake is on. These will contain a plaque for each light.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### FIRE EXTINGUISHER OPTION:

Two five-pound ABC fire extinguishers shall be supplied and mounted. One shall be mounted behind the cab passenger seat, and (1) mounted in the D-2 compartment.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **MAP TOWER:**

There shall be a Map Tower mounted on the rear wall in the cab. This is mounted on the forward side of the lower pass-thru cabinet. This includes (4) polycarbonate shelves mounted on an angle in the forward section of the cabinet.

Bidder Understands and Will Supply Exactly as Written?

YES

# **MODULAR BODY**

# **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 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 Understands and Will Supply Exactly as Written?

YES

NO

# FLOOR CONSTRUCTION:

The floor shall be engineered using interlocking 0.125" 6063-T6 alloy custom aluminum extrusions set at a right angle from the frame rails thereby minimizing the twist felt in parallel mounting systems. The 0.125" floor extrusion shall consist of a "C" channel with hollow "V" joint receptacle on one end and an extruded solid "V" edge which mates with the hollow "V" receptacle on the adjoining extrusion. When the solid "V" edge of one piece is inserted into the hollow "V" receptacle of another, the toothed leg shall lock to form one side of the 2" tubular frame. These integrated extrusions shall form the sub floor with interlocking 2" x 2" tubes every ten inches. The floor extrusion sections shall be welded to each other both on top and on the bottom. A triple hollow 2" x 3" x 0.188" tube shall be placed fore and aft of the wheel well openings extending the full width of the body for maximum strength, crash protection and support of this critical area in the center of the body. Triple hollow is to be defined as a 2" x 3" x 0.188" aluminum tube with two integral 0.188" webs that serve to divide the tube interior into three equal cavities. A 2" x 3" x 0.125" tube shall be placed at the forward end of the floor assembly to provide additional strength at the cab to body interface. A 2" x 2" x 0.25" tube shall be placed at the rearward most end of the floor assembly to provide additional strength at the rear of the body and to provide a robust foundation for the threshold of the rear doors.

Two custom 6063-T6 alloy aluminum angles shall run lengthwise the entire length of the floor assembly. This custom angle shall be "L" shaped. The bottom of the "L" shall be 4.75" L x 0.75" in thickness. The vertical part of the "L" shall be 2.375" L x 0.375" in thickness. At each juncture where this aluminum angle crosses a 2" x 2" framing member of the interlocking extrusion, it shall be welded to that framing member along both edges of the aluminum angle. These high strength aluminum angles shall provide a continuous mounting surface to attach the body to the chassis at the chassis mounting locations. In addition, these aluminum angles shall provide additional strength to the floor system making it a solid, crashworthy foundation upon which the rest of the module shall be built.

As the floor assembly is constructed, provisions shall be made for the installation of the exterior compartment enclosures, the step well and any other options that will extend below the floor structure. At the edges of these intrusions, an additional 2" x 2" x 0.125 aluminum framing member shall be installed at the front and rear edges of the intrusion to provide additional support for the option. These

additional 2"  $\times$  2"  $\times$  0.125" framing members shall extend beyond the custom aluminum angle. This will allow the additional tubes to be welded to the raw floor edge of the intrusion, the interlocking floor extrusions and also to the aluminum angle.

At the locations in the floor assembly where the cot mounting hardware is to be installed, there shall be additional reinforcement of the floor structure to allow for a safe and secure installation. This shall consist of a 0.375" solid aluminum block welded in the cot hardware mounting locations. At the attendant seat location there shall be additional 2" x 2" x 0.125 aluminum tubing welded into the floor structure as well as an additional section of 0.125" aluminum sheet welded to bottom of the floor for additional strength and to provide for secure attachment of the attendant seat to the floor structure.

The voids between the 2" x 2" x 0.125 framing members of the extruded floor assembly shall be filled with 2" extruded polystyrene insulator foam plank insulation. The insulation shall be custom cut by hand to fill the void spaces. In addition, the foam plank insulation shall be glued in place using high strength, low odor adhesive. To help dissipate noise and temperature, the bottom side of the sub floor shall be covered by a sheet of 0.050" aluminum with the seams sealed with seam sealer and then undercoated with automotive grade undercoating material. Finally, a heatshield shall be installed on the bottom of the floor as needed to shield from the heat generated by the chassis exhaust system. Upon completion, the floor system shall be a smooth, 2" thick, integrally insulated, heat shielded, double sided aluminum floor.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# SIDE WALL CONSTRUCTION:

The side walls shall be constructed on a specially designed table with an overhead laser light guide system to allow for the precise placement of the aluminum tubing used to form the side wall. Body wall vertical framing shall consist of 2" x 2" x 0.125" and 2" x 3" x 0.125" aluminum extruded tubing of 6063-T6 alloy. A 6063-T6 alloy 2" x 3" x 0.188" aluminum triple hollow tube shall be installed fore and aft of the rear wheel well housings. Triple hollow is to be defined as a 2" x 3" x 0.188" aluminum tube with two integral 0.188" webs that serve to divide the tube interior into three equal cavities. This shall tie into the same triple hollow tube used in the floor construction providing superior, integrated side impact protection. The rear of the side wall shall also incorporate a 2" x 3" x 0.125" tube. A horizontal 2" x 3" x 0.125" extruded tube shall be installed along the lower edge of the side wall to act as additional structure to attach the rub rails to the lower body. Each side wall shall have at a minimum five horizontal tube supports that will provide additional protection in the event of a side body impact.

At seating locations along each sidewall there shall be additional framing to ensure safe and secure attachment point for the restraint system at the seating location. A 2" x 2" x 0.250" framing member shall be installed to serve as an attachment point for the restraints. Additional 2" x 2" x 0.125" tubing shall be installed to allow for installation of the contoured seatback assemblies as needed for the restraint system. This extra framing also provides for added side impact protection directly behind the seating position.

Vertical aluminum radius-type corner extrusions, of a hollow core design, utilizing 6063 T6 alloy, which interlock with the body side sheets and vertical framing shall be utilized. These corner post extrusions must include an integral X-frame web, running full length of the extrusion for added impact resistance. 2" x 2" x 0.125" and 2" x 3" x 0.125" (where applicable) extruded tubes shall be welded to the outside of the X-frame on either side of the corner post extrusion to complete a 7.5" radius corner post design.

All exterior aluminum body panels shall be attached to the underlying structural supports via 3M VHB high performance, double sided tape. The tape shall provide an adhesion strength of 350 N/100 MM. The tape shall consist of acrylic foam with a thickness of 0.062 inches, which is viscoelastic in nature. Viscoelastic means the foam absorbs energy and relaxes stress, as compared with other types of foam core tape. The tape shall also provide for an environmental resistance creating a strong durable bond. The tape shall be used as an insulating agent to hold the panels tightly against the structural supports, thus eliminating vibration and oil-canning. In addition to the tape attachment system, all panels shall be welded to structural members at the perimeter. Hydro-Thermo absorption pads shall be used during the welding process to quickly dissipate the heat of the welding procedure. The use of the pads as described will eliminate heat distortion without damaging the structural integrity of the module body. Methods of panel attachment that utilize rivets will not be acceptable. The voids between the 2" x 2" x 0.125 framing members shall be filled with 2" extruded polystyrene insulator foam, non-settling plank insulation. The insulation shall be hand cut to fill the space and shall be glued in place using high strength, low odor adhesive. Spray foam type of insulation is not permitted due to the uneven application characteristics of this material. In addition, the inside of the wall shall be covered by a 4mil vapor barrier.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### FRONT AND REAR WALL CONSTRUCTION:

The front wall shall be constructed of 6063-T6 aluminum alloy 2" x 2" x 0.125 tubing. There shall be a minimum of five horizontal framing members to provide additional strength in the walls. There shall be a framed opening to allow for access to the chassis cab. A single sheet, 5052-H32 flat sheet shall cover the front wall. It shall be cut using a microprocessor controlled milling machine which will cut the circumference of the sheet as well as any openings for lights and other optional equipment to be installed. This front panel shall be attached to the underlying structural supports via 3M VHB high performance, double sided tape as well as fully welded to the structural members around the perimeter of the wall. The voids between the 2" x 2" frame members shall be filled with 2" extruded polystyrene insulator foam plank insulation. The insulation shall be hand cut to fill the space and shall be glued in place using OSI-F38 high strength, low odor adhesive.

The rear wall shall be constructed of 6063-T6 aluminum alloy 2" x 2" x 0.125 tubing. There shall be a minimum of five horizontal framing members to provide additional strength on the walls. There shall be additional framing as required to support any optional equipment being installed on the wall. There shall be a framed opening to allow for the rear entry doors. Due to the severe duty cycle of the rear doors, there shall be additional bracing installed to ensure a strong mounting area for the rear doors as well as ensuring reliable operation. The hinge side for both rear doors shall include (2) 6063-T6 aluminum alloy 2" x 2" x 0.125 framing members, welded to each other. The bottom threshold shall be

a 2" x 2" x 0.250 framing member, milled to interlock with the longitudinal floor angles. The top header of the doors shall be a 6063-T6 aluminum alloy 2" x 2" x 0.25" framing member. The top tube of the wall, where it meets the roof structure, shall be a 6063-T6 aluminum alloy 1.5" x 2" x 0.188 framing member. A minimum of (10) aluminum box style gussets shall be installed above the rear doors, along the width of the rear wall. Each gusset shall be fabricated from 6063-T6 alloy, 1" x 2" x 0.125" aluminum box members with 45 degree, angled ends. (2) shall be installed, one to each side of the double door frame vertical framing members, at the upper door edge on both sides of the door opening. Next, (2) shall be installed at the top edge of the rear wall on both sides of the double door frame vertical framing members where they meet the roof. Finally, (1) additional gusset shall be installed at the roof level at each outside corner of the rear wall where the rear corner framing member meets the roof. All (10) gussets shall be used except in the rare case where there is interference with a required option on the rear wall in this area. A single sheet, 5052-H32 flat sheet shall cover the rear wall. It shall be cut using a microprocessor controlled milling machine which will cut the circumference of the sheet as well as any openings for lights and other optional equipment to be installed. This panel shall be attached to the underlying structural supports via 3M VHB high performance, double sided tape as well as fully welded to the structural members around the perimeter of the wall. Hydro-Thermo absorption pads shall be used during the welding process to quickly dissipate the heat of the welding procedure. The use of the pads as described will eliminate heat distortion without damaging the structural integrity of the module body. The voids between the 2" x 2" frame members shall be filled with 2" extruded polystyrene insulator foam plank insulation. The insulation shall be cut to fill the space and shall be glued in place using high strength, low odor adhesive.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **ROOF CONSTRUCTION:**

The roof shall be one piece .090 sheet, 5052-H32 alloy, which is supported by a grid consisting of a minimum 6" x 2" x 0.150" channel with .230" flanges running longitudinally and 4" x 2" x 0.125 "hat channels extending transversely from the longitudinal channel to the roof frame extrusions. These hat channels shall be spaced no more than 18" apart. The minimum 6" x 2" x 0.150" center spine channel shall also function as a wiring raceway. Aluminum plates shall be welded between each "hat channel" to provide support for all ceiling mounted hardware. The roof frame extrusions and corner extrusions shall be the reinforced "X" type, hollow core design. All roof rail extrusions shall be 6063-T6 alloy. Radius corners consisting of a rolled sheet will not be acceptable.

The horizontal roof extrusions shall incorporate an extruded drip rail on all four sides of the body. The roof sheet shall interlock with the roof frame extrusions. The voids between the 2" x 2" x 0.125 framing members shall be filled with 2" extruded polystyrene insulator foam plank insulation. A single sheet of 0.090 5052-H32 aluminum alloy shall be attached to the roof grid using 3M VHB high performance, double sided tape. The edges of the sheet shall be fully perimeter welded to the top roof corner extrusions to ensure a strong and waterproof seal.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **MOUNTING:**

The cutaway module shall be mounted using (6) ladder frame cross members and OEM rubber spacers with steel sleeves. A minimum # 8 grade bolt and locking nut provided with chassis shall be used. There shall be a minimum of 12 mounting points. These mounting points shall utilize existing OEM frame rail holes whenever possible. An extruded EPDM closed cell cab sponge seal shall then be attached to the rear of the cab opening to seal the opening between the module and cab. This flexible seal shall be installed as one continuous piece. The chassis cutaway shall be securely bolted to module by a minimum of 39, 1/4" diameter bolts with KEPS nuts. This Mounting system shall meet all OEM and FMVSS requirements and shall be the only mounting system allowed. Other mounting systems shall not be allowed due to their noise and vibration transmission into the modular body.

Bidder Understands and Will Supply Exactly as Written? YES NO

#### FINISHED HEADROOM:

The interior of the patient compartment will provide a minimum of 72 inches of finished headroom from floor to ceiling.

Bidder Understands and Will Supply Exactly as Written? YES NO

#### **RECESSED BULKHEAD WALL:**

The cab to module bulkhead wall shall be recessed an additional minimum 3" to allow for full seat travel and a slight recline of the seat back.

Bidder Understands and Will Supply Exactly as Written? YES NO

#### **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 Understands and Will Supply Exactly as Written? YES NO

# **VENTS:**

There shall be a minimum of three C.P.I. style intake and exhaust vents mounted high on the ambulance body as follows: (1) to vent the oxygen compartment and (1) as a passive intake for the climate-control system.

Bidder Understands and Will Supply Exactly as Written? YES NO

#### 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.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

NO

# MODULE SIDE ENTRY DOOR THRESHOLD:

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# SIDE ENTRY DOOR WINDOW:

Side entry door shall be equipped with a manufactured, minimum 16" x 20", sliding, and safety plate window in an aluminum frame with bronze tint.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **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 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 Understands and Will Supply Exactly as Written? YES

# **REAR ENTRY DOOR WINDOW:**

Both rear entry doors shall be equipped with a manufactured, 16" x 20", non-opening, and safety plate window in an aluminum frame. Windows will have coating or stickers to prevent viewing from the outside.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **ENTRY DOOR HANDLES:**

The side and rear entry doors shall be equipped with 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 Understands and Will Supply Exactly as Written? YES NO

# **ENTRY DOOR HANDLES:**

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

Bidder Understands and Will Supply Exactly as Written? YES NO

#### 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.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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. "Locktite" shall be applied on both ends.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

NO

# **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 assembly 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 Exception.** 

Bidder Understands and Will Supply Exactly as Written?

YES

#### SIDE DOOR STEPWELL:

The side entry door stepwell floor shall have a removable grip strut plate and include a drain plug located beneath it.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

NO

# **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.

Bidder Understands and Will Supply Exactly as Written?

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 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.

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 door-frame. 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. Each door shall have an exterior latch.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **DOOR SEALS:**

The door seals must be 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.

Bidder Understands and Will Supply Exactly as Written?

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 and dust from entering the compartment.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **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 Understands and Will Supply Exactly as Written?

YES

NO

# **COMPARTMENT DOORS:**

All compartment door interior panels shall be smooth aluminum plate. They shall be recessed into the door extrusion and attached using stainless flathead machine screws and locking cage nuts. The machine screws shall be dipped in ECK anti-corrosion coating prior to installation.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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.

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/airtight 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 Understands and Will Supply Exactly as Written?

YES

NO

# **EXTERIOR COMPARTMENT LIGHTING:**

Provide and install (4) 11" LED strip lighting in an exterior compartment.

- (2) One each side of door opening P-1 compartment
- (2) One each shelf side of door opening P-4 compartment

- Wide angle 120 degree surface mount LED installed on a printed circuit board for shock and vibration resistance
- Lighting will be enclosed within a high impact polycarbonate enclosure
- Output will exceed NFPA 1901:2009 Compartment Lighting standard
- Draw not to exceed 130 mA per foot / forward voltage of 20mA per LED
- > Boards will be connected in series using a high grade Molex connector
- > System will provide the option to utilize an extruded aluminum retainer for installation
- > System will include an integrated auto resettable current limiting device designed to protect the light assembly from amperage spikes

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **EXTERIOR COMPARTMENT LIGHTING:**

Provide and install (7) 21" LED strip lighting in an exterior compartments.

- (2) One each side of door opening D-2 compartment
- (1) Ceiling P-1 compartment.
- (1) Ceiling P-5 compartment
- (1) Ceiling D-1 compartment.
- (1) Ceiling D-2 compartment
- (1) Ceiling D-3 compartment
- ➤ Wide angle 120 degree surface mount LED installed on a printed circuit board for shock and vibration resistance
- Lighting will be enclosed within a high impact polycarbonate enclosure
- Output will exceed NFPA 1901:2009 Compartment Lighting standard
- Draw not to exceed 130 mA per foot / forward voltage of 20mA per LED
- > Boards will be connected in series using a high grade Molex connector

- System will provide the option to utilize an extruded aluminum retainer for installation
- System will include an integrated auto resettable current limiting device designed to protect the light assembly from amperage spikes

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **EXTERIOR COMPARTMENT LIGHTING:**

Provide and install (1) 42" LED strip lighting in an exterior compartment.

- (1) Each side of door opening D-3 compartment
- Wide angle 120 degree surface mount LED installed on a printed circuit board for shock and vibration resistance
- Lighting will be enclosed within a high impact polycarbonate enclosure

- Output will exceed NFPA 1901:2009 Compartment Lighting standard
- Draw not to exceed 130 mA per foot / forward voltage of 20mA per LED
- Boards will be connected in series using a high grade Molex connector

- System will provide the option to utilize an extruded aluminum retainer for installation
- > System will include an integrated auto resettable current limiting device designed to protect the light assembly from amperage spikes

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **EXTERIOR COMPARTMENT LIGHTING:**

Provide and install (4) 64" LED strip lighting in an exterior compartment.

- (2) Each side of door opening P-5 compartment.
- (2) Each side of door opening D-1 compartment
- Wide angle 120 degree surface mount LED installed on a printed circuit board for shock and vibration resistance
- ➤ Lighting will be enclosed within a high impact polycarbonate enclosure
- Output will exceed NFPA 1901:2009 Compartment Lighting standard
- Draw not to exceed 130 mA per foot / forward voltage of 20mA per LED
- Boards will be connected in series using a high grade Molex connector
- System will provide the option to utilize an extruded aluminum retainer for installation
- > System will include an integrated auto resettable current limiting device designed to protect the light assembly from amperage spikes

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **EXTERIOR COMPARTMENT VENTS:**

All exterior compartments shall be vented. 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 Understands and Will Supply Exactly as Written?

YES

#### **CURBSIDE COMPARTMENTS:**

The inside/outside access, curbside front compartment shall have three aluminum adjustable shelfs with Dri - Deck matting. The center shelf will be permanently mounted with an adjustable smooth aluminum shelf top and bottom of the center shelf. This compartment will hold Medical Kits and First in bags. The size of this compartment is a minimum of 56" high X 22.0" wide X 25" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **CURBSIDE COMPARTMENTS:**

The inside/outside access, and all exterior compartments interior walls shall be sprayed with polyurethane/polyurea coating.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 heavy-duty slide-out tray capable of holding three Group 31 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 to the bottom of the door. There shall be a 1" Nylon Strap with metal buckle and quick disconnect to hold the door at 90 degrees and will stop the door from swinging down and making contact causing the paint to chip. The actual size shall be a minimum of 12 5/8" high X 24.0" wide X 19.25" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **CURBSIDE COMPARTMENT:**

There shall be a small compartment mounted on the curbside for miscellaneous storage. The minimum size is 19.0" high X 14.50" wide X16.0" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **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 with two adjustable backboard dividers lined with rubber, and two vortexed cushions mounted on the backboard area wall. The divider and shelves shall be polyurethane/polyurea coated. This compartment will also have inside/outside access with a total of two adjustable, and one fixed shelf with dri-deck matting mounted over the Stryker Model 6252 stair chair area. This compartment will hold (2) full height backboards, (1) FW Scoop Stretcher, and (1) pediatric immobilization device. Actual compartment size shall be a minimum of 80.50" high X 21.50" wide X 20.7/8" deep.

Bidder Understands and Will Supply Exactly as Written? YES

# STREETSIDE COMPARTMENT EXTERIOR DOORS:

All the street side exterior compartment doors will be reinforced to mount equipment / items on the doors.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **STREETSIDE COMPARTMENTS:**

There shall be a full height street side front storage compartment, with one smooth aluminum shelf. Mounted on the forward compartment door is a flathead axe and a pair of bolt cutters. Mounting brackets on the forward floor for a Halligan Bar. The Rear wall of this compartment shall have a large Vortexed Plate attached with unistrut for installing a Zico SCBA Bracket / Bottle. Actual compartment size shall be a minimum of 80.50" high X 19.50" wide X 19.25" deep.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **STREETSIDE COMPARTMENTS:**

There shall be a double door, street side front intermediate storage compartment. With one smooth aluminum adjustable shelf. Actual compartment size shall be a minimum of 33.0" high X 49.50" wide X 19.25" deep.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **STREETSIDE COMPARTMENTS:**

There shall be a 3/4 high, double door, street side rear compartment. With two smooth aluminum adjustable shelves. Installed on one of the exterior doors shall be a four foot New York Hook. On the back wall on the right side shall be the main oxygen storage area with a "M" Oxygen tank with bracket, and (3) Ratchet style straps to hold the oxygen bottle to the bracket, with an oxygen wrench on the wall of the compartment. Mounted on the floor near the main oxygen bottle shall be a 5# ABC fire

extinguisher. Located on the front left side wall shall be a Vortexed Plate for mounting equipment on, mounted on unistrut, also mounted on this vortexed plate is a Zico bracket to hold a SCBA bottle. Below this area will be a Stream light Vulcan Box Hand Light / Charger, and an open area for (2) adjustable shelves.

Actual compartment size shall be a minimum of 62.50" high X 27.50" wide X 19.25" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **COMPARTMENT SHELVING:**

There shall be (7) smooth aluminum adjustable shelves installed in a compartment. Each shelf shall have two inch lips and Dri Dek matting. The location and quantity of the shelving shall be follows;

- (3) In the P-5 compartment right side of divider above the Stryker stair chair.
- (1) In the D-1 compartment
- (1) In the D-2 compartment
- (2) In the D-3 compartment

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **VERTICAL DIVIDERS:**

There shall be a fixed, 0.125 inch aluminum, vertical divider installed in a compartment. It shall be covered with polyurethane/polyurea coating. The location and quantity of the dividers are (1) in the D-3 compartment forward of the main oxygen bottle.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **VERTICAL DIVIDERS:**

Install a 0.125 inch, aluminum, adjustable divider in the ceiling of the backboard compartment to prevent the backboards from coming out of the compartment when the door is open. Divider to be full width of the backboard area only. It is to hang down from the compartment ceiling approximately 16" to cover the last 2"-3" of the backboard. The bottom 1" shall be angled towards the exterior with a 30 degree angle. The divider shall be sprayed with polyurethane/polyurea coating.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **VERTICAL DIVIDERS:**

There shall be (2) adjustable, 0.125 inch, aluminum divider approximately three feet long placed on the back wall of the compartment. These dividers shall serve as slots for long backboards and shall be sprayed with a polyurethane/polyurea coating. They shall be mounted on aluminum extruded tracking. This shall allow them to adjust side to side depending on the style of backboard. There shall also be (2) Vortexed covered back wall cushions which are as wide as the backboard area these will eliminate the backboards from hitting the back wall.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **COMPARTMENT OPTION:**

An exterior compartment shall have inside/outside access to the inside of the modular body. The location shall be one in the P-5 compartment to gain access to the (3) adjustable shelves.

Bidder Understands and Will Supply Exactly as Written? YES NO

#### **COMPARTMENT OPTION:**

There shall be black Dri-Dek on the compartment floor of all the six exterior compartments.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **COMPARTMENT OPTION:**

There shall be a set of 1.5" equipment straps installed in the P-5 compartment to hold the backboards in place.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **COMPARTMENT OPTION:**

There shall be a 1.5", seat belt style, equipment strap with metal buckle installed in the P-5 compartment to hold the Stryker stair chair in place.

Bidder Understands and Will Supply Exactly as Written? YES NO

# **COMPARTMENT OPTION:**

Two (2) "S.C.B.A." brackets shall be supplied and installed in exterior compartments. There shall be (1) in the D-1 compartment, and (1) in the D-3 compartment to hold SCBA Breathing bottles.

Bidder Understands and Will Supply Exactly as Written? YES NO

#### **COMPARTMENT OPTION:**

An exterior compartment shall have a notch installed in it to allow for intrusion from cabinetry on the inside of the module. In the D-2 compartment.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **COMPARTMENT OPTION:**

There shall be two (2) 0.188" aluminum plates for mounting equipment installed in a compartment. The compartment wall where the mounting plate is to be installed shall have shelf track installed horizontally to attach the mounting plate to the wall of the compartment. A minimum of two tracks shall be used, one at the top and one at the bottom of the mounting plate. The track shall allow for space between the mounting plate and the wall of the compartment so the mounting hardware does not effect the integrity of the compartment wall. The mounting plate and shelf tracking shall be sprayed with polyurethane/polyurea coating. There shall be one in the D-1 compartment and one in the D-3 compartment mounted on the back wall.

The actual size will be as wide and as high as possible on each wall.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **REINFORCE (3) EXTERIOR DOORS / DOOR PANELS**

Reinforce all exterior Doors / Door Panels on the driver's side the D-1, D-2, D-3. So customer can install equipment on the exterior compartment doors.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **MODULE REAR BUMPER:**

There shall be a heavy duty bumper extending to each side of the step. The under carriage shall be constructed of aluminum **structural** channel. An aluminum **structural** channel shall run the width of the bumper assembly to tie both ends together. A vertical **structural** channel shall be welded to the bumper structure and shall be bolted to the chassis frame rails with a minimum of 5/8" grade 8 bolts, (4) on each side. The bumper framing shall be reinforced with aluminum **structural** channel coming out from the chassis frame rails at a 45-degree angle to the outside corners of the bumper. This support shall be attached to the lower rear body tube using 3/8" grade 8 bolts, (1) on each side. The entire assembly shall be spaced out from the rear kick plate a minimum of one inch.

There shall be a minimum 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 bottom of this step shall be covered with stainless steel to prevent interference with the ambulance cot when is being

put into or being taken out of the ambulance. The rear step shall be hinged to allow it to be folded against the rear of the body. When the step is in the upright position, a stretcher can be removed from the back of the ambulance.

The outside corners of the covers shall be tapered 15 degrees to minimize bumper dragging. There shall be one heavy-duty rubber dock bumper installed on the rear face of each of the bumper pods, bolted through into the bumper structure.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **REAR BODY OPTION:**

There shall be an area recessed into the rear kick plate to house the hinged rear step when flipped up.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 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.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 anticorrosion 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 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. The rails shall be installed along the entire length on both sides of the lower modular body.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **RUNNING BOARDS:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **RUNNING BOARD LIGHTS:**

Running boards shall be illuminated by two Whelen model 20C0CDCD 4" round LED lights. The Whelen model 2GFLANGEC mounting kit is included as well as the optional Deutsch connector. These lights shall be installed, one on each side of the front of the module body, positioned to illuminate the running boards.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **MUD FLAPS:**

The chassis shall have heavy-duty rear rubber mud flaps with stainless steel hem weights installed in the rear wheel well area.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **MUD FLAPS:**

A heavy-duty rubber mud flap shall be added to both the front running boards.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **DRIP RAIL:**

A polished aluminum drip rail shall be installed over every door. The drip rail shall be installed with double stick tape to prevent corrosion. Drip rails installed with screws shall not be acceptable due to the probability of corrosion from dissimilar metals. The quantity is nine.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **STONE GUARDS:**

There shall be 0.100", bright finished, aluminum diamond tread stone shields, 24" 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 Understands and Will Supply Exactly as Written?

YES

NO

# **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.

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 electrical system must have a quick start of twenty seconds or less. 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 Understands and Will Supply Exactly as Written?

YES

#### FRONT CONTROL SCREEN:

The front control screen shall be a color LCD touch screen with instant-on technology and programmable switch functions. The system will have "hot" buttons. These "hot" buttons shall guarantee control of critical functions in the rare event of touch screen failure. In an effort to give the driver the ability to assist 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 on 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, and 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 Understands and Will Supply Exactly as Written?

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 "hot" buttons. These "hot" buttons shall guarantee control of critical functions in the rare event of touch screen failure. 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 Understands and Will Supply Exactly as Written?

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 must 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.

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. 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
- Robust communications
- Twisted pair cabling
- Cancels out electromagnetic interference
- Differential signaling
- Automatic Throttle Control output.
- Easy to read LED diagnostics.

Bidder Understands and Will Supply Exactly as Written?

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 Output

Status LED's. The power modules shall be easily exchanged, with minimal work for the service personnel, without the need for reprogramming.

Bidder Understands and Will Supply Exactly as Written?

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. All wiring used shall be copper with GXL thermoplastic insulation rated to 125 degrees Centigrade. All wiring between the cab and module shall be connected to a terminal block located in an exclusive wire terminal interior cabinet.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

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 Understands and Will Supply Exactly as Written?

YES

#### SECOND REAR TOUCH SCREEN:

A second rear touch screen shall be added. The location is in the street side action area.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# ADDITIONAL (THIRD) REAR TOUCH SCREEN:

A third rear touch screen shall be added. The location is under the head end of squad bench bandage cabinet mounted in an angled cabinet.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **BACKUP ALARM:**

A backup alarm shall installed and shall activate when the vehicle is placed in reverse gear.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 cover installed. The inlet shall be located on the street side of the ambulance body above the street side 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 Understands and Will Supply Exactly as Written?

YES

NO

# SHORELINE INDICATOR LIGHT:

A Whelen OS Series, non-flashing, red light shall be supplied and mounted above or near the shoreline inlet. It shall illuminate when the shoreline is plugged in and shall indicate that there is power past the breaker box that supplies power to the module 110 volt outlets in the shoreline system.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **INVERTER:**

A minimum 1500 watt inverter with 60 amp charger and large display shall be supplied and installed. The inverter shall be equipped with an automatic transfer relay which disconnects the inverter when the shore power is applied. A remote on/off switch shall be provided in the attendant control panel.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **POWER PORTS:**

The patient action area shall be furnished with a combination dual 2.4 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 Understands and Will Supply Exactly as Written?

YES

NO

# **POWER PORTS:**

The inside/outside cabinet shall be furnished with a combination dual 2.4 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 Understands and Will Supply Exactly as Written?

YES

NO

# **POWER PORTS:**

There shall be (5) 20 amp USB style 12V outlets shall be provided.

- (1) Action area next to CPR seat.
- (2) Above the lower pass-thru countertop on the aisle side of the right front stack cabinet.
- (1) In the Left Front Overhead cabinet on the rear wall for the I.V. Warmer.
- (1) In the exterior D-1 compartment 1/2 way up on the wall near the door frame.

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 Understands and Will Supply Exactly as Written?

YES

#### **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 Understands and Will Supply Exactly as Written?

YES

NO

## **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 Understands and Will Supply Exactly as Written?

YES

NO

#### **125 VOLT OUTLETS:**

There shall be (4) additional 125V Interior duplex outlets 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 is as follows;

- (1) Action Area Next To CPR seat.
- (1) Above the lower pass-thru cabinet countertop on wall.
- (1) In the left rear overhead cabinet centered on the rear wall.
- (1) In the Telemetry Area on the rear wall.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **POWER PORTS:**

Four (4) additional 2.1 amp dual USB charging ports shall be provided.

- (1) Front cab console.
- (1) Rear Action Area.
- (2) Two in the pass-through area (One on each wall).

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 Understands and Will Supply Exactly as Written?

YES

#### IV WARMER:

A 12 volt Smith works IV fluid warmer tray shall be installed and mounted in an interior cabinet. The location is in the base of the left forward interior cabinet.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **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 Understands and Will Supply Exactly as Written?

YES

NO

## **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 Understands and Will Supply Exactly as Written?

YES

NO

## **POWER DOOR LOCKS:**

Two power door lock switches shall be installed in the interior of the module. They shall use a pulsed signal and provide both lock and unlock for all designated doors. The location and quantity of the switches shall be one on the primary rear door, and one at the head of squad bench work station by the curbside door.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **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 Understands and Will Supply Exactly as Written?

YES

NO

# **POWER / GROUND CIRCUIT OPTION:**

There shall be a relay controlled power and ground circuit for future installation of (9) rechargeable flashlight, portable radios, hand light / chargers. This circuit shall be fused for 5 amps maximum. The quantity and location(s) are;

- (2) D-1 Compartment for (2) hand light / chargers.
- (1) In cab for portable radio / chargers.
- (2) Action area (1) for small MED BOX and (1) by the CPR seat for small KNOX BOX.

- (3) To the pass-thru area for a gas meter charger, Knox Box, and 2 TICs
- (1) To the rear of cab console for computer / docking station.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **CARBON MONOXIDE MONITOR:**

There shall be a 12 volt carbon monoxide detector mounted in the patient compartment.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### ITEMS SUPPLIED BY CUSTOMER TO BE MOUNTED IN PATIENT AREA:

- > Small Knox Box to be mounted in the pass-through area, exact location to be determined by Chief
- > Small Knox Med Vault to be mounted in the action area, exact location to be determined by Chief
- Mount a Cardiac Monitor in the telemetry area

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **INTERIOR LIGHTING:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **INTERIOR LIGHTING:**

A Whelen 3SCOCDCR 3" round, surface mount, Super LED light shall be installed in the side door stepwell. This light shall illuminate both steps when the side door is open.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **INTERIOR LIGHTING:**

The patient compartment shall be illuminated, by 11 Whelen # 80C0EHZR 18-Diode ceiling light with a frosted lens. The light shall be mounted to .125 ceiling plates.

The left and right banks of lights shall each have their own "high" and "low" switch positions. The exact number and location is (6) mounted street side and (5) Curbside.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **INTERIOR LIGHTING:**

The patient action area shall be illuminated by a 14" 12-volt LED strip light.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **INTERIOR LIGHTING:**

The telemetry area shall be illuminated by a 14" LED strip light.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **CENTER STRIP LIGHTING:**

Four (4) ROM Corp model R03853 LED ceiling overhead lights shall be installed in the ceiling of the patient compartment. They shall be evenly spaced down the center strip of the vehicle. These will be wired on high with timer switch.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **TAIL LIGHT OPTION:**

There shall be (2) Whelen 600 Model 60BTT Series "LED" stop/tail lights with chrome trim bezels installed above the rear kick plate.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **TAIL LIGHT OPTION:**

There shall be (2) Whelen Model 604T 600 Series "LED" populated amber turn signals with chrome trim bezels installed. They shall be programmed to flash sequentially in the direction of the arrow mounted on the rear above the stop / tail lights.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **TAIL LIGHT OPTION:**

There shall be (2) additional Whelen Model 60A00TAR 600 Series "LED" populated amber turn signals with chrome trim bezels installed. They shall be programmed to flash sequentially in the direction of the arrow mounted on front of the module body.

Bidder Understands and Will Supply Exactly as Written?

YES

#### LICENSE PLATE HOUSING:

The rear license plate housing shall be a recessed style Cast Products or comparable housing. It shall include clear LED license plate lights Mounted in the recessed are in the rear kick plate.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **TAIL LIGHT OPTION:**

There shall be (2) Whelen 60C00WCR 600 Series "LED" maximum intensity populated backup lights with chrome trim bezels installed on the rear above the directional lights..

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **SCENE LIGHTING:**

There shall be two reverse activated, Whelen Model 9SC0ENZR 900 series Super LED rear load lights with chrome trim bezels installed. These lights shall also be controlled by the front control panel. The location is mounted over the rear directional lights.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **SCENE LIGHTING:**

There shall be four Whelen Model 9SC0ENZR 900 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 Understands and Will Supply Exactly as Written?

YES

NO

#### **SCENE LIGHTING:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **WIRED TO BRAKE OVERRIDE:**

The brake light override feature shall function during all modes of lighting operation. The lights shall steady burn when the brake pedal switch is activated even when the emergency lighting is turned off. When the warning lights are in primary or secondary mode, then the rear lights specified above shall steady burn for the duration of foot pedal depression and resume flashing when foot brake is released.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **ICC MARKER LIGHTS:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **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 through the brake light circuit.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **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 Understands and Will Supply Exactly as Written?

YES

NO

#### **ANTENNA OPTIONS:**

One antenna coaxial cable, with a base, shall be installed. This cable shall have a 36" service loop. The mounting location is front modular roof to the angled switch cabinet over the head of squad bench.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **ANTENNA OPTIONS:**

An antenna base with coax cable, shall be installed on the mid modular roof of the patient compartment and terminate in the ambulance module. This cable shall have a 36" service loop. The mounting location is from mid-modular roof to the street side action area radio panel.

An antenna base with coax cable, shall be installed on the rear of module roof of patient compartment and terminate in the ambulance module. This cable shall have a 36" service loop. The mounting location is from rear of modular roof to the front cab console switch panel.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **RADIO OPTIONS:**

There shall be three 12-volt positive and negative leads, wired to 20 AMP Buss Bar power studs, provided for radio power. The positive lead shall be wired full time hot and rated for over 20amps. A separate

switched lead, wired to a power stud, shall be also provided, wired through the ignition "on" circuit. The Location Of these (3) are;

- (1) 20 Amp Buss Bar on the base of the front console for;
  - (1) Radio
  - (1) Portable radio / charger
  - (2) Hand lights / chargers mounted rear of cab console
- > (1) 20 Amp Buss Bar mounted in the head of squad bench switch panel / radio cabinet for radios
- (1) For the radios in the street side action area, mounted behind the switch panel.

All the Buss Bars will be covered with a rubber cover.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## SIREN OPTION:

There shall be a Whelen Model number 295HFSA7 dual amplifier siren system installed in the front console.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **SIREN SPEAKERS:**

There shall be C.P.I. Model number SAD 3801 and SAP 3801 siren speakers installed in the front bumper as per the manufacturer's instructions.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **WARNING LIGHT OPTION:**

There shall be four Whelen 900 Series Red Super LED side module warning lights with clear lens 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.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **WARNING LIGHT OPTION:**

There shall be two Whelen 900 Series Super LED upper rear module warning lights installed. One on the left side is Blue, and the one on the right side is Red, both with clear lens. They shall be mounted, in each rear upper corner under the drip rail, and shall include the chrome flange option.

Bidder Understands and Will Supply Exactly as Written?

YES

# **WARNING LIGHT OPTION:**

There shall be one Whelen 900 Series Super LED rear module warning light installed. It shall be mounted on the rear of the body, at the top center, but below the drip rail. The light shall include the chrome flange option.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **WARNING LIGHT OPTION:**

Customer selected emergency lights are to turn on when the vehicle is placed in reverse. This option shall include a cancel switch to defeat this function as needed. The lights to flash in reverse are all the rear warning lights on the rear of the module.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **GRILLE LIGHT OPTION:**

There shall be two Whelen Red LED ION wide angle, surface mounted Super "LED" warning lights installed on the upper grille area of the chassis. With chrome flange option.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **INTERSECTION LIGHT OPTION:**

There shall be two Whelen 700 Series Red Super "LED" warning lights installed, with chrome bezels, one on the forward area of each chassis front fender.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **REAR WHEEL WELL LIGHTS:**

There shall be two Whelen 700 Series Red Super "LED" rear wheel well lights installed, one over each rear wheel well. With chrome bezels.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **UPPER FRONT MODULE WARNING LIGHTS:**

There shall be (7) Whelen 900 Series Super "LED" front module warning lights installed, (6) #90RR5SRR Red Super "LED" and (1) #60C02SCR center Clear Super LED "KKK" light evenly spaced, across the upper front wall of the module body. The lens on each light shall be clear. All with chrome flange options.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **OPTICOM OPTION:**

There shall be a GTT Opticom mounted in the front wall of the ambulance body. It shall operate with a neutral park disable switch installed. This will be mounted in a recessed bezel under the center Whelen Model 600 Series LED Clear light.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **OPTICOM OPTION:**

A recessed mount bezel for the GTT Opticom emitter shall be provided for installation of the system. This will be mounted under the center clear LED light on the front of the module.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **WARNING LIGHT OPTION:**

There shall be (2) Whelen 900 Series, Red Super LED lights with chrome flanges installed on the rear of the body so that they will show through the windows on the rear doors when the doors are open.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **FLASHER OPTION:**

There shall be two Whelen model number AFM560 flasher installed. It shall include five outlets and be rated for 60 watts maximum output. All warning LED lights shall be controlled by the two flashers.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **WARNING LIGHT OPTION:**

All warning LED Lights shall have clear lens.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### WARNING LIGHT OPTION:

All LED warning lights will flash with a "Comet Flash Pattern".

Bidder Understands and Will Supply Exactly as Written?

YES

#### INTERIOR 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. 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.

Bidder Understands and Will Supply Exactly as Written?

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 Understands and Will Supply Exactly as Written?

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 chamfered 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 Understands and Will Supply Exactly as Written?

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 Understands and Will Supply Exactly as Written?

YES

#### **CABINET ATTACHMENT:**

All interior cabinets including the squad bench shall be bolted securely to modular body frame members and floor. The attachment bolts shall be a minimum 1/4" machine grade bolts. All fasteners and washers shall be stainless steel, or coated to protect from corrosion or another non-corrosive material. All cabinets must be removable for ease of future interior modification.

Bidder Understands and Will Supply Exactly as Written?

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

## **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 Understands and Will Supply Exactly as Written?

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 Understands and Will Supply Exactly as Written?

YES

NO

## **WARRANTY:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **MODULE BODY HEADLINER:**

The ambulance module headliner shall be high gloss, two piece, and 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 Understands and Will Supply Exactly as Written?

YES

NO

#### **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 Understands and Will Supply Exactly as Written?

YES

NO

#### COT FASTENER SYSTEM:

A Stryker Power Load Cot Fastener System, model 6390, shall be installed during production. It shall include the complete package with the 10 gauge power and ground wiring and a 15 amp circuit breaker included. The cot is not included.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **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. 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 size of the cabinet is minimum 18.75" high X 18.75" wide X 18.25" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **CABINET OPTION:**

There shall be a cabinet above the side CPR seat with a speed load style 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 vertical ends of the speed load framed cabinet will have EPDM rubber foam to protect the handles from damage. The size of the cabinet is minimum 12" high X 14.50" wide X 10.0" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **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 vertical ends of the speed load framed cabinet will have EPDM rubber foam to protect the handles from damage. The size of each section of the cabinets is minimum 18.75" high X 22.25" wide X 18.25" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **CABINET OPTION:**

There shall be a cabinet installed in the primary action area with sliding polycarbonate doors. The sliding door handle shall be made from an aluminum extrusion and shall run the full height of the door. The door handle corners shall be cut at forty-five degrees. The vertical ends of the framed cabinet will have rubber foam to protect the handles from damage. The size is minimum 10" high X 14" wide X 18.25" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### TRASH OPTION:

There shall be a tip out trash container and a sharps container mounted in a cabinet side by side. This cabinet shall be mounted under the action area and include a door with a latch to hold it in the closed position. The waste and sharps containers shall be held in the cabinet with stainless steel bands.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# TRASH OPTION:

There shall be a tip out waste and a sharps container located in the lower base of the squad bench work station at the head end of the squad bench. The waste and the sharps containers will be attached to the cabinet with metal bands. There shall also be a full width hole in the lower face of the squad bench stepwell area to be able to access the waste container through this opening.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **CPR SEAT OPTION:**

A seat approximately 29.75" 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. All seams shall be sealed to repel any contaminants. An IMMI 4-Point seat belt 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 Understands and Will Supply Exactly as Written?

YES

NO

## ATTENDANT'S SEAT OPTION:

There shall be a high back, Valor, sewn 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 Understands and Will Supply Exactly as Written?

YES

NO

#### **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 Understands and Will Supply Exactly as Written?

YES

NO

#### **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, laminated, wood doors or through an exterior compartment door. The laminated wood doors shall have a polycarbonate windows installed with stand-off fasteners to allow air to escape the compartment as the doors are closed.

Bidder Understands and Will Supply Exactly as Written?

YES

#### RIGHT FRONT CABINET OPTION:

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, laminated, wood doors or through an exterior compartment door. The laminated wood doors shall have polycarbonate windows, installed with standoff fasteners to allow air to escape as the doors are closed.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **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 size of the compartment is minimum 13.25" high X 17.75" wide X 22" deep.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **CABINET OPTION:**

There shall be a cabinet mounted in the lower walk thru area. This cabinet shall have (2) solid wood doors with poly insert and a latch for each door. Mounted on the right side will be (2) Zico Model QR-D2 portable oxygen tank brackets mounted side by side on the back wall. The left side will be open. The top of this cabinet shall have a Corian countertop that matches the rest of the Corian countertops.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **SQUAD BENCH OPTION:**

The ambulance shall be equipped with a squad bench approximately 56" long by 22" wide. The squad bench lid shall have a minimum 2" foam cushion. Two, structurally reinforced, steel frame encompassed, 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. 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 two IMMI 4-Point seat belts appropriately secured to the side wall shall be provided. The squad bench lid shall be one piece, with no divider, and have two heavy-duty, gas piston hold-open devices. The lid shall be attached to the bench with a continuous hinge. The lid shall have a self-latching, stainless steel, paddle style-latching device. Two sets of encased restraints shall be installed. Two Retractors shall be installed against the outer wall.

Bidder Understands and Will Supply Exactly as Written?

YES

## **SQUAD BENCH OPTION:**

There shall be a work station cabinet with counter top at the head end of the squad bench with two slide out drawers, and a Corian countertop.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **SQUAD BENCH OPTION:**

There shall be a headrest covering the back 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 Understands and Will Supply Exactly as Written?

YES

NO

# **SQUAD BENCH CABINET:**

There shall be a two-section cabinet, with speed load style doors, mounted above the squad bench. The bottom of the cabinet is to be sweep-out style. In each section, the cabinet door frames shall be secured at the top by a full-length piano hinge. The entire door frame shall hinge upward and be held in place by gas piston hold-open devices. There shall be (2) sliding Polycarbonate doors to allow for access without lifting the frames. The sliding doors shall run in sound deadening tracks to hold the door secure and provide resistance so the door does not slide due to vehicle movement. The sliding door handles shall be made from an aluminum extrusion and shall run the full height at the ends of the doors. The door handle corners shall be cut at forty-five degrees and finished so there are no burrs or sharp corners. The vertical ends of the door frame will have rubber foam inserts to protect the handles from damage. The size of each section of this cabinet shall be minimum 12" high X 13.25" wide X 10" deep. Each section of these cabinets shall contain one adjustable shelf.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **GLOVE BOX OPTION:**

The head pad shall include a recessed area for a triple glove box. The glove box holder shall be compliant to SAE J3058. The glove box holder shall be made from ABS plastic or lined hardwood plywood and include a clear polycarbonate door, top hinged with stainless steel hardware, and a stainless steel flush pull, push-to-close latch. This shall hold (3) different sizes of gloves.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **GRAB RAIL:**

There shall be two 30" formed, 2" diameter, aluminum, overhead assist rails. They shall be located over the main patient CPR seat area. One each side of the CPR seat area mounted in the ceiling. There will be no bar in front of the CPR Seat.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **GRAB RAIL:**

There shall be a 60" formed, 2" diameter, aluminum, overhead assist rail. It shall be located over the squad bench.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **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 up alongside the hinge side of the window to provide safe entry from the street level and safe exit from the patient floor.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **ASSIST RAIL:**

There shall be a 12" formed, 2" diameter, brushed stainless steel assist rail mounted at the head end of the squad bench on an angle.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **ASSIST Rail:**

There shall be a 12" formed, 2" diameter, brushed stainless steel assist rail. It shall be located at the left rear wall.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **ASSIST Rail:**

There shall be a 12" formed 2" diameter brushed stainless steel assist rail. It shall be located on the aisle side of the right front stack cabinet.

Bidder Understands and Will Supply Exactly as Written?

YES

#### 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. These will be mounted in the mid / rear cot position.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## IV OPTION:

There shall be a CPI Model 2008 recessed, rubber, non-swinging type IV hanger that folds flat when not in use, mounted in the ceiling over the lower portion of the patient area. It shall be bolted to the roof framing structure. These will be mounted in the forward cot position.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **CABINET OPTION:**

There shall be black cabinet latches installed on the interior cabinet doors.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **CABINET DRAWER:**

There shall be four interior cabinet drawers installed. The drawer shall be made from .125 aluminum and have a solid surface face. Each drawer will include (3) adjustable/removable Poly dividers. The size of <u>ALL</u> the drawers are minimum 4.5" high X 13.25" Deep X as wide as possible. The four drawers shall be; (2) in the head of squad bench work station that open towards the rear of the squad bench, and (2) drawers mounted in the telemetry area that open towards the aisle.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **CLOCK OPTION:**

There shall be a 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 Understands and Will Supply Exactly as Written?

YES

#### **CABINET DOOR LOCK OPTION:**

An interior cabinet shall include a cylinder style, locking cabinet door with key. This is the upper right stack cabinet at ceiling level.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **SHARPS / WASTE OPTION:**

There shall be cutouts for sharps and waste containers built into a recessed area in the squad bench. There shall be a hinged lid, with a cushion attached, to close off this area, and be removed via the interior patient compartment.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **CABINET OPTION:**

There shall be two additional interior adjustable shelves installed, one in each section of the action area.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **SCUFF Protector:**

There shall be a polished stainless steel scuff protector mounted on the right wall up to the height of the squad bench lid on the rear interior wall of the exterior P-5 compartment wall.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **INTERIOR LAMINATE OPTION:**

The interior laminate color shall be Gunmetal High Gloss D355-01.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **INTERIOR LAMINATE OPTION:**

A laminated 6" accent stripe is required. The stripe will be 6" and start at the top of the squad bench and be on all four interior walls. The laminate accent stripe color shall be Burgundy Glossy # 7966-58.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **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 Sierra Light Gray SIE-6758.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **VALOR VINYL OPTION:**

The sewn vinyl color for the Valor Attendant Seat shall be Dove Gray.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **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 Light Gray.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **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

The solid surface color shall be Dusk.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **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 Glacier White. The solid surface color shall be Dusk.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **FLOORING OPTION:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **CABINET OPTION:**

An angled cabinet for the second rear control panel shall be installed. It shall have extended height to allow for a radio head and mike.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## SHARPS WALL MOUNT OPTION

There shall be a Kendall wall mount sharps container installed on the rear wall of the squad bench, exact location will be determined by Chief of Department.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **FRESH AIR INTAKE:**

A filtered fresh air intake shall be mounted on the upper right front corner of the modular body. A 12-volt powered fresh air intake fan shall be included.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 street side 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. The default setting for this fac will be in the "on" position when the modular unit has power.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **ENVIRONMENTAL OPTION:**

The HVAC system unit shall have as a minimum 30,000 BTU cooling, and 36,000 BTU heating with a 580 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 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 Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

NO

## **INSULATION PACKAGE:**

There shall be minimum 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.

This Insulation shall be placed between all framing to include the module body walls, floor, ceiling and patient doors. There shall also be a minimum 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.

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 Understands and Will Supply Exactly as Written?

YES

NO

#### RUSTPROOFING:

The ambulance module shall be rustproofed with automotive grade rustproofing Waxoyl or equivalent. All chassis manufacturer recommendations shall be followed. This includes inside the chassis frame rails as well as outside the chassis frame rails, fenders, doors, cab, modular body. Running boards, rear bumper.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **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 Understands and Will Supply Exactly as Written?

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 Understands and Will Supply Exactly as Written?

YES

NO

#### **OXYGEN SYSTEM OPTION:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

#### **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 Understands and Will Supply Exactly as Written?

YES

NO

## **OXYGEN SYSTEM OPTION:**

Add a second Ohio Style Oxygen outlet in the action area for a total of two outlets.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **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 Understands and Will Supply Exactly as Written?

YES

NO

# **OXYGEN SYSTEM OPTION:**

An "M" size, oxygen cylinder storage cradle shall be mounted in an exterior 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. The location is in the D-3 Left Rear Compartment mounted on the right rear wall.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **OXYGEN SYSTEM OPTION:**

The main oxygen cylinder mount shall have accommodations made for future adjustment depending on the type of oxygen cylinder, "M" or "H", used at any given time.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **OXYGEN SYSTEM OPTION:**

An oxygen wrench shall be provided and installed in the oxygen compartment wall.

Bidder Understands and Will Supply Exactly as Written?

YES

#### **OXYGEN SYSTEM OPTION:**

Two ZICO Model QR-D-2 Quick Release Strapless Portable Oxygen Tank Brackets shall be installed on the back right hand side wall in the lower pass-thru cabinet to hold (2) portable oxygen bottles.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### 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 Understands and Will Supply Exactly as Written?

YES

NO

# **SUCTION Option:**

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

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **SUCTION OPTION:**

An Ohio style suction outlet shall be mounted on the back wall of the primary and secondary action area.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **SUCTION OPTION:**

An Ohio style suction outlet shall be provided on the squad bench side wall over the squad bench work station.

Bidder Understands and Will Supply Exactly as Written?

YES

#### 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 Understands and Will Supply Exactly as Written?

YES

NO

## **SECOND SSCOR SUCTION UNIT:**

- A second permanent on board suction unit shall be installed on the wall over the squad bench work station
- This will also include; (1) Quick disconnect Ohio Outlet
- Suction Unit regulator, and suction valve shall be a SSCOR 22000 Bracket
- > Disposable Bemis (or equivalent) collection bottle all mounted on the back wall
- > The collection bottle shall be wall mounted

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **PAINT PROCESS:**

The ambulance manufacturer shall use an Epoxy Primer and Polyurethane Topcoat paint system.

The paint must have:

- 1) High gloss retention and DOI
- 2) Strong UV properties to resist fading
- 3) Strong Chemical resistance
- 4) Strong Chip resistance
- 5) A 3.5lbs/gal VOC content or less (green component)
- 6) A proven durability in the commercial fleet industry

Bidder Understands and Will Supply Exactly as Written?

YES

## **PAINT MIL THICKNESS:**

The minimum mil thicknesses are as follows:

Autocoat BT LV262 Epoxy Primer 1.0 to 1.5 mils

Autocoat BT LV650 2K Primer Surfacer 1.0 to 3.0 mils

Autocoat BT LV650 Basecoat color 1.0 to 1.8 mils

Autocoat BT ACIII Clear coat 2.0 to 3.0 mils

Combined total: 5.0 to 9.3 mils

Bidder Understands and Will Supply Exactly as Written? YES NO

## **PAINT OPTION:**

The chassis shall be painted a non-standard color. The color is RED #FLNA32114

Bidder Understands and Will Supply Exactly as Written? YES NO

## PAINT OPTION:

The module body shall be painted a non-standard color. The color is RED #FLNA32114

Bidder Understands and Will Supply Exactly as Written? YES NO

# **PAINT OPTION:**

A custom paint design, consisting of two separate colors, shall be included. The paint colors are as follows:

- Cab roof WHITE
- Both pillar posts down to the bottom of the cab door windows are painted WHITE
- > From the WHITE paint down including hood, both front fenders, bottom of doors will be RED #FLNA32114
- Modular body roof from the rain gutters up and the complete roof shall be WHITE
- > The modular body from the rain gutters down will be RED #FLNA 32114

Bidder Understands and Will Supply Exactly as Written? YES NO

## **PAINTED WHEELS OPTION:**

All chassis wheels shall be painted Red #FLNA32114.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **STRIPING:**

There shall be two color, 3M Diamond grade Scotch lite 6" reflective chevron striping applied to the inner door panels of the three entrance doors and six forward facing compartment doors of the modular body. The Color of the stripes are Red Diamond Grade #983-72-NL, and Yellow Diamond Grade #983-23-ES.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

## **DECALS:**

Unit shall be supplied with the Federal Star of Life Decal Package. The package shall include: The Star of Life Roof Decal installed on the roof, (2) 4" Star of Life decals, (2) 12" Star of Life decals, (2) 18" Star of Life decals, (3) 6" "Ambulance" decals and (1) 4" reverse "Ambulance" decals. The decals shall be installed as per the Federal KKK1822 requirements.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

#### **DECALS:**

No smoking and Fasten seat belt decals shall be installed.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **REFLECTIVE STRIPING:**

There shall be 3/4" red reflective striping applied around all the exterior door extrusions. (KKK Compliance).

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# **STRIPING / LETTERING:**

All striping / lettering will match current fleet.

Bidder Understands and Will Supply Exactly as Written?

YES

## THE FOLLOWING ITEMS WILL BE SUPPLIED BY CUSTOMER AND INSTALLED BY DEALER:

- ➤ Installed per the Chief of Department instructions
  - o Portable Radio / Charger (1) In Cab
  - Small Knox Box
  - Small Knox Med Vault
  - o Multi Gas Meter
  - Cardiac Monitor Mount
  - o (2) Thermal Imaging Cameras
  - o (2) Box Flashlight / Chargers
  - Flathead Axe
  - Bolt Cutters
  - o 4' New York Hook

Bidder Understands and Will Supply Exactly as Written?

YES

NO

# TRADE IN:

Trade in is a 2013 Ford E450 Life Line Type 3 Class 1 Emergency Medical Vehicle in its present condition and will have approximately 106,000 miles.

This may be inspected during working hours by calling the Chief of Department and making an appointment to see it.

Bidder Understands and Will Supply Exactly as Written?

YES

NO

**END OF TECHNICAL SPECIFICATIONS** 

# **BID PROPOSAL FORM**

For ease of reviewing prices, the following must be filled out in their entirety and submitted within the bid package.

Total Delivered Price Per Bid Spe	ecificati	ons:	\$	
Less Trade in Allowance:			\$	
Less Ford FIN Concession:			\$	
Total Delivered Price Less Ford F	IN and	Trade-In Allowance	: \$	
Anticipated Delivery Date to Fal				
AUTHORIZATION				
Authorized Signature of Bidder				
Typed Name	_	Street Address		
Title	City	State	Zip	
Dated	 Phone	 e Number		

# **AGREEMENT**

## I. PARTIES

This contract (hereinafter referred to as "Agreement") is made and entered into on this XXXX day of XXXXX, 2024, by and between the Inhabitants of the Town of Falmouth with a mailing address of 271 Falmouth Road, Falmouth, Maine 04105 (hereinafter referred to as "Town"); and NAME OF CONTRACTOR, with a mailing address of ADDRESS, TOWN, STATE ZIP (hereinafter referred to as "Contractor"). In consideration of the mutual promises contained herein, Contractor agrees to perform the following services for the Town.

# II. SCOPE OF WORK

In consideration of the compensation set forth herein, the Contractor shall perform the services as outlined in a request for proposal dated March 1, 2024, and attached hereto as Exhibit A and the response attached hereto as Exhibit B.

## III. COMMENCEMENT AND COMPLETION

The Contractor will commence work on or before DATE and will complete work on or before DATE.

# IV. PAYMENT TERMS

The Contractor understands that the payment for completion of the services outlined in Section II shall not exceed \$XXXXXXX dollars and the Contractor agrees to perform the services on that basis.

## V. TERMINATION

Either party may terminate this Agreement for cause after giving the other party written notice and a reasonable opportunity to cure. The Town may terminate without cause by giving the Contractor fourteen (14) days' notice, and compensating the Contractor equitably to the termination date.

## VI. DISPUTE RESOLUTION

Any controversy or claim arising out of or related to this Agreement, which cannot be resolved between the parties shall be submitted to the Maine Superior Court (Cumberland County). This agreement shall be governed by Maine law.

# VII. QUALIFICATIONS

The Contractor represents it holds, and will continue to hold during the term hereof any and all qualifications, licenses and certifications required to perform its services in Maine. The contractor shall perform all services in accordance with professional standards.

#### VIII. SUBCONTRACTORS

The Contractor shall be fully responsible to the Town for the acts and omissions of any subcontractors and of persons either directly or indirectly employed by it, and shall hold subcontractors to the same terms and conditions as Contractor is held under this Agreement. No subcontractors shall be retained on this Agreement without the specific prior written approval of the Town.

# IX. INSURANCE

The Contractor shall purchase and maintain Workers' Compensation Insurance, General Public Liability and Property Damage Insurance including vehicle coverage and professional liability insurance, all with limits and terms satisfactory to the Town. The Town shall be named as an additional insured on the liability policy.

# X. INDEMNIFICATION

The Contractor will indemnify and hold harmless the Town, its officers, agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Agreement by the Contractor, its officials, employees, agents and subcontractors.

# XI. ENTIRE AGREEMENT

This Agreement and its attachments represent and contain the entire agreement between the parties. Prior discussions or verbal representations by the parties that are not contained in this Agreement and its attachments are not a part of this Agreement. Where there is any conflict between the provisions of this Agreement and the provisions of any attachment, the provisions of this Agreement shall control.

Date:	CONTRACTOR NAME
	Ву:
	REPRESENTATIVE
	TITLE
Date:	INHABITANTS OF THE
	TOWN OF FALMOUTH, MAINE
	Ву:
	Nathan Poore Town Manager