VILLAGE OF ALSIP
COOK COUNTY, ILLINOIS
NOTICE TO EMERGENCY VEHICLE DEALERS/ MANUFACTURERS

The Village of Alsip will receive sealed proposals at the Clerk's office, 4500 W. 123rd Street, Alsip, Illinois, until 3:00 PM, September 12, 2022

Replacement Ambulance

Proposals will be publicly read aloud on Monday, 7:35 PM on September 12, 2022. No bid shall be withdrawn after the opening of the proposals without the consent of the President and Board of Trustees for a period of thirty (30) days after the scheduled time of closing bids.

All proposals shall be sealed in an envelope, addressed to the Village of Alsip, attention Village Clerk. The name and address of the bidder and the name of the project shall also appear on the outside of the envelope.

The Bid Documents, including specifications shall be obtained from the Village Clerk's office or the village website. The bid documents will be issued until 3:00 PM on September 9, 2022.

A certified check/bank draft drawn on a solvent bank, cashier's check or bid bond, payable without condition to the Village of Alsip in an amount not less than ten percent (10%) of the bid shall be submitted with each proposal, as a guarantee that, if the proposal is accepted, a contract will be entered into and the performance of the contract is properly secured.

A performance bond in a sum equal to one hundred percent (100%) of the amount of the bid, with sureties to be approved by the President and Board of Trustees for the faithful performance of the contract, must be furnished by the successful bidder. All bids or proposals shall contain an offer to furnish a bond upon acceptance of such bid or proposal.

The right is reserved to reject any or all proposals, to waive technicalities, to postpone the bid opening, or to advertise for new proposals, if in the judgment of the President and Board of Trustees their best interests will be promoted thereby.

Dated August 24, 2022

President and Board of Trustees
Village of Alsip
Cook County, Illinois

Alsip Fire Department

Ambulance Specification

1.1 SCOPE,PURPOSE AND CLASSIFICATION

SCOPE

This specification covers a new commercially produced surface emergency medical care vehicle(s), herein referred to as an "ambulance" or "vehicle". This vehicle shall be in accordance with the Ambulance Design Criteria of the National Highway Traffic Safety Administration, United States Department of Transportation, Washington DC. This specification is based on current KKK - A1822 - F revision or CAAS-GVS. It is the intent of this agency to purchase vehicle(s) that are professionally engineered and designed. It is paramount to this agency that vehicle(s) presented be built by a reputable manufacturer with considerable experience in the ambulance manufacturing field. To this end, this agency requires that each manufacturer provide the following:

- A statement of fact, signed by an officer of the manufacturing company, disclosing that the manufacturer has delivered five hundred (500) ambulances within the last twelve (12) months of the date of this bid.
- The size and location of manufacturing facilities and number of production staff.
- Interior pictures to verify plant facilities.
- A list of on-site engineering staff with educational accreditation.
- ISO 9001:2000 Certification.

Failure to provide this agency with the documentation required will be deemed non-responsive.

PURPOSE

The purpose of this document is to provide the manufacturer with a set of specifications and test parameters that will meet the criteria to manufacture a vehicle as set forth by this agency. This agency seeks a vehicle that will deliver "fair value". Fair value is defined by this agency as the manufacturer's ability to provide a safe, functional, and practical ambulance conversion that will work in junction with the chassis specified at a reasonable cost. The specifications within this document are a basis to deliver such a vehicle to this agency. This agency at its discretion shall assess the intangible assets of the manufacturer such as, but not limited to, after quality, delivery support, customer service, parts availability and warranty turn around time.

CLASSIFICATION

This specification calls for the following type of vehicle in accordance with the current KKK-A1822-E revision.

GENERAL

This is an engineer, design, construct and deliver type specification meeting the needs of this agency. Attention has been given to the engineering and design aspect of this specification that will attain our goal of fair value. It is the manufacturer's responsibility to deliver a product meeting the criteria as set forth. This agency reserves the right to increase the equipment quantities that are specified. In addition, other agencies will be permitted to purchase equipment under this contract as a result of this specification, unless prohibited under law.

SITES OF WORK

Other than the chassis, specified accessories, and raw materials such as aluminum, wood, etc.; all shops and sub-shops shall be within the complex(s) that are directly owned and controlled by the primary manufacturer. Any assemblies including, but not limited to, upholstery, fiberglass, cabinetry, electrical, structural and paint application, that are performed or supplied outside of the primary manufacturer's location(s) must be noted. The name, address, and contact person supplying the primary manufacturer with the assemblies must be provided in writing to this agency. Non-disclosure will be sufficient grounds for rejection of bid or termination of contract. Ambulances or chassis' imported for consideration of this specification into the United States under the North America Free Trade Act must provide documentation of compliance with all United States laws applicable. Further, any import ambulance must be independently certified and tested within the United States to meet KKK-A1822-F certification or CAAS-GVS.

EXAMINATION OF SPECIFICATIONS

It is incumbent on each manufacturer to be thoroughly familiar with the specification contained herein. The specification will require a "YES" or "NO" or when requested a definitive answer to each section or subsection. Sections or subsections not marked with a "YES" or "NO" or answered shall be deemed incomplete and considered non-responsive. A "YES" answer constitutes a complete compliance to the section or subsection as written. A "NO" shall indicate noncompliance and does not eliminate a manufacturer from competition. A manufacturer may object or counter to a specific section or subsection. A manufacturer must indicate in writing, as an attachment, the section or subsection in dispute. The manufacturer must include the verbiage as written, new verbiage presented, explanation of verbiage with consequences and supporting tests and documentation. Failure to comply will be deemed as non-responsive. This agency reserves the right to determine compliance.

DEFINITIONS:

The following definitions shall apply with regards to these specifications.

PURCHASER: The end user of the equipment specified or the applicable purchasing agency acting on behalf of the end user.

CONTRACTOR: The individual, firm, partnership manufacturer, or corporation to whom the contract is awarded by the Purchaser and is subject to the terms thereof. For bidding purposes, the contractor, vendor, bidder, manufacturer are synonymous.

EQUAL: This agency supports the design, engineering, quality and materials as specified in this document. This shall not prohibit the bidding of unlike product. However, any deviation from the specification must be marked and submitted per section A1.1.2. Failure to do so shall be deemed non-responsive.

MANUFACTURER: The manufacturer within this specification shall be considered the "primary manufacturer" of the ambulance conversion. The chassis requirement as set forth in this specification is the responsibility of the primary manufacturer to procure. This agency considers the chassis platform as a conveyance for the ambulance conversion. It is imperative that the primary manufacturers procure the exact chassis from the chassis manufacturer. After market modifications by the primary manufacturer to achieve

chassis specification will not be tolerated. This agency will require documentation from the chassis manufacturer pertaining to the chassis requirements for this agency. Failure to provide documentation after award and prior to construction may result in the termination of the contract. Expenses to re-bid will be the responsibility of the manufacturer in default.

1.2 SPECIAL CONDITIONS

BIDDERS RESPONSIBILITY AND QUALIFICATION

It is not the intent of these specifications to call for an unusual or experimental vehicle(s). The primary manufacturer shall have a minimum of 10 years of uninterrupted manufacturing of similar or identical vehicles to the specifications set forth in this bid.

If requested by the purchaser, the primary manufacturer shall supply upon request a list of fifteen (15) agencies that have purchased similar or identical vehicles within the past year from date of bid. The list will have contact names and phone numbers.

For the purpose of this section, if the bidder of record and the primary manufacturer are separate business entities, then each shall be required to submit financial, insurance, and/or licensor to conduct business within this jurisdiction. Failure to provide proper documentation with the bid response may result in any bid being deemed non-responsive.

The primary manufacturer shall be ISO 9001:2015 certified. No Exceptions.

The primary manufacturer shall employ full time a Quality Control Manager whose primary function is to monitor quality. No Exceptions.

PAYMENT, DELIVERY AND ACCEPTANCE -A deposit may be remitted with the order not to exceed ten percent (10%) of the total contract amount. This agency reserves the right to issue a binding municipal Purchase Order in lieu of a deposit. The choice to submit either the deposit and/or the binding purchase order will be that of this agency.

Prepayments or progress payments for any part or material after contract award may result in a termination of the award. The contract will be given to the next responsible primary manufacturer. It is the intent of this agency to do business with a company of sufficient financial means to meet the financial burdens necessary complete and delivery the vehicle as specified.

Unless otherwise requested, the primary manufacturer shall arrange over the road delivery of the completed vehicle to this agency's designated local address under the vehicles own power. Costs of transportation and preparation are to be included with the price as bid. The primary manufacturer, may as an option, offer a line item credit for pick up by this agency at their place of manufacture.

Payment in full will be made upon delivery once an inspection of the vehicle by this agencies authorized representative(s) confirms compliance with the specification. The delivery, acceptance inspection, and payment shall take place on the same day. In the event it is deemed necessary for this agency to inspect the vehicle(s) at the primary manufacture location, a temperature controlled inspection area separate from the production facility shall be available.

All bid prices and conditions must be specified on the Bid Proposal Form.

Bid prices shall be valid for sixty (60) days. In the unforeseen circumstance that this agency requires the primary manufacturer to extend pricing requirement; then it will be at the discretion of this agency to request in writing from the primary manufacturer any deviation in prices quoted. The primary manufacturer may revise pricing and state in writing reasons for any change and certify the amended pricing for sixty (60) additional days.

BID EVALUATION - Bids received shall be evaluated by the Purchaser. This evaluation will be based on the following:

- Completeness of the proposal
- Manufacturing and Delivery schedule
- Primary manufacturer's demonstrated capabilities and qualifications
- Primary manufacturer's past performance on similar Bid Proposals
- Primary manufacturer's maintainability and recommendations
- Primary manufacturer's logistical and service support

Bid proposals taking total exception to these specifications will not be accepted.

Bid proposals that do not comply with the prescribed method to take exceptions listed in paragraph A1.1.2 will be rejected without further consideration.

This agency seeks the highest level of value for the cost. To assure this agency is receiving such value the primary manufacturer must submit evidence of compliance with KKK-A1822-E testing parameters. The testing is to be performed by an independent testing facility and verified by person(s) with the standing of Professional Engineer. If further testing is required by any lawful agency of the Federal or State Government then it shall be incumbent upon the primary manufacturer to provide this agency with certification required.
This agency also recognizes Ford Motor Company's Qualified Vehicle Modifiers (QVM) accreditation. Therefore, regardless of chassis specifications the primary manufacturer must include with this proposal their current QVM certification.

Internal testing performed and certified for a primary manufacturer will not be considered by this agency.

The primary manufacturer may submit certification of all "member in good standing" of any public or private association that may have bearing on this specification i.e. AMD, NTEA.

To insure that this contract is awarded to a primary manufacturer who has the resources to meet the performance and warranty criteria specified herein, the primary manufacturer shall state in the bid proposal if it is a public or private company. If the primary manufacturer is privately held then it shall include the most current financial statement by a Certified Public Accountant not more than twelve (12) months old, or current financial statement of the parent company. If the primary manufacturer is a publicly held company or wholly owned by a publicly held company then it shall state what stock exchange and under what symbol it is traded under. Bids not meeting this requirement cannot be accepted.
Note: In performing the evaluation, only information contained within the primary manufacturer's written proposal will be considered.

CONTRACT AWARD - The Purchaser reserves the right to increase the number of vehicles or equipment specified under this contract. If awarded, the primary manufacturer agrees that additional agencies may purchase under the same terms and prices afforded by any contract arising from the bid award, unless prohibited by law.

The purchaser has the right to waive any informalities, irregularities, and technicalities in procedure.

WARRANTY - This agency is concerned with the ability of the primary manufacturer to warrant the conversion after delivery. This agency expects a minimum of a twenty five (25) year modular construction warranty and twenty four (24) months and thirty six thousand (36,000) mile full warranty on the conversion. In addition, each manufacturer shall submit their various warranties and warranty options, if applicable, with the proposal for evaluation. Also, each primary manufacturer will supply the name and phone number of a contact person in the event this agency requires clarification of the submitted warranty documents.

The primary manufacturer will provide the location of the closest approved warranty center. Indicate to this agency, in writing, to be included with this proposal; the process to initiate and file a warranty claim.

Due to the high demands on a pre-hospital care vehicle, this agency demands the primary manufacturer have available a twenty-four hour a day technical assist service. This 24/7 service must be staffed by the primary manufacturer's service personnel, include telephone number:_____.
DELIVERY - The primary manufacturer will provide in writing to accompany this document a proposed delivery time. The delivery time proposal will include the transit time of the finished vehicle.

Bidder Complies YES_____NO_____

INDEMNIFICATION AND INSURANCE - This agency seeks to mitigate future liability exposure; therefore, all primary manufacturers will submit their Certificate of Insurance for evaluation. This agency will only consider a primary manufacturer with a minimum of Ten Million United States Dollars ($10,000,000.00 USD) that is based on a PER INCIDENT basis. This insurance shall be issued by a company rated "A" or better as reported in the current edition of Bests Key Rating Guide, published by Alfred M. Best Company, Inc. Aggregate liability coverage will not be considered regardless of amount. Failure to comply will be deemed non-responsive.

FAMILIARITY WITH LAWS - The primary manufacturer will be familiar with all Federal, State and Local laws, ordinance, code rules and regulations that may in any way effect the work. Ignorance on the part of the primary manufacturer is not acceptable.

PRE-CONSTRUCTION & FINAL INSPECTION TRIPS - The successful primary manufacturer shall be required to hold a pre-construction conference with representatives of this agency to finalize construction details. This conference shall be held at the manufacturers main manufacturing facility. The primary manufacturer will provide adequate transportation, lodging, and meals for two (2) designated personnel from this agency. Further, if the location is in an excess of three hundred (300) miles from this agency's location, the transportation shall be by a commercial air carrier. Private or corporate aircraft may not be used. A Final inspection trip for two (2) designated personnel shall also be provided to inspect the completed apparatus prior to the unit leaving the manufacturing facility.

Bidder Complies YES_____NO_____

DRAWINGS - The primary manufacturer shall provide Two (2) sets of drawings that accurately depict the vehicle as specified. The drawings will show all exterior and interior planes with dimensions. Failure to comply will be deemed non-responsive.

Bidder Complies YES_____NO_____

EMPLOYEE STATEMENT - It is mandated by the United States Government that all employees currently and to be employed during the duration of this contract are not discriminated against because of their race, creed, color, sex, nationality origin and disability. Further, this agency must be satisfied that the primary manufacturer's labor pool is treated in a fair and equitable manner. Therefore, it will be the responsibility of the primary manufacturer to include a human resource statement outlining employment status, working conditions, and benefits.

Bidder Complies YES_____NO_____

Alsip Fire Department

Ambulance Specification

ANTI-COLLUSION STATEMENT - By signing this bid, the primary manufacturer agrees that this bid is made without any understanding, agreement or connection with any other person, firm or corporation making a bid for the same purpose and this bid is in all respects fair and without collusion or fraud.

Bidder Complies YES NO_____

Purpose - Specification Y_____N___

The following specification describes a new ambulance to be acquired by: ALSIP FIRE DEPARTMENT. The specification details the needs of this department relevant to the chassis requirements and the modular body design. This department requires a state of the art vehicle with sophisticated electronics and a mechanical and structural design that eliminates the use of wood or other absorbent, degradable materials. Manufacturers, who utilize prototype equipment or manufacturing processes that do not meet manufacturing criteria, will not be considered.

The standard for the configuration and design of this ambulance exceeds the current KKK Federal Specification due to the requirements of this department. Manufacturers who are unwilling or unable to meet the requirements herein, will not be considered.

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. **This specification requires an all aluminum modular exterior and interior.** The compartment and cabinet sizes are critical. While it is not the intent of this specification to preclude any qualified bidder, it must be clear that any bidder deviating in any substantial manner from these specifications will be rejected as non-compliant.

Bidder Complies YES_____NO_____

Certification - KKK-A-1822F Y___N___

This specification requires the manufacturer to provide a new, commercially produced, medical care vehicle, hereinafter referred to as an "ambulance". This vehicle shall be manufactured in accordance with the ambulance design criteria of the National Highway Traffic Administration, U.S. Department of Transportation in Washington D.C. and the GSA - Federal Ambulance Specification KKK-A-1822F. Documentation shall be submitted with the bid that validates the manufacturer's current and full compliance with KKK-A-1822F.

Compliance - AMD Y N___

Alsip Fire Department

Ambulance Specification

The ambulance described herein shall be type and model tested to and in compliance with the National Truck Equipment Association's Ambulance Manufacturing Division, Standards 001 - 025. Certifications must be current to manufacturer's most recent manufacturing/engineering design criteria.

Statement - Intent of Specification Y___N___

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, therefore, in numerous places we have named specific brands of components. This has been done to establish a certain standard of quality. Other brands will be accepted providing the vendor provides documentation in the bid that the particular brand offered meets or exceeds the quality of the actual brand called for in the specification.

Statement - Anti-Collusion Y N___

By submission of this signed bid response, the bidder certifies under penalty of perjury, that to the best of his/her knowledge that the pricing in this bid response has been prepared independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such pricing with any other bidder or competitor. The bidder also acknowledges that the pricing quoted has not been discussed with or disclosed by the bidder prior to the opening of the bid, either directly or indirectly.

Documentation - Insurance Y N___

The bidder's proposal packet shall include a copy of the ambulance manufacturer's current insurance certificate. The manufacturer shall provide proof of $10 Million dollars of product liability insurance coverage

Information - Sales Drawings Y N___

The manufacturer shall provide two (2) complete sets of sales drawings for the proposed ambulance.

Government GPC Number, (FORD) **# QC722 Village of Alsip** Y___N___

The customer is a qualified governmental fleet operator with a valid Ford Fleet "GPC" number

and this bid will include the price concession from Ford Motor Company for the chassis required by these specifications. The purchaser shall provide this "GPC" number at the time of the bid or it will be the responsibility of the purchaser to solicit the rebate from Ford Motor Company.

REQUIREMENTS Y N___

Requirements - Manufacturer's Ability Y___N___

It is the intent of these specifications that the manufacturer of this vehicle has the ability to manufacture a completed ambulance 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 and shall have manufactured a minimum of 5800 comparable units. Y N___

This department requires that the manufacturer of the ambulance be a 100% American owned company. American owned defines the manufacturer as well as the majority equity owners of the manufacturer as US companies, individuals and/or stockholders. Y N___

Requirements - Manufacturer's ISO 9001 Y___N___

Bidder must be a registered and certified ISO 9001 manufacturer and provide documentation to support it's claim. **NO EXCEPTIONS**

Requirements - Vehicle Design Criteria Y___N___

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.

Due to its inherent propensity to absorb and retain fluids that create unacceptably hazardous environmental conditions in the patient compartment there shall be no wood or wood byproducts used as fabrication materials in any component of this vehicle. There shall be no plastics or

PVC type materials used in any structural fabrication process including cabinet, compartment or wall construction. The entire modular structure and all integral body parts and pieces shall be manufactured from aluminum. Y N___

Requirements - Information Y___N___

Bidder must furnish all information as requested. Additionally the bidder shall supply at least two (2) complete sets of drawings, descriptive literature and complete specifications covering the products offered. Bids not meeting this requirement will be rejected. **NO EXCEPTIONS**

Requirements - Pricing and Payment Y N___

All bid prices shall be complete and include warranty and delivery of the completed vehicle to the purchaser. Payment shall be made in accordance with the terms, and conditions of these specifications. Payment will be made upon delivery and acceptance of the vehicle(s) and equipment specified herein.

All bid prices and conditions must be specified on the Bid Proposal Form. Bid prices shall be valid for 30 days from the date of the bid opening, or as otherwise specified in the bid proposal. Payment in full will be made as each unit is received, inspected and found to comply with these specifications. The vehicles(s) shall be free of damage and properly invoiced.

WARRANTY Y N___

0.1 WARRANTY

, Warranty, Documentation Y___N___

The bidder's proposal packet shall include copies of all warranties listed in these following detailed specifications. The minimum acceptable required warranties are: Conversion Warranty, Electrical Warranty, Modular Structural Warranty and Paint Warranty. The bidder shall include a copy of these warranties within the proposal package. If the bidder does not include a copy of the warranties, the bid will automatically be rejected.

Warranty, Module Structural Y N___

The manufacturer shall provide a "Lifetime" Limited Modular Structural warranty. 'Lifetime", a lifetime is defined as 25 years from the date of original retail owner's purchase/in-service date from the manufacturer or the period of time the ambulance is in continuous front line service with the original purchaser. Terms and condition of the Limited Modular warranty shall be per the manufacturer's published warranty documentation.

Warranty, Electrical, Standard System Y___N___

The manufacturer shall provide a Limited "Electrical" warranty. The Limited "Electrical" Warranty shall be 7 years from the date of original retail owner's purchase/in-service date from the manufacturer and shall be warranted by the manufacturer to the original owner. Terms and condition of the Limited Electrical warranty shall be per the manufacturer's published warranty documentation.

Warranty, Paint Y___N___

The manufacturer shall provide a Pro-rated paint warranty for "Five Years" / unlimited mileage from the date of delivery of the completed new ambulance to the original retail owner, unlimited mileage, or the time of module remount, whichever occurs first. The paint application on the ambulance module shall be warranted by the manufacturer to the original owner for a period of 5 years with unlimited mileage.

Warranty, Conversion Y N___

The manufacturer shall provide a Limited "Conversion" warranty. The "Conversion" Warranty shall be for a period of 2 years or 36,000 miles and must be supplied in writing from manufacturer. Terms and condition of the Limited Conversion warranty shall be per the manufacturer's published warranty documentation.

This unit built in accordance with KKK-A-1822-F CN 10 Cabinet Requirements Y N___

This unit shall be built to the KKK-1822F specifications including the Change Notice 11 changes dated July 1, 2018.

As evidence that the modular ambulance body meets the above criteria, the FSAM's shall furnish a certification that the modular ambulance body meets the testing requirements of SAE J3057.

Installed Oxygen cylinder, suction, cardiac monitor, and fire extinguisher mounting devices shall meet the performance requirements of SAE J3043.

1) All interior enclosed stowage devices shall be tested to their rated weight capacity in accordance with the requirements of SAE J3058.
2) Stowage devices shall not come open in transit.
3) Storage for the main oxygen cylinder shall be accessible for replacement from an outside position.

4) The oxygen compartment shall be provided with at least a 9 sq. in. of open vent to dissipate/vent leaking oxygen to the outside of the ambulance.
5) Oxygen cylinder compartment shall not be utilized for storage of any other equipment.
6) All interior enclosed stowage devices shall be labeled with their rated weight capacity.

A complete litter fastener assembly shall be furnished. The installed litter fastener device for wheeled cots shall meet the performance requirements of SAE J3027. The litter fastener device shall be installed according to the litter fastener manufacturer's instructions. The ambulance floor and substructure shall be tested in accordance with the dynamic requirements of SAE J3102.

The ambulance shall have a piped medical oxygen system capable of storing and supplying the minimum requirements in liters of medical oxygen as specified by the purchaser. The installed medical oxygen piping shall be leak tested to 80 PSI. After the successful completion of piping test, the system shall be completely assembled and the flow rate of the outlets tested with the system pressurized at normal working pressure. The system shall be capped then tagged with date and signature of person and firm performing the tests.

01- CHASSIS REQUIREMENTS Y___N___

1. CHASSIS REQUIREMENTS

FORD CHASSIS Y___N___

2023 Ford E450, 7.3L Gasoline, Cutaway, 158" WB 2023-5 Y___N___

3.1 TECHNICAL REQUIREMENTS CAB - CHASSIS

3.2 GENERAL VEHICULAR DESIGN, TYPES, AND FLOOR PLAN

The ambulance and the allied equipment furnished under this specification shall be the primary manufacturer's current commercial vehicle of the type and class specified. The ambulance shall be complete with the operating accessories as specified herein. It shall be furnished with such modifications and attachments as necessary and specified to enable the vehicle to function reliably and efficiently in sustained operation. The design of the vehicle and the specified equipment shall permit accessibility for servicing, replacement and adjustment of component parts and accessories with minimum disturbance to other components and systems.

3.1.2

The ambulance shall be a Type III, Class I, and shall be a chassis furnished with a two (2) door conventional cutaway cab. The chassis shall be suitable for subsequent mounting of a modular (containerized), transferable equipped ambulance body conforming to the requirements herein.

3.1.3

The design of the vehicle shall utilize floor plan "A" loading arrangement of patients into the patient compartment. All litters shall be loaded into position with the heads of the patients forward in the vehicle.

3.3 VEHICLE COMPONENTS, EQUIPMENT, AND ACCESSORIES.

The emergency medical care vehicle, chassis ambulance body, equipment, devices medical accessories and electronic equipment to be delivered under this contract shall be standard commercial products, tested and certified, to meet this specification. The vehicle shall comply with all Federal Motor Vehicle Safety Standards (FMVSS) and

3.4 MATERIALS

Materials used in the construction shall be new and meet the quality conforming to this specification. Materials shall be free of defects.

3.5 VEHICLE OPERATION, PERFORMANCE, AND PHYSICAL CHARACTERISTICS

The following is a description of the cab and chassis that will meet the requirements of this specification. In addition, the chassis will comply with paragraphs 3.4.1 through 3.6.14 of Federal Specification KKK-A-1822F.

3.6 CHASSIS MANUFACTURER AND MODEL YEAR

The chassis shall meet the requirements of this specification. It shall be a **2023** Ford.

3.7 MODEL PHYSICAL CHARACTERISTICS

Vehicle: Econoline

Body Style: Cutaway Dual Rear Wheel

Drive Train: Rear Wheel Drive

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Model Number body code:	E450/158” wheel base- E4F	
Gross Axle Weight:	Front 5,000 lb.	Rear 9,500 lb.
Gross Vehicle Weight	Rating 14,500 lb.	
Engine Type:	7.3L V8 gasoline	
Displacement	7.3 liters	
Fuel System	Electronic Fuel Injected	
SAE net HP	350hp @ 3900 rpm	
SAE net Torque	468lb-ft @ 3900 rpm	
Wheelbase:	158 inches	
Transmission:	6 - speed Automatic, Electronic	
Rear Axle Ratio:	4:56	
Tire Size:	LT225/7516E, 2 front, 4 rear	
Spare Tire Size:	LT225/7516E	
Wheels	All including spare, steel 16.0 x 6.0	
Brakes:	ABS System, Power Disc Brakes front and rear.	
Engine Block Heater:	Code 41H	
Alternator:	240 amp Alternator	
Batteries:	Dual, 72-AH, 650 CCA	
Fuel Tank:	Single 55 Gallon, aft of rear axle	
Exterior Upgrade Package:	Code 18A	

Interior Upgrade Package: Code 18C

Dual Captains Chairs: Code M - Cloth Captains Chairs

Speed Control: Code 525

Ambulance Prep. Package: Code 47A

Steering: Power

Radio: Electric AM/FM/MP3 Radio w/4 speakers

Locks: Code 948 Keyless/Alarm

Safety: Code 526 Ford Co-Pilot 360 Driver Assist Technology package

4.5 ELECTRICAL GENERATING SYSTEM

The vehicle shall be equipped with the OEM supplied 225 ampere alternator. The Primary manufacturer shall install a second 105 ampere alternator to supplement the OEM.

4.6 ENGINE AUTOMATIC HIGH IDLE SPEED CONTROL

The Engine high idle shall be regulated by the OEM supplied high idle speed control. The control shall be mounted in the cab console.

4.7 DRIVERS COMPARTMENT

The driver's compartment shall be as required by paragraphs 3.9.1, 3.9.2, and 3.9.4 of Federal specification KKK-A-1822-F as well as section 3.0 of this document. The cab shall be equipped with the chassis manufacturer's high back “captain’s chair” with arm rests. The safety restraint system for the driver and passenger shall be installed by the chassis manufacturer. Modifications or substitutions of the chassis manufacturers cab seats or restraint system will not be acceptable.

4.8 OUTSIDE REAR VIEW MIRRORS

The vehicle mirrors should be firmly secured, vibration less rear view mirrors totaling at least one hundred and twenty five square inches. The mirror shall be OEM with the following description: Telescopic Trailer Tow with LH/RH Power Adjust Flat Glass & Manual Adjust Convex.

Bidder Complies YES_____NO_____

CHASSIS OPTIONS Y___N___

1.2 CHASSIS OPTIONS

Hour Meter - Honeywell, Drivers Side of Front Console Y___N___

– Engine Hour Meter - There shall be a Honeywell brand engine hour meter installed on the driver's side of the radio console. It shall be wired "On" with ignition.

Bidder Complies YES_____NO_____

ALTERNATORS Y___N___

Alternator - Standard OEM Y___N___

– Alternator - shall be the standard alternator that the OEM chassis manufacturer installs on the ambulance prep package.

SUSPENSION Y___N___

Front Suspension, Ford E-Series Y___N___

FRONT SUSPENSION
The front suspension shall include heavy-duty gas shocks and computer selected coil springs and shall include a 1" OEM stabilizer bar.

Bidder Complies YES_____NO_____

Rear Suspension, Ford E-Series OEM Y___N___

REAR SUSPENSION
The chassis rear suspension shall be a multi-leaf, single stage spring assembly and shall include a 1.25" OEM stabilizer bar.

Bidder Complies YES_____NO_____

Front Sway Bar, OEM Y___N___

Rear Sway Bar, OEM Y___N___

Sway Bar shall be OEM

HIGH IDLE Y___N___

CAB EXTERIOR OPTIONS Y___N___

1.3 CHASSIS CAB EXTERIOR OPTIONS

1.3 CHASSIS CAB EXTERIOR OPTIONS

OUTSIDE REAR VIEW MIRRORS Y___N___

1.20 OUTSIDE REAR VIEW MIRROR

Mirrors, Velvac 2020XG Black, Heated/Remote Mirrors, E-Series Y___N___

OUTSIDE REAR VIEW MIRRORS

The chassis shall be fitted with Velvac 2020XG mirrors. These mirrors are direct bolt on replacements for the OEM mirrors. The mirrors shall have black housings, heated glass and remote control adjustment for the main glass. The separate convex section in the lower part of the housing shall be manually adjustable. Heater switch and adjustment controls shall be located on the driver door sail panel.

Bidder Complies YES NO_____

CAB INTERIOR OPTIONS Y___N___

1.21 CAB INTERIOR FEATURES

The following optional interior features shall be supplied with this ambulance chassis cab:

Insulation, Cab, Thinsulate in Cab Ceiling (STANDARD) Y___N___

INSULATION, CAB CEILING

The manufacturer shall install a single layer of 3M Thinsulate insulation between the OEM head liner and the cab roof to reduce noise.

Bidder Complies YES_____NO_____

SAFETY OPTIONS Y___N___

Anti-Theft Device, Idle Lock, Intermotive, Ford E Series 2020+ Y___N___

IDLE LOCK

An Idle Lock System shall be installed in the vehicle with a Switch located in the cab. It shall allow for leaving the vehicle running and locking the vehicle in park. The system when activated would sound the horn and shut off the ignition if it had not been reset Prior to trying to shift out of Park.

Bidder Complies YES_____NO_____

TIRES / WHEELS Y___N___

1.23 TIRES AND WHEELS

Spare Tire Bracke , Delete Y___N___

The spare tire shall not be a mounted in the exterior compartment for storage. If the chassis is ordered with a spare tire it is to be shipped loose.

WHEEL COVERS Y___N___

Wheel Covers, Phoenix w/ Lug Nut covers, E-Series Y___N___

WHEEL COVERS

The vehicle shall be equipped with four (4) outside wheel Phoenix polished stainless steel wheel inserts. These inserts shall be designed in such a way that they are removable without removing any of the OEM lug nuts. The inserts will include braided stainless steel fill tubes.

Bidder Complies YES NO_____

BASE CONVERSION Y___N___

Conversion,, Type 3, 170 Module, Ford 21-1b Y___N___

2 - MODULE REQUIREMENTS Y___N___

2. MODULE REQUIREMENTS

170" x 96"W Type 3 Module Y___N___

2.1 MODULE TYPE

The Type III (A.D.) module shall be a 170"L x 96"W conversion for a type 3 chassis.

Overall Vehicle Dimensions:
- Ford Length = 270"
- Chevrolet Length = 278"
- Width = 100"
- Height = 105.5"

Exterior Module Dimensions (inches):
- Length = 170"
- Width = 96"
- Height = 88"

Standard Cab Extension of 6" Y___N___

CAB EXTENSION

There shall be a 6" recessed bulkhead on the cab side of the module to insure that the driver and passenger seats have additional seat travel and that the incline adjustment on the seats is capable of providing the driver and passenger with a comfortable seating position.

Bidder Complies YES NO_____

Interior Headroom, 72" Y___N___

Interior Module Dimensions:
Length = 163.5"
Width = 91.5"
Height = 72"

Aisle Space, 50" , Type III Y___N___

MATERIALS Y___N___

Sub floor Materials, 2" Thick Y___N___

SUB-FLOOR SYSTEM
The module floor shall be a sandwiched composite subfloor whose materials equal 2.125" total thickness. The sandwich construction method shall include from top to bottom:

TRANSVERSE STRUCTURE - The sub floor shall consist of a minimum of (5) five 2" x 2" x .250" 6061-T6 and (2) two 2" x 3" x .250" 6061-T6 structural 'C' channel transversely stacked and completely welded to the longitudinal runners with a minimum 4 inches of weld at every intersection. This shall create a 4 inch high floor substructure that provides enhanced structural strength from the transverse layering of the structural channels. The manufacturer shall utilize extruded, structural channel. Architectural channel or material that is not structurally rated channel shall not be acceptable.

LONGITUDINAL STRUCTURE - The modular floor super structure shall include (2) full length 2" x 2" x .250" 6061-T6 longitudinal runners spaced the distance of the OEM chassis wheel wells. These longitudinal runners shall be welded to the 2" x 2" x .250" transverse structural members. The longitudinal runners shall provide the connecting structure for mounting the module to the OEM chassis frame. Due to the long term dynamic stresses inherent to any modular mounting system, under no circumstances shall the longitudinal runners be modified to accommodate the module mounting system bolts.

The welded 'C' channel floor substructure shall be pre-stressed with a minimum 1000 pound weight in order to give the floor structure more dynamic resistance to long term high cycle stresses.

GUSSET SUPPORTS - Are fabricated of .250" aluminum with welding flanges on (2) sides. A minimum of (8) supports are welded to the Structural Wall Framing, Sub Floor and the Sub Structure further enhancing the structural integrity of the entire Floor Structure.

FLOOR PAN - Inlaid between the longitudinal runners the manufacturer shall install a 2 inch thick composite core panel. This panel shall be a formed aluminum structure utilizing .090 aluminum on the top and .063 aluminum on the bottom. Running full length from the front to the back shall be two (2), .125" x 1.75" 5053-H32 single piece, formed aluminum "C" channel support members for additional strength at the cot and attendant seat mounting locations. This support member shall be an integral part of the composite floor design.

FLOOR MATERIAL - The assembled aluminum floor core panels shall be placed in a press and shall have 2.5# per cubic foot high density expanding foam injected between the layers which shall adhere to the aluminum structure creating enhanced structural strength to the subfloor system. The total 'R' value of the composite panel shall be R12 and the panel shall have a 20

decibel noise barrier. This panel shall run the full length of the module with no seams in the surfacing material.

INSTALLATION - The composite floor panel shall be installed flush with the top of the longitudinal channel structure. The composite insert shall be secured in place with a two part self-etching, high-strength epoxy. All other open areas of the exposed sub floor not being filled by compartments or wheel wells shall have the same composite floor panel material installed to fill the openings. All seams and the entire perimeter of the sub floor shall be completely sealed with Sikaflex sealant adhesive or a spray-in-place foam material to create a watertight, dust free environment.

The manufacturer shall install a full length 1/8" closed cell, expanded core PVC panel on top of the composite floor insert. The PVC shall create a smooth environment for installation of the interior floor material.

Type I & Type III, Interior Materials Y N___

INTERIOR CONSTRUCTION
The interior cabinet construction shall be aluminum and PVC and will include the following materials:

Wall Thickness = .090"
Alloy = 5052-H32

Interior Module Wall Panels
Wall Thickness = .063"
Alloy = 5052-H32

Interior Cabinet Shelves
Shelf Thickness = .063"
Alloy = 5005-H34

Interior panels
Wall thickness- .188
Material - PVC

All upper band cabinet door frames shall consist of rigid, heavy duty, extruded aluminum glass frame. The rigid design of the frame extrusions and corner assemblies on the restocking doors will reduce twisting of the frame structure. The door frames will be held closed with slam latches and the felt track design does not require adjustment.

In order to decrease the risk of accumulation or exposure to fluid borne pathogens, any areas

around the interior that have the potential for fluid accumulation shall be seam sealed with silicone or equivalent type material that will prevent the possible accumulation of fluid borne pathogens.

All cabinet and wall panel aluminum trim included shall be Gray anodized. All protective corner trim shall be Opaque and will include a matching domed end cap.

The frames of the street side upper band cabinets shall be hinged with full length, piano hinge. The frame shall be hinged on top and be equipped with pneumatic hold opens on each side, with one (1) interior positive catch bottom center. This shall enable the entire face frame with sliding Plexiglas doors to be opened for easier cleaning and restocking of the cabinets. The gas shocks shall be of sufficient strength to automatically lift the cabinet door frame without any aid and hold in the open position

The flat wall panels on the curbside above the squad bench and above the CPR side seat shall be constructed of a PVC material to help insulate the patient compartment.

RR, Type I & Type III, Materials Y N___

2.2 MATERIALS

The entire modular structure and all integral body parts and pieces shall be manufactured from aluminum. The perimeter frame of the roof shall consist of a 3 inches high x 1-1/2 inch radius extrusion securely fastened and welded to the wall and ceiling structural framing. The extrusion shall be fully enclosed with vertical center supports. The design of this extrusion shall be such that it incorporates a flange similar to the box pan formed construction technique to ensure that the construction and fastening technique remains consistent throughout the module build process.

In addition to the welding, an extreme strength 3M VHB bonding system shall be utilized throughout, providing for a rivet less exterior, free of warping which can occur when exterior sheeting is welded to the structural tubes. Prior to application of the bonding tape all aluminum surfaces must be cleaned with an acid based cleaner. Each of the side, front and rear walls shall be assembled, and compression applied per the requirements of the adhesive manufacturer to provide proper adhesion and to produce a smooth, flat exterior surface eliminating side wall waves on the finished product.

Fabricated gusset supports shall be added for extreme structural integrity. Gussets to be welded into place where the sub-floor structure meets the vertical wall tube structure.

Roof Assembly	Roof Rail	.125 6061-T6 Aluminum
	Channel	.025 6061-T6 Aluminum
	Sheet	.090 5052-H32 Aluminum
	Tubing	.125 6061-T6 Aluminum
		.250 6063-T6 Aluminum
	Corner Cap	.125 5052-H32 Aluminum
	Plate	.250 3003-H14 Aluminum
Floor Assembly	Composite Sub Floor	.125 Intecel PVC
		1.00"- Dense Composite
	Channel	.25 6061-T6 Aluminum
	Tubing	.25 6063-T6 Aluminum
		.125 6061-T6 Aluminum
	Sheet	.090 5052-H32 Aluminum
	Plate	.250 3003-H14 Aluminum
	Bar	.50 6061-T6 Aluminum
Front Assembly	Sheet	.125 5052-H32 Aluminum
	Tubing	.125 6061-T6 Aluminum
	Plate	.250 3003-H14 Aluminum
Rear Assembly	Sheet	.125 5052-H32 Aluminum
	Tubing	.125 6061-T6 Aluminum
	Plate	.250 3003-H14 Aluminum
Side Assembly	Sheet	.125 5052-H32 Aluminum
	Tubing	.125 6061-T6 Aluminum
	Angle	.25 6061-T6 Aluminum
	Bar	.50 6061-T6 Aluminum
		.250 3003-H14 Aluminum
Seamless Door Assembly	Sheet	.125 6061-T6 Aluminum
	Door Frame	6061-T6 Aluminum
	Jamb	6061-T6 Aluminum

S**UB-FLOOR SYSTEM**

The module floor shall be a sandwiched dense composite subfloor whose materials equal 1" total thickness. The sandwich construction method shall include aluminum on top to bottom:

TRANSVERSE STRUCTURE - The sub floor shall consist of a minimum of (5) five 2" x 2" x .250" 6061-T6 and (2) two 2" x 3" x .250" 6061-T6 structural box tubing transversely stacked and completely welded to the longitudinal runners with a minimum 4 inches of weld at every intersection. This shall create a 3 inch high

floor substructure that provides enhanced structural strength from the transverse layering of the structural channels. The manufacturer shall utilize extruded, structural tubing and channel. Architectural channel or material that is not structurally rated channel shall not be acceptable.

LONGITUDINAL STRUCTURE - The modular floor super structure shall include (2) full length 1" x 2" x .125" 6061-T6 longitudinal runners spaced the distance of the OEM chassis wheel wells. These longitudinal runners shall be welded to the transverse structural members. The longitudinal runners shall provide additional structural integrity. Due to the long term dynamic stresses inherent to any modular mounting system, under no circumstances shall the longitudinal runners be modified to accommodate the module mounting system bolts.

GUSSET SUPPORTS - Are fabricated of .250" aluminum with welding flanges on (2) sides. A minimum of (8) supports are welded to the Structural Wall Framing, Sub Floor and the Sub Structure further enhancing the structural integrity of the entire Floor Structure.

FLOOR INSERT - Inlaid between the longitudinal runners the manufacturer shall install a 2.75 inch thick dense composite core panel. This panel shall be laminated with an aluminum structure utilizing .090 aluminum on the top and .063 aluminum on the bottom.

INSTALLATION - The composite floor panel shall be installed flush with the top of the longitudinal channel structure. The composite insert shall be secured in place with a two part self-etching, high-strength epoxy and in addition will be drilled, countersunk and tapped in to each transverse sub floor structure. All other open areas of the exposed sub floor not being filled by compartments or wheel wells shall have the same composite floor panel material installed to fill the openings. All seams and the entire perimeter of the sub floor shall be completely sealed with Sikaflex sealant adhesive or a spray-in-place foam material to create a watertight, dust free environment.

The manufacturer shall install a full length 1/8" closed cell, expanded core PVC panel on top of the composite floor insert. The PVC shall create a smooth environment for installation of the interior floor material.

INTERIOR CONSTRUCTION

The interior cabinet construction shall be aluminum and PVC and will include the following aluminum materials:

Interior Cabinets
Wall Thickness = .090"
Alloy = 5052-H32

Interior Module Wall Panels
Wall Thickness = .188"
Material-PVC

Interior Cabinet Shelves

Shelf Thickness = .063"
Alloy = 5005-H34

Cabinet Access Panels
Wall thickness= .125"
Material= PVC

All upper band cabinet door frames shall consist of rigid, heavy duty, extruded aluminum glass frame. The rigid design of the frame extrusions and corner assemblies on the restocking doors will reduce twisting of the frame structure. The door frames will be held closed with slam latches and the felt track design does not require adjustment.

In order to decrease the risk of accumulation or exposure to fluid borne pathogens, any areas around the interior that have the potential for fluid accumulation shall be seam sealed with silicone or equivalent type material that will prevent the possible accumulation of fluid borne pathogens.

All cabinet and wall panel aluminum trim included shall be Gray anodized. All protective corner trim shall be Opaque and will include a matching domed end cap.

The frames of the street side upper band cabinets shall be hinged with full length, piano hinge. The frame shall be hinged on top and be equipped with pneumatic hold opens on each side, with one (1) interior positive catch bottom center. This shall enable the entire face frame with sliding Plexiglas doors to be opened for easier cleaning and restocking of the cabinets. The gas shocks shall be of sufficient strength to automatically lift the cabinet door frame without any aid and hold in the open position.

The flat wall panels on the curbside above the squad bench and above the CPR side seat shall be constructed of a PVC material to help insulate the patient compartment.

3 - MODULE EXTERIOR Y N___

3. MODULE EXTERIOR

UNDERCOATING Y___N___

Undercoating Module (STANDARD) Y___N___

3.2 UNDERCOATING

The entire underbody (excluding drive shaft, wheels, fuel tank and 12 inches either side of exhaust system) shall be sprayed with Transcoat 161 undercoating for rust prevention, corrosion protection and added sound deadening. The material used shall be a low VOC product that meets MIL Spec MIL-C-62218A and will remain flexible but tack-free.

Bidder Complies YES_____NO_____

EXTERIOR MODULE CONSTRUCTION Y___N___

Exterior Module Construction Specifications Y___N___

3.3 EXTERIOR MODULE CONSTRUCTION

The structural framing of the roof and side walls shall consist of 2" x 2" x .125", 6061-T6511 aluminum structural tubing, firmly affixed to the body side skin with extreme acrylic bonding tape. Each frame member shall be independently welded at each intersection point with a minimum 4" of weld. The lateral spacing of framing members shall be a maximum average of 13" on center for superior strength throughout.

The entire exterior module shall be constructed of .125" x 5052-H32, corrosion resistant sheet aluminum. The module side wall, front and rear wall panels shall each be CNC cut and machine formed to provide a seamless sidewall. They shall be independently box pan formed components assembled to form an interlocking, integral structure that is interval stitched welded and Plug welded along the formed web and at alternating intervals along the full length of each internal flange and along each external seam independent of the side wall structural framing. The construction process shall produce a clean, unbroken surface that provides seamless sidewalls with transition seams at the front and rear of the streetside and curbside walls providing an environment that is designed to eliminate unnecessary exposure, prevent oxidation and corrosion and promote the long term integrity of the ambulance body and finish.

Each sidewall shall be manufactured in an environment designed to prevent the waviness that can occur during the assembly process. The formed module side, front and rear wall panels shall be securely welded to the 2" structural framing at the top and bottom where each individual framing member comes in contact with the box pan formed flange.

In addition to the welding, a high strength extreme acrylic bonding system shall be utilized throughout, providing for a rivet less exterior, free of warping which can occur when exterior sheeting is welded to the structural tubes. The bonding tape shall be a closed cell foam with visco elastic properties that help absorb dynamic body stresses.

Prior to application of the bonding tape all aluminum surfaces must be cleaned with an alcohol cleaner. Each of the side, front and rear walls shall be assembled and compression applied per the requirements of the adhesive manufacturer to provide proper adhesion and to produce a smooth, flat exterior surface eliminating side wall waves on the finished product.

The manufacturer must complete the installation process by applying the adhesive manufacturer's required compression PSI to insure proper adhesion. The manufacturer shall supply documentation detailing the mechanical properties and bond strength.

The roof framing structure shall be 2" x 2" x .125" 6061-T6 structural tubing spaced at a minimum of 12" on center and welded at each intersection and to the roof radius extrusion flange at every contact point. The ceiling shall be configured and constructed so that there is aluminum frame and support material to accommodate all of the ceiling mounted fixtures. The roof structure shall include two separate plenums that are integrated into the structural design and run two thirds the length of the roof. One plenum is used to provide even distribution of conditioned air throughout the patient compartment. In order to support the efficient and effective performance of the system and to prevent the build-up of condensation inside, the interior of the plenum will be completely insulated with a reflective barrier insulation material.

The additional plenum provides a permanent, stable mounting environment for lighting, oxygen outlets, IV hangers, antenna access. The overall roof structure shall incorporate a 3/4" crown to reduce vibration and prevent water pooling on the module roof.

The perimeter frame of the roof shall consist of a 3" x 3" x .125 inch radius extrusion that has vertical triple wall webbing for superior strength. This extrusion shall be securely fastened, and stitch welded and plug welded to the wall and ceiling structural framing. The design of this extrusion shall be such that it incorporates a flange similar to the box pan formed construction technique to ensure that the construction and fastening technique remains consistent throughout the module build process.

Inlaid into each of the upper four (4) corners of the module shall be aluminum corner caps. The corner caps shall be stamped out of the identical alloy material as the module side walls. Corner caps made of cast aluminum shall not be acceptable due to the inferior quality of the metal used for casting. The corner caps shall be continuously welded and ground smooth to provide a smooth, seamless transition at each corner whose appearance is as one continuous surface. The corners must be completely filled with weld material, bondo or other types of cold fillers are unacceptable.

The module roof shall include a single sheet of .125" x 5052-H32 aluminum. This roof sheet shall be attached to the welded roof structure with Acrylic VHB tape and incorporate a continuous, full perimeter weld to the roof radius extrusion to provide a permanent weatherproof seal and to enhance the structural design of the modular structure. The weld around the perimeter of the roof skin shall be ground to provide a uniform transition around the perimeter of the roof material.

To minimize the effects of the long term stress cycles exerted on the modular structure, the manufacturer shall provide additional welding in areas of high stress concentration in the module. As a minimum, these areas shall be plug welded along the four vertical corners where the corner panel meets the modular body panel. There shall be additional welding on inside corners of the rear entrance door opening, body panel seams and areas around the perimeter of the door jambs where the jamb extrusions and wall structure intersect.

To enhance the structural integrity of the modular structure, the manufacturer shall provide additional interior wall plates and structural tubes across rear header and side walls to reduce long term stress in these areas.

To eliminate the potential for seam seal cracks or the appearance of any sidewall body cracks, the manufacturer shall provide single piece front, rear, and side body panels.

Module Roof Radius, 3" High (STANDARD) Y___N___

The perimeter frame of the roof to consist of a 3 inch high x 1-1/2 inch radius extrusion securely fastened and welded to the wall and ceiling structural framing. The roof extrusion to be fully enclosed and include vertical center supports.
(STANDARD ON ALL MODULES)

Extreme Bonding Tape (STANDARD) Y N___

Exterior wall panels and roof sheet to be bonded to the tube structure with 3M extreme bonding tape. (STANDARD)

Sub-floor Gusset Supports (STANDARD) Y___N___

Fabricated gusset supports to be added for extreme structural integrity. Gussets to be welded into place where the sub-floor structure meets the vertical wall tube structure.
(STANDARD)

One Piece Side Body Panels (STANDARD) Y___N___

Each side of the module shall be fabricated out of single sheet wall panels. There will be no body seams above the side and rear entry doors opening. (STANDARD)

Reinforce Rear Header (STANDARD) Y___N___

Plates and structural tubes are added across rear header and side walls to reduce long term stress in these areas.(STANDARD)

Single Sheet Module Roof Sheet (STANDARD) Y___N___

The module roof to be a single sheet of aluminum and will have full perimeter weld to the roof radius extrusion to provide a permanent weather proof seal and to enhance the structural design of the modular structure.(STANDARD)

DROP SKIRTS Y_ N___

Drop Curbside Fwd Body Skirt, 5", Add Double Step, Light Duty Chassis Y___N___

DROP SKIRT - CURBSIDE
The manufacturer shall drop the lower body skirt along the curbside of the module ahead of the rear wheel well at the bottom of the module by approximately 5". This shall lower the height of the side entry step and provide easier access through the side entry door. Increase the depth of stepwell inboard as far as sub structure permits. Side surfaces to be Diamond Plate. Step surface to be a combination of NFPA Diamond Plate and removable 9" Grip Strut insert. The second step to be fabricated of NFPA Diamond Plate and installed so that the step surface is midway between the stepwell floor surface and the module floor surface making two equal steps into the vehicle.

FUEL FILLS & SPLASH PLATE Y N___

Housing Fuel Fill , Pocket, Round Y___N___

FUEL FILL

The vehicle shall be equipped with a cast aluminum fuel fill bezel.

Composite Floor Pan, 1" Thick Y___N___

Inlaid between the longitudinal runners the manufacturer shall install a 1 inch thick composite core panel. This panel shall be a formed aluminum structure utilizing .090 aluminum on the top and .063 aluminum on the bottom. Running full length from the front to the back shall be two (2), .125" x .75" 5052-H32 single piece, formed aluminum "C" channel support members for additional strength at the cot and attendant seat mounting locations. This support member shall be an integral part of the composite floor design.

Composite Floor Material Y N___

The assembled aluminum floor core panels shall be high density expanded polystyrene shall be adhere to the aluminum structure creating enhanced structural strength to the subfloor system. The total 'R' value of the composite panel shall be R12 and the panel shall have a 20 decibel noise barrier. This panel shall run the full length of the module with no seams in the surfacing material.

Sub-Floor Assembly, Installation Y N___

The composite floor panel shall be installed flush with the top of the longitudinal channel structure. The composite insert shall be secured in place with a two part self-etching, high-strength epoxy. All other open areas of the exposed sub floor not being filled by compartments or wheel wells shall have the same composite floor panel material installed to fill the openings.

All seams and the entire perimeter of the sub floor shall be completely sealed with Sikaflex sealant adhesive or a spray-in-place foam material to create a watertight, dust free environment.

Sub-Floor Assembly, 1/8" PVC Y___N___

The manufacturer shall install a full length 1/8" closed cell, expanded core PVC panel on top of the composite floor insert. The PVC shall create a smooth environment for installation of the interior floor material.

MODULE ENTRANCE Y N___

Module Access, CS Door standard location Y___N___

3.5 MODULE ACCESS

The module shall include one side entry door on the curb side of the module, and one set of double doors for entry to the rear of the module. The curb side door shall provide a clear opening that is approximately 30" W x 70"H. The rear double doors shall provide a clear opening that is approximately 50"W x 60"H.

Entry Doors-Sliding Side Entry, Hidden Hinge Rear Fail Safe per ENG design Y___N___

3.6 MODULE ENTRANCE DOORS

The door and jamb design retain the benefits and features of the traditional side hinged door. the significant additional benefit is the doors capability to open and slide parallel with the ambulance body while remaining no more than 6” off of the side panel. this eliminates the traditional 32” door swing potentially into a traffic way or possible blocked egress in a confined environment. The door/jamb shall retain standard rotary latch and cage nut with “Fail Safe" feature, vertical actuator rods/adjustments accessed and maintained as standard. The upper and lower trolley mounting brackets are formed, welded 1/4" steel plates gusseted for strength and designed with adjustability by way of vertical and horizontal slots at all bolt points.
Brackets are bolted to the door through ¼” backing plates using 3/8” x 1 ½”, grade 8, bolts, lock washers and nuts. The trolley brackets shall be mounted to the upper and lower forward corners of the door frame. The upper header pan shall be designed to wrap the upper jamb providing a consistent location critical for precise hardware installation. The upper track shall be mounted by way of mounting angle clips thru bolted through the header with 3/8” grade 8 hardware. Pre punched hole locations provide positive track geometry.
The lower track shall be mounted in a modified stepwell, utilizing the exact installation hardware and geometry noted in the header description. Since the stepwell requires full width and depth for proper ingress and egress, the track is located under a removable non slip panel. This assembly is structurally supported to alleviate flex and add accessible for routine maintenance and cleaning. the interior door handle shall be a pushbutton handle. This pushbutton interior handle actuates the rotary latches to open, also releases safety hold open catch to close door. This function is through a sheathed cable from handles to catch device, located at top of door. Rubber bumper blocks are located in the ends of each track section. these are located to synchronize with the hold open

safety catch, latching the door in the open position just as the trolleys contact the stop blocks. This system eliminates the hard jarring action associated with rapidly opening and releasing the door. There shall be a matched set of pins located on the forward vertical door edge slide into slotted receptacles milled into the jamb extrusion. Nylon wedged blocks secures the front of door during the closing process. The pins are mounted by way of captive cage nuts, identical to those used on the nader pins. A stainless steel surround dresses out the door opening and provides the perimeter bulb gasket mounting surface. this seal provides a secondary gasketing method around the area of the jamb where the mid body track and trolley penetrate the primary gasketing. The required door pass thru of 30" is maintained from the gasketed edge of this housing to the forward gasket on the inner jamb.

The electrical functions of the sliding door are easily accessed by way of a removable header trim panel/ head bumper. standard door ajar requirements are met with contacts mounted fore and aft inside the header pan. The contact is broken as the door opens actuating the ajar signal. upon reaching the latched open position, contacts actuate a series of led warning lights recessed into the rear vertical door edge. this provides a " heads up" warning to passing motorists. The hold open safety catch, latching the door in the open position just as the trolleys contact the stop blocks. This system eliminates the hard jarring action associated with rapidly opening and releasing the door. There shall be a matched set of pins located on the forward vertical door edge slide into slotted receptacles milled into the jamb extrusion. Nylon wedged blocks secures the front of door during the closing process. The pins are mounted by way of captive cage nuts, identical to those used on the nader pins. A stainless steel surround dresses out the door opening and provides the perimeter bulb gasket mounting surface. this seal provides a secondary gasketing method around the area of the jamb where the mid body track and trolley penetrate the primary gasketing. The required door pass thru of 30" is maintained from the gasketed edge of this housing to the forward gasket on the inner jamb. The electrical functions of the sliding door are easily accessed by way of a removable header trim panel/ head bumper. standard door ajar requirements are met with contacts mounted fore and aft inside the header pan. The contact is broken as the door opens actuating the ajar signal. upon reaching the latched open position, contacts actuate a series of led warning lights recessed into the rear vertical door edge. this provides a " heads up" warning to passing motorists. A Whelen 18LED Strip light will activate along the underside of the stepwell, orientated toward the ground providing a clear view of potential obstacles on the ground.

Hold Open Rear Door, Polished Cast Aluminum, Pin & Slot Style Y_ N___

The rear doors shall have polished cast aluminum hold-open devices with high-density rubber replaceable inserts mounted on each side. These devices shall hold the doors in a fully opened 135 degree position. To eliminate long-term stress due to opening and closing of the rear doors, hold open devices mounted to the module surface shall be bolted through the module skin and into the structural framing of the rear wall. Hold open devices mounted to the doors shall be installed with 1/4" x 20 stainless steel machine screws with a support washer and nylon lock nut on the interior surface. Screw attachment of these hold open devices shall not be acceptable.

Rear Entry Door Handles, Trimark Logo Chrome/Black(includes interior handle) Y N___

The rear module entrance doors shall be equipped with two point, flush mounted TriMark paddle handles. The handle shall be designed with a floating cam so when the doors are locked no stress will be placed on the door rod linkage when the paddle handle is operated. The handle housings shall have a die cut rubber gasket separating the paddle handle from the door. The surface finish of the handles and the handle housing shall provide a polished chrome, bright finish. The paddle handles and housings shall be tested for adhesion, chemical resistance, salt spray, abrasion and accelerated weathering. All springs shall be made of pre-galvanized zinc music wire. Pivot plate and lock cam washer are zinc plated and coated with clear chromate.

All compartment and module entry door paddle handles shall be keyed alike. The paddle latches mounted in each locking door shall include a double cut, non-directional tumbler assembly designed to accept a key that does not require a specific orientation for actuation. Single cut tumbler assemblies that require a specific orientation for operation are not acceptable.

The rear module entrance doors shall be equipped with TriMark rotary latches constructed of high strength, heat treated, steel latch components. Rotor and latch shall be coated with a solid film lubricant, springs made of 302 stainless steel, and components zinc plated with Clear chromate. There shall be removable access plates on the interior of the door to gain access to the rotary latches.

All rotary door latches shall engage Nader pin striker posts made of high strength steel, plated with clear chromate and inserted through a synthetic isolation washer designed to prevent corrosion around Nader pins. The Nader pins shall have a shoulder to prevent the latch mechanism from being pulled over the top of the pin in a dynamic crash situation. The Nader pins shall be fastened with a securing nut designed to function like a blind fastener, allowing the Nader pin to be adjusted and re-tightened without having to access the nut.

All of the internal door hardware, paddle handles and latches, shall be sprayed with a petroleum based lubricant material. "NO EXCEPTIONS"

The interior side of the rear module entrance doors shall include a polished chrome TriMark flush mount interior paddle handle with the same specifications as the exterior paddle handles. The interior door assembly shall include a locking lever for the side entrance door and the curbside rear locking door. The street side rear door shall include a matching, non-locking TriMark paddle handle. All of the interior door paddle handles shall be mounted on removable, laminated aluminum panels designed for accessing, servicing and adjusting the paddle handles.

The rear module entrance door switches shall incorporate magnetic proximity switches that will activate specified module interior lighting when the side or rear entry doors are opened and will activate a flashing indicator light in the driver's control panel when the doors are opened. When open, the rear doors shall activate the rear load and back-up lights. The curbside scene lights

shall be activated when the curbside module entrance door is opened. The switch utilized shall be a magnetic proximity switch that requires no maintenance and is easily accessible for replacement. The magnetic switch shall be a heavy-duty, industrial type with a minimum of a 3 amp rating.

Door Lubrication, Paddle Handles and Latches (STANDARD) Y N___

All of the internal door hardware, paddle handles and latches, shall be sprayed with a petroleum based lubricant material. "NO EXCEPTIONS"

Magnetic Entry Door Switches (STANDARD) Y___N___

The module entrance door switches shall incorporate magnetic proximity switches that will activate specified module interior lighting when the side or rear entry doors are opened and will activate a flashing indicator light in the driver's control panel when the doors are opened. When open, the rear doors shall activate the rear load and back-up lights. The curbside scene lights shall be activated when the curbside module entrance door is opened. The switch utilized shall be a magnetic proximity switch that requires no maintenance and is easily accessible for replacement. The magnetic switch shall be a heavy-duty, industrial type with a minimum of a 3 amp rating.

Door Panel Mounting Screws (STANDARD) Y N___

The interior door panels for all entrance doors will utilize the automotive style spring clips mounted to the door frame. The interior door panels will be held in place with 10-24 X 3/4" stainless steel machine screws. Screws will be rubber backed and treated with thread locking material pre-applied by the screw manufacturer to prevent loosening from long term vibration.

Coil Cords for Electrical Circuits (STANDARD) Y N___

The manufacturer shall provide coil cord cables to enable electrical devices to be installed on the side and rear entry doors. The coil cords will be secured at both ends (on the door and at the adjacent wall) with plastic inserts designed to provide an effective, stable mounting point to prevent chafing, and to promote the long term reliability of the function it supports.

Power Door Locks, Module Entry Doors,w/Hidden Switch Y N___

POWER LOCKS - ENTRY DOOR

This vehicle shall be equipped with power door locks. They shall be for patient access doors only and shall lock and unlock manually with the switch at each patient access door or cab door lock. There shall also be a hidden license frame switch for the unlock function. This option does not include a wireless remote.
Note: Hidden switch can be moved to different location.

Inner Door Panel - Stainless Steel , Two Piece (STANDARD) Y N___

INTERIOR DOOR PANEL - The interior finish of the entry doors shall be stainless steel, 2 piece design for ease of serviceability.

Lock Boxes, White Diamond Grade Y___N___

LOCK BOXES - The lock boxes for the interior door handles are to be covered with White Diamond Grade reflective material.

SIDE DOOR STEP Y___N___

Side Entry Step Well, Increased Depth, Diamond Plate Upper & Lower step Y___N___

3.8 SIDE DOOR STEP

Increase the depth of stepwell inboard as far as sub structure permits. Side surfaces to be Diamond Plate. Lower step surface to be NFPA Diamond Plate Sweep Out. The "Sweep Out" step to be 1/4" above top of weather strip with a 45 degree chamfered edge. The floor shall be supported with rigid foam floor insulation in the same manner as the module floor.

The Second step to be fabricated of aluminum diamond plate and installed so that the step surface is midway between the stepwell floor surface and the module floor surface making two equal steps into the vehicle.

Light, Side Entry Step well, LED, Whelen OS Mini, Clear Y N___

There shall be a Whelen OS Mini LED light, 45 degree, installed in the curbside stepwell to automatically light when the side entrance door is opened.

WINDOWS Y___N___

Module Window Requirements Y___N___

3.9 WINDOWS

All windows shall be from the same window manufacturer and shall use safety glass with black aluminum extruded frames inside and out. Windows shall meet and incorporate the required stamp and serial number per F.M.V.S.S. regulation #571.205.

WINDOW- Side Entry Door Y___N___

Window, Side Entry Door, 18X18, Slider - Standard Glass Y_ N___

Side entry door shall include an 18"W x 18"L sliding tinted safety glass window with a positive latch and screen.

WINDOW - Rear Entry Doors Y___N___

Window, Rear Entry Doors, (2) 18 x 24, Fixed, Standard Glass Y___N___

Rear entry doors shall each include an 18"W x 24"L fixed tinted safety glass window.

MODULE TO CHASSIS MOUNTING SYSTEM Y___N___

Module to chassis mounting system, Additional Duty Type III (12) Y___N___

3.10 MODULE TO CHASSIS MOUNTING

The module shall be mounted to the chassis frame at not less than twelve (12) tie down locations. Each mounting location shall consist of a high density, polyurethane doughnut, securely bolted to the OEM manufacturer's frame. On top of these doughnuts shall be bolted not less than five (5) 1 inch thick aluminum sill mounting plates, measuring 3 inches wide, extending from just behind the cab and extend to the wheel well area and the wheel well area to the back of the chassis frame. The module sub floor tube structure shall rest on top of the sill mounting plates and after the module being square with the chassis the sub floor structure shall be welded in position.

Cab to Module Attachment, Type III Y N___

3.11 CAB TO MODULE

The module shall be attached to the cab by a minimum of 15 - 3/8" x grade 8 bolts with washers and nylon lock nuts. A minimum 30 percent of the connecting bolts shall go through a structural channel of the module. Where a bolt does not go through a structural member it must be backed by a 1-1/4" fender washer. The

module to cab connection undergoes a great deal of stress, therefore this cab to module connection is considered critical and exceptions will NOT be allowed to the number of connection bolts used or method of connection.

The cab module connection shall incorporate a double rubber seal. On the interior cab flange where the connection points are located there shall be a minimum 2 inch x 1/4 inch closed cell foam seal to compensate for irregularities in the cab flange, to prevent moisture from accumulating around the connection points and to minimize electrolytic corrosion. At the point where the cab meets the module shall be a separate neoprene weatherproof gasket to minimize electrolytic corrosion and provide a water tight seal.

REAR BUMPER AND REAR STEP CONSTRUCTION Y N___

Rear Bumper, Recessed 9" Pocket, Flip-up Y___N___

3.12 BUMPER AND REAR STEP

The rear bumper frame shall be all steel, welded construction. The frame members shall be made of 4" x 1-3/8" steel 'C' channel, 6" x 2" steel 'C' channel, 2" x 2" steel tube and 3" x 1-1/2" steel angle. The bumper shall be bolted to the OEM chassis frame rails.

There shall be a full width, one piece polished aluminum diamond plate kick plate installed above the rear step bumper and below the rear entry doors. The kick panel shall be sealed along the top and both ends with a continuous bead of Sikaflex sealant adhesive.

All steel rear bumper frame members to include isolation material between the steel frame and the aluminum bumper pods. Frame to have rubberized Scorpion polyurethane coating applied to prevent rust.

To support lifting safety and provide optimum cot loading space at the rear doors of the vehicle, the rear bumper shall be a flip up recessed pocket design. The 9" grip strut center section of the bumper shall flip up into a recessed pocket in the rear diamond plate wrapper. The recessed pocket shall be finished in polished diamond plate to match the wrapper and shall be deep enough to make the flip section of the bumper flush with the outside of the vehicle when in the up position.

There shall be eye beam constructed skid plates with tow eyes mounted as part of the frame of the bumper. Bumper

Pods, CPI Cast Aluminum w/RR Logo. (UM & UM-150) Y N___

The rear outboard bumper pods shall be CPI cast aluminum with high polish finish, formed with manufacturer Logo embossed in the cast pattern on the step tread.

INSULATION Y___N___

Whisper Quiet, Sound Dampening/Thermal Insulation Package Y___N___

3.13 INSULATION

The module interior walls, roof and doors shall be insulated to enhance the interior environment and minimize the conduction of heat, cold and external noise from entering the module. The wall and ceiling insulation shall be a non-settling, 2 inch thick, self-extinguishing polystyrene foam planking.

There shall be 3M brand acoustical Thinsulate installed over all exterior compartments and wheel wells for added acoustical insulation.

In addition to the polystyrene foam planking, the ceiling shall include a layer of 1/2 inch closed cell foam rubber padding installed prior to the vinyl ceiling material. The foam and vinyl shall provide additional safety and insulation.

There shall be a single layer of 3M Thinsulate insulation between the OEM head liner and the cab roof to reduce noise.

The patient compartment entrance doors and the exterior compartment doors shall have 2 in. thick, self-extinguishing polystyrene foam insulation. The foam shall be glued to the interior and exterior panel.

The interior walls of the module shall be insulated with 1" polystyrene block foam insulation installed between the extruded structural framing. Wall areas that are too irregular for 1" block foam insulation, or where the block foam will interfere with wall outlets and wire chases, are to be insulated with 3M brand acoustical Thinsulate insulation. After the foam is installed, the entire interior of the unit shall be wrapped with 5/16" foil wrapped two sides radiant barrier foam style insulation to enhance the thermal and acoustical properties of the modular unit. The wheelwell and interior compartment wall areas shall be wrapped with Barymat sound proofing material installed under 3M brand acoustical Thinsulate insulation and the underside of the module floor will be coated with a Dow Chemical two part spray in place acoustical/thermal polyurethane insulation. This package provides an enhanced thermal/acoustical insulation package designed to provide an extremely quiet, environmentally efficient patient compartment.

<u>Reflective Barrier/Barymat/Spray Foam Thermal Insulation Package:</u>

A. Reflective Barrier - Low-E Foil Wrapped Insulation System - The module walls shall be insulated with high density 1" block foam. Wall areas that are too irregular for 1" block foam insulation, or where the block foam will interfere with wall outlets and wire chases, are to be insulated with 3M brand acoustical Thinsulate insulation. Then the entire interior of the module shall be wrapped with 1/4" Low-E foil wrapped radiant barrier foam style insulation.

B. This radiant barrier material will cover the following:
   - Full ceiling and wrapping over the corner radius and down the sidewall
   - Full side, front and rear walls from the top of the wall to the lowest possible point along the side, front and rear walls

- Seams to be taped with silver / foil ducting tape to secure seams.

C. Barymat sound deadening insulation over wheel wells and interior side of exterior compartment walls. (Installed under 3M brand acoustical Thinsulate insulation).

D. Spray foam underbody insulation prior to undercoat application, full subfloor coverage where applicable. Includes curbside step well area.

ELECTROLYSIS PREVENTION Y___N___

Electrolysis Prevention, Fluid Film Y___N___

3.14 ELECTROLYSIS PREVENTION

All external materials and fasteners shall be chosen to prevent electrolysis and corrosion due to dissimilar materials, exposure to the elements and moisture entrapment.

Rubber, plastic or Mylar insulating material shall be installed under all lighting, all exterior compartment and entrance door handles, exterior door hinges, rear door hold opens, fuel filler, crash rails, windows and between the cab and module.

Additionally, all exterior components fastened or attached to the module, anything that breaks or has the potential to break paint shall incorporate the use of Fluid Film brand anti-corrosion and electrolysis prevention material. The manufacturer must use the patented Fluid film product; an equivalent substitute will not be acceptable. This product is available to any and all manufacturers and has proven itself in the emergency and fire industries. Product must be applied per the application guidelines.

To prevent long term electrolytic paint corrosion all components to be mounted on the module exterior shall be cut out prior to painting. All exterior fasteners used to mount emergency lighting to the outside of the module shall be completely isolated from the painted module by using a nonferrous collapsible blind insert that is reusable.

Crash rails and fender rings shall be secured to the module body utilizing an attachment method that does not use dissimilar metals.

COMBINATION RUB RAIL AND FENDER RING Y N___

Rub Rail, Skirt Line Only, NO Fender Ring Y___N___

3.15 COMBINATION RUB RAIL AND FENDER RING

There shall be lower body Rub Rail/Crash Rails constructed of Black extruded rubber. The rubber rub rail will be mounted to an aluminum extrusion for added strength and will stand off the exterior body utilizing nylon spacers and held into position by through bolt fasteners this provides a gap between the rub rail and the exterior body, reducing any opportunity of corrosion. At each end of the rub rail there will be polished aluminum end caps. This rubber material shall be highly resistant to weather extremes, road salts, and other chemicals.

Lighting LED Strip, Kinequip, In Standard Rubber Crash Rail Y N___

3.15.1 LIGHTING FOR COMBINATION RUB RAIL AND FENDER RING

There shall be Kinequip LED strip lighting designed to fit into the extruded rubber crash rails.
The lights shall be wired to come on with the compartment door adjacent to that area and increase the visibility of the unit at night. The lights will also be connected to the emergency warning system and flash when the warning lights are energized.

Fender Flare, Polished Alum, Sliding CS door, Dropped Skirt CS, up to 19.5" Y N___

The fender rings of this vehicle shall be polished aluminum. For sliding door application.

SPLASH GUARDS AND RUNNING BOARDS Y___N___

Running Boards, Diamond Plate, E-Series Y___N___

3.16 RUNNING BOARDS

Running boards shall be provided on both sides of the vehicle. The running board shall be made of .125 inch NFPA compliant aluminum diamond plate and will be 8 inches wide in front and flared out to provide a 14 inch width at the rear. Diamond plate splash guards shall also be provided measuring approximately 8 inches wide x 14 inches high and shall be welded to the ends of the running boards. This assembly shall be securely mounted to the cab with stainless steel 1/4 inch x 20 hex head bolts. ECK brand material must be applied to prevent electrolysis at mounting locations.

Mud Flaps, Rear, Black w/ Manufacturers Logo Y N___

3.16.5 MUD FLAPS

Mounted behind the rear dual wheels shall be heavy duty commercial type mud flaps. They shall be installed in such a manner as to not come in contact with the exhaust pipe and shall be bolted on with 1/4" x 20 stainless steel bolt assemblies for ease of replacement.

Drip Rails, Lighted Drip rails, Between Upper side markers, 170" Module Y N___

3.17 DRIP RAILS

There shall be Drip Rails installed on the upper four side of the module that are removable. The upper driver's side and passenger side drip rails are to incorporate RED and WHITE LED Lights in a single row of lights and be angled downward at 13 Degrees between the standard upper side marker lights

The RED/WHITE LED's are too flash alternately (200 FPM) RED then
WHITE and shall come on with 'Master Emergency' and will include
a cut-out switch labeled 'AUX C/O' in the front switch panel. The
cut-out switch will disable the RED/WHITE LED's when alternate flashing.
STEADY BURN FUNCTIONALITY:
The WHITE LED's are to steady burn to act as perimeter lighting when vehicle is in 'Park' and
module power is 'On' and also includes a
switch labeled 'Ground Light' in the front switch panel to activate
when vehicle is in 'Park' and module power is 'On'.
To also activate when a corresponding compartment door or entry
door is opened and illuminate the ground area below the vehicle.
- If the rear entry doors are open the rear most drip rail white lights
on both sides of the module will light.
- If the #1, #2, exterior compartment door is opened the WHITE LED's in the center and forward sections of lights in street side drip rail will light.
- If the #4 exterior compartment door is opened the WHITE LED's in the center and rearmost sections of lights in street side drip rail will light.
- If the #6 exterior compartment door is opened the WHITE LED's in the center and rearmost sections of lights in curb side drip rail will light.
- If the Curb side entry door or #8 exterior compartment door is opened the WHITE LED's in the center and forward sections of lights in curb side drip rail will light.
When the vehicle is placed in gear the courtesy/perimeter lights will cut out.

Wheel well liners Y N___

3.18 WHEEL WELL LINERS

There shall be full wheel well liner protection plates in each rear wheel well extending down to the bottom of the skirt. Chassis manufacturer's wheel and jounce clearance must not be violated.

CAB TO MODULE ACCESS Y___N___

3.19 CAB TO MODULE ACCESS

Cab to Module, Walk Through Door Y___N___

WALK THOUGH DOOR / FLUID DAM

The cab to module walk-through shall have a clear opening measuring approximately 46"H x 17"W. The hinged door shall be self latching in the open or closed position with the actuator latch being on the cab side. The door shall contain a clear safety glass window, providing a minimum 200 square inches of viewing. The overall door height shall accommodate a fluid dam.

Cab to Module, Fluid Dam Y N___

Install a partition at the floor level in the module to prevent fluids from contaminating the cab. The walk through floor will be fully sealed to prevent contamination.

LICENSE PLATE HOLDER Y___N___

3.20 LICENSE PLATE HOLDER

Rear License Holder Location, C/S Above Rear Kick plate Y___N___

- Location: The license plate frame shall be installed on the curbside rear module body above the diamond plate.

EXTERIOR COMPARTMENT CONSTRUCTION Y___N___

4. MODULE COMPARTMENTS

4.1 EXTERIOR COMP/ MENT CONSTRUCTION

Exterior Compartment Const ruction, Heavy Duty Y___N___

All compartment sidewalls and ceilings shall be constructed of .125" x 5052-H32 aluminum. Compartment floors shall be constructed of .125" x 5052H32 aluminum that is raised to provide a smooth sweep out floor. The complete formed and welded compartment assemblies shall be securely welded to the sub-floor structure and sidewall structural framing of the module. All compartment construction joints that are not sealed by weld shall be sealed with an automotive grade seam sealer before final finishing of the compartments.

Module exterior compartment door jambs shall be .125" x 5052H32 extruded aluminum. The door jamb extrusion shall have four corner keys installed and each corner shall be fully welded as a square assembly. The extrusion shall not have a tapered flange that overlaps the body and shall also have a flange with a smooth mating surface for the air cell hollow core, compression door seal that is applied to the door. There shall be a 2" x 2" door frame around the full

perimeter of the door opening to provide a structural foundation for the door jamb. The door jamb assembly shall be welded to the compartment framing.

Door Sill Protection, Stainless Steel. Y___N___

The manufacturer shall install a stainless steel door sill protection on the lower outside edge of all exterior entry and compartment door frames to prevent damage caused by entering or leaving the vehicle or when accessing or replacing equipment.

EXTERIOR COMPARTMENT DOORS Y N___

4.2 EXTERIOR COMPARTMENT DOORS

Compartment Door, Hidden Hinge, Seal on Door Y___N___

4.2. EXTERIOR COMPARTMENT DOORS

Module exterior compartment door jambs to be extruded aluminum with no visible door jamb flange that overlaps the exterior wall skin. The exterior compartment doors to be single box pan formed door skin with reinforced extruded aluminum door frame.

The hinge shall have a 3M Urethane closed cell barrier tape between the hinge and door jamb. The area between the stainless steel hinge and the painted door and jamb surfaces shall also be treated with anti-corrosion, electrolysis prevention material. The product must be commonly available to any and all manufacturers and have proven itself in the emergency and fire industries. The material must be applied per the manufacturer's application guidelines.

The exterior compartment doors shall be mounted in such a manner that when the doors are closed the stainless steel hinge is completely hidden behind the door skin. The design of these doors imitates smooth, flush fitting doors commonly found in the automotive industry.

Polystyrene foam planking insulation between the outer skin and the interior door panel. Weather stripping to be secured to the door so that the latching system is protected from the elements.

The compartment doors shall be equipped with TriMark rotary latches constructed of high strength, heat treated, steel latch components. Rotor and latch shall be coated with a solid film lubricant, springs made of 302 stainless steel, and components zinc plated with Clear chromate

All rotary door latches shall engage Nader pin striker posts made of high strength steel, plated with clear chromate and inserted through a synthetic isolation washer designed to prevent corrosion around Nader pins. The Nader pins shall have a shoulder to prevent the latch mechanism from being pulled over the top of the pin

in a dynamic crash situation. The Nader pins shall be fastened with a securing nut designed to function like a blind fastener, allowing the Nader pin to be adjusted and re-tightened without having to access the nut.

All of the internal door hardware, paddle handles and latches, shall be sprayed with a petroleum based lubricant material. NO EXCEPTIONS

The module compartment door switches shall incorporate magnetic proximity switches that will activate specified module compartment interior lighting when the compartment door is opened it will activate corresponding interior compartment light and activate a flashing indicator light in the driver's control panel when the doors are opened. The switch utilized shall be a magnetic proximity switch that requires no maintenance and is easily accessible for replacement. The magnetic switch shall be a heavy-duty, industrial type with a minimum of a 3 amp rating.

Compartment Handles, Exterior, TriMark Logo Chrome/Black (UM) Y N___

The exterior compartment doors shall be equipped with two point, flush mounted TriMark paddle handles. The handle shall be designed with a floating cam so when the doors are locked, no stress will be placed on the door rod linkage when the paddle handle is operated. The handle housings shall have a die cut rubber gasket separating the paddle handle from the door. The surface finish of the handles and the handle housing shall provide a polished chrome, bright finish. The paddle handles and housings shall be tested for adhesion, chemical resistance, salt spray, abrasion and accelerated weathering. All springs shall be made of pre-galvanized zinc music wire. Pivot plate and lock cam washer are zinc plated and coated with clear chromate.

Compartment Handle, TriMark Logo Chrome/Black, Paddle, Street side, locking Y N___

The exterior compartment doors shall be equipped with two point, flush mounted TriMark paddle handles. The handle shall be designed with a floating cam so when the doors are locked , no stress will be placed on the door rod linkage when the paddle handle is operated. The handle housings shall have a die cut rubber gasket separating the paddle handle from the door. The surface finish of the handles and the handle housing shall provide a polished chrome, bright finish. The paddle handles and housings shall be tested for adhesion, chemical resistance, salt spray, abrasion and accelerated weathering. All springs shall be made of pre-galvanized zinc music wire. Pivot plate and lock cam washer are zinc plated and coated with clear chromate.

Compartment Handle, TriMark Logo Chrome/Black, Paddle, Street side, Non-Lock Y N___

The exterior compartment doors shall be equipped with two point, flush mounted TriMark paddle handles. The handle housings shall have a die cut rubber gasket separating the paddle

handle from the door. The surface finish of the handles and the handle housing shall provide a polished chrome, bright finish. The paddle handles and housings shall be tested for adhesion, chemical resistance, salt spray, abrasion and accelerated weathering. All springs shall be made of pre-galvanized zinc music wire. Pivot plate and lock cam washer are zinc plated and coated with clear chromate.

Compartment Handle, TriMark Logo Chrome/Black, Paddle, Curbside, locking Y N___

The exterior compartment doors shall be equipped with two point, flush mounted TriMark paddle handles. The handle shall be designed with a floating cam so when the doors are locked , no stress will be placed on the door rod linkage when the paddle handle is operated. The handle housings shall have a die cut rubber gasket separating the paddle handle from the door. The surface finish of the handles and the handle housing shall provide a polished chrome, bright finish. The paddle handles and housings shall be tested for adhesion, chemical resistance, salt spray, abrasion and accelerated weathering. All springs shall be made of pre-galvanized zinc music wire. Pivot plate and lock cam washer are zinc plated and coated with clear chromate.

Compartment Handle, TriMark Logo Chrome/Black ,Drop Door or Drawer, Locking Y N___

The exterior compartment doors shall be equipped with two point, flush mounted TriMark paddle handles. The handle shall be designed with a floating cam so when the doors are locked , no stress will be placed on the door rod linkage when the paddle handle is operated. The handle housings shall have a die cut rubber gasket separating the paddle handle from the door. The surface finish of the handles and the handle housing shall provide a polished chrome, bright finish. The paddle handles and housings shall be tested for adhesion, chemical resistance, salt spray, abrasion and accelerated weathering. All springs shall be made of pre-galvanized zinc music wire. Pivot plate and lock cam washer are zinc plated and coated with clear chromate.
Drop down door or pull-out drawer, Both Streetside or Curbside of the unit.

Compartment Door Locks, 2015 TriMark Y N___

All compartment door paddle handles shall be keyed alike. The paddle latches mounted in each locking door shall include a double cut, non-directional tumbler assembly designed to accept a key that does not require a specific orientation for actuation. Single cut tumbler assemblies that require a specific orientation for operation are not acceptable. NO EXCEPTIONS

The compartment doors shall be equipped with TriMark rotary latches constructed of high strength, heat treated, steel latch components. Rotor and latch shall be coated with a solid film lubricant, springs made of 302 stainless steel, and components zinc plated with Clear chromate

All rotary door latches shall engage Nader pin striker posts made of high strength steel, plated with clear chromate and inserted through a synthetic isolation washer designed to prevent corrosion around Nader pins. The Nader pins shall have a shoulder to prevent the latch mechanism from being pulled over the top of the pin in a dynamic crash situation. The Nader pins shall be fastened with a securing nut designed to function like a blind fastener, allowing the Nader pin to be adjusted and re-tightened without having to access the nut.

All of the internal door hardware, paddle handles and latches, shall be sprayed with a petroleum based lubricant material. NO EXCEPTIONS

The module compartment door switches shall incorporate magnetic proximity switches that will activate specified module compartment interior lighting when the compartment door is opened it will activate corresponding interior compartment light and activate a flashing indicator light in the driver's control panel when the doors are opened. The switch utilized shall be a magnetic proximity switch that requires no maintenance and is easily accessible for replacement. The magnetic switch shall be a heavy-duty, industrial type with a minimum of a 3 amp rating.

Compartment Rotary Latches Y N___

The compartment doors shall be equipped with TriMark rotary latches constructed of high strength, heat treated, steel latch components. Rotor and latch shall be coated with a solid film lubricant, springs made of 302 stainless steel, and components zinc plated with Clear chromate

Compartment Door Nader Pin Y N___

All rotary door latches shall engage Nader pin striker posts made of high strength steel, plated with clear chromate and inserted through a synthetic isolation washer designed to prevent corrosion around Nader pins. The Nader pins shall have a shoulder to prevent the latch mechanism from being pulled over the top of the pin in a dynamic crash situation. The Nader pins shall be fastened with a securing nut designed to function like a blind fastener, allowing the Nader pin to be adjusted and re-tightened without having to access the nut.

Compartment Door Lubrication, Door Handles and Latches Y N___

All of the internal door hardware, paddle handles and latches, shall be sprayed with a petroleum based lubricant material. NO EXCEPTIONS

Compartment Door Reflectors Y___N___

All exterior compartment doors shall have a red reflector mechanically attached to the lower outboard corner of the door

Compartment Door Switches, Magnetic Y___N___

The module compartment door switches shall incorporate magnetic proximity switches that will activate specified module compartment interior lighting when the compartment door is opened it will activate corresponding interior compartment light and activate a flashing indicator light in the driver's control panel when the doors are opened. The switch utilized shall be a magnetic proximity switch that requires no maintenance and is easily accessible for replacement. The magnetic switch shall be a heavy-duty, industrial type with a minimum of a 3 amp rating.

Compartment Door Panel, Inner, Diamond Plate Y N___

The interior door panels of the exterior compartment doors are to be Aluminum Diamond Plate.

All exterior compartment doors shall have a red reflector mechanically attached to the lower outboard corner of the door

Compartment Door, Panel Mounting Screws Y___N___

The interior door panels for all module exterior compartment doors will utilize the automotive style spring clips mounted to the door frame. The interior door panels will be held in place with 10-24 X 3/4" stainless steel machine screws. Screws will be rubber backed and treated with thread locking material pre-applied by the screw manufacturer to prevent loosening from long term vibration.

Power Door Locks, Exterior Compartments Y N___

The following exterior compartments shall come equipped with power door locks:

Exterior Compartment #'s 1, 2, 4, 6 & 8, Only Y___N___

- Exterior Compartment #1
- Exterior Compartment #2
- Exterior Compartment #4
- Exterior Compartment #6
- Exterior Compartment #8

Compartment Door, Gas Struts Y___N___

The ambulance shall be equipped with Heavy Duty gas strut hold opens. The struts will be installed on each exterior compartment door. Exterior compartment doors to open to 90+ degrees.

All Standard Compartment Lights, LED, Flexible Strip Y N___

All compartments shall be illuminated by Flexible LED strip lighting in lieu of the standard 4" halogen lights. Two (2) Vertical strips in each exterior compartment installed, one (1) on each side of the opening. The compartment #1 lights will be also wired to Oxygen light switch in action area.

EXTERIOR COMPARTMENT INTERIOR Y N___

Exterior Compartment, Interior Finish, Polyurethane Coated Y___N___

4.4. EXTERIOR COMPARTMENT FINISH

All compartments surfaces shall have a degreaser and metal treatment application to remove oils and etch the surface to insure proper adhesion of the polyurethane coating. All seams shall then be caulked and allowed to dry to prevent shrinking and cracking. This system shall produce a high performance textured solid color surface to provide a durable, wear resistant finish.

Color, Dark Gray Y N___

Polyurethane Color shall be: Dark Gray

Exterior Compartment, Floor Matting "Dri Dek" Y___N___

FLOOR MATTING

There shall be Dri-Dek matting on the bottom of the exterior compartment floors and all standard shelves.

Color, Black Y___N___

EXTERIOR COMPARTMENT SHELVING Y___N___

Exterior Compartment Shelving and Unistrut Y___N___

4.5. EXTERIOR COMPARTMENT SHELVING

All shelving Unistrut shall be welded to the walls prior to any compartment wall finish. Where specified, exterior adjustable shelves shall be box pan formed of a minimum .125 inch Aluminum Diamond Plate and corners shall be welded. Shelves shall be infinitely adjustable, and securely mounted to heavy gauge aluminum Unistrut track.

Compartment Shelving, Diamond Plate Y N___

Where specified, exterior adjustable shelves shall be box pan formed of a minimum .125 inch Aluminum Diamond Plate and corners shall be welded. Shelves shall be infinitely adjustable, and securely mounted to heavy gauge aluminum Unistrut track.

COMPARTMENT #1 - STREETSIDE FWD Y N___

Compartment #1, EXTERIOR Y___N___

4.6 EXTERIOR COMPARTMENT - #1

Compartment #1, Electrical Storage Y___N___

Recessed into the bulkhead side of compartment #1 shall be an enclosed area for the installation of miscellaneous electrical components. The aluminum cover for this area to be installed with 'J' molding. The 'J' molding to be full length of panel on bottom and inboard side. Outboard side of panel to be secured with mechanical fasteners.

Compartment #1, Full Height, Standard Configuration Y N___

The forward most compartment on the street side of the module. It shall be externally vented with stamped louvers, to prevent compression of the air inside the compartment to allow you to shut the door.

Compartment #1, Storage, Stair Chair, Y N___

There shall be 21" clear depth to accommodate a Stryker 6250 Stair Chair forward of the divider in the #1 compartment.

Compartment #1, Shelf, Adjustable, First shelf Y___N___

There shall be an adjustable shelf installed in the forward section of compartment #1, forward of the compartment vertical divider. The shelf shall be easily removable to allow removal of the electrical access panel on the forward wall of this compartment. Includes two additional

compartment lights.

Compartment #1, Strap, equipment, Seat belt Style, Metal Buckle, Each Y___N___

There shall be one (1) equipment restraint strap with quick release buckle provided in this compartment.

COMPARTMENT #2 - STREETSIDE FWD WHEELWELL Y___N___

Compartment #2, EXTERIOR Y___N___

4.7 EXTERIOR COMPARTMENT - #2

Compartment #2, Standard Configuration, Y___N___

Exterior compartment #2 shall be directly behind the #1 compartment and below the interior action area shelf on the street side of the module. The compartment shall have double doors and one adjustable shelf on Unistrut track. This compartment shall for equipment storage and shall be per the size and configuration shown in the attached prints.

Compartment #2, Shelf Adjustable, First Shelf Y N___

– This compartment shall have one (1) adjustable shelf on unistrut track and additional compartment light.

COMPARTMENT #4 - STREETSIDE AFT Y___N___

Compartment #4, EXTERIOR Y___N___

4.9 EXTERIOR COMPARTMENT - #4

Compartment #4, 3/4 Height, Standard Configuration Y___N___

Compartment #4 shall be the rearward most compartment on the street side of the vehicle. The compartment includes one adjustable shelf on Unistrut tracks.

Compartment #4, Shelf Adjustable, First Shelf Y___N___

This compartment shall have one (1) adjustable shelf on unistrut track.

Compartment #4, Unistrut Back Wall of for SCBA Brackets Y___N___

There shall be Unistrut installed on the upper portion of the back wall of the #4 exterior compartment for the installation of SCBA brackets. (8) Nuts and bolts shall be provided.

COMPARTMENT #6 - CURBSIDE AFT Y___N___

Compartment #6, EXTERIOR Y___N___

4.11 EXTERIOR COMPARTMENT - #6

Compartment #6, Standard Configuration (UM) Y___N___

Exterior compartment #6 shall be located at the curbside rear of the module. The compartment shall have a single door. This compartment shall be configured primarily for the vertical storage of backboards and other miscellaneous equipment. The manufacturer shall install a louvered vent in the upper left wall of the #6 compartment to enable the door to close without added compression. This compartment shall be per the size and configuration shown in the attached prints.

Compartment #6, Divider, Fixed Y N___

Compartment #6 shall include a fixed vertical divider centered in compartment.

Compartment #6, Shelf Adjustable, First shelf Y___N___

There shall be an adjustable shelf mounted in compartment #6. The addition of this shelf will include an additional compartment light for this exterior compartment. The shelf will be installed forward of the compartment's vertical divider.

Compartment #6, Shelf Adjustable, Additional, Each Y N___

There shall be two adjustable shelves mounted in compartment #6. Each shelf will include a compartment light. The shelves will be installed forward of the compartment's vertical divider.

Compartment #6, Equipment Strap, Seat Belt Style, Metal Buckle, Each Y___N___

There shall be one (1) equipment restraint strap with quick release metal buckle provided as

directed by this agency.

Compartment #8, EXTERIOR Y___N___

4.14 EXTERIOR COMPARTMENT - #8

Compartment #8, Full Height Door Y___N___

Exterior compartment #8 shall be the forward most compartment on the curbside of the module allowing interior / exterior access to the interior ALS cabinet. This compartment shall be per the size and configuration shown in the attached prints.

COMPARTMENT #8.5 - CURBSIDE LOWER FORWARD Y N___

Compartment #8.5, EXTERIOR Y___N___

4.15 EXTERIOR COMPARTMENT - #8.5

Compartment #8.5, Drawer Style Battery Box Configuration Y___N___

Exterior compartment #8.5 shall be located below the primary #8 compartment inside/outside access ALS cabinet. It shall be an isolated storage compartment for the vehicle batteries. This compartment shall be a self sealing drawer that is an integral part of the battery storage tray. The tray shall be mounted to a set of HD 250# slides mounted on 1/4" aluminum side rails.

NOTE: Battery access door mounted slide out battery tray. The interior of the battery compartment to be made of Polyurethane coated aluminum. Battery Tray to be raw aluminum

INTERIOR TRIM AND FEATURES Y___N___

5 MODULE INTERIOR

5.1 INTERIOR CABINET CONSTRUCTION

All cabinets shall be independently box pan formed of .090 aluminum, utilizing welded, shatter proof construction for maximum safety. No wood products shall be used. Cabinets shall be constructed as independent modular units completely assembled outside the vehicle then secured to the module structure, thereby enhancing the overall structural integrity of the module. Cabinets created or assembled in the vehicle as

a dependent part of the module structure shall not be acceptable due to their inability to enhance the overall structural integrity of the module. The material for the curbside wall panel and the CPR side seat wall panel shall be .188 PVC material to give a better insulation to the walls.

The interior of the cabinets shall be acid washed, degreased with wax and grease remover. A coat of self etching wash primer shall be applied and a final coat of white paint with flattening toner shall be applied.

The exterior of the cabinets shall be laminated with industrial grade, color coordinated material. The upper cabinets shall be covered with a heavy-duty color coordinated vinyl and the lower cabinets and walls will be covered with a anti-microbial grade thermal plastic laminate. Cabinet bottoms shall be lined with non-hygroscopic removable shelf liner

The cabinet door frames shall consist of heavy-duty, extruded aluminum glass track frame fastened together as a structure independent of the cabinet. All frame corners shall be mitered and assembled with extruded aluminum corner braces and epoxy. The frames shall be constructed in a manner that allows for disassembly and replacement of the sliding Acrylic doors. All sliding cabinet doors shall be 3/16 inch Acrylic set in felt lined tracks that require no adjustment. Each piece of Acrylic glass shall have full length extruded aluminum handles.

The frames of the upper band cabinets shall be hinged with full length, piano hinge. The frame shall be hinged on top and be equipped with pneumatic hold opens on each side, with one (1) interior positive slam latch. This shall enable the entire face frame with sliding Acrylic doors to be opened for easier cleaning and restocking of the cabinets. The gas shocks shall be of sufficient strength to automatically lift the cabinet door frame without any aid and hold in the open position without any other device. The rigid design of the frame extrusions and corner assemblies on the restocking doors will eliminate twisting of the frame structure. The frame shall have a positive locking device to keep the frame from opening while the vehicle is in motion.

The frames of the street side upper band cabinets shall be hinged with full length, piano hinge. The frame shall be hinged on top and be equipped with pneumatic hold opens on each side, with one (1) interior positive catch bottom center. This shall enable the entire face frame with sliding Plexiglas doors to be opened for easier cleaning and restocking of the cabinets. The gas shocks shall be of sufficient strength to automatically lift the cabinet door frame without any aid and hold in the open position without any other device. The frame shall have a positive locking device to keep the frame from opening while the vehicle is in motion.

All plastic laminates shall be adhered to the cabinetry using an industrial grade high strength contact adhesive. The manufacturer shall demonstrate strength of adhesive through independent testing. Test results shall demonstrate strength of newly applied adhesive as well as strength of aged adhesive. Testing should be to ASTM standard # D3163-92 or equivalent.

All upper band cabinet door frames shall consist of rigid, heavy duty, extruded aluminum glass frame. The rigid design of the frame extrusions and corner assemblies on the restocking doors will reduce twisting of the frame structure. The door frames will be held closed with slam latches and the felt track design does not require adjustment.

Squad Bench and CPR seat cushions shall be securely fastened but easily removable without tools for daily cleaning. All other cushions shall be permanently fastened.

In order to decrease the risk of accumulation or exposure to fluid borne pathogens, any areas around the interior that have the potential for fluid accumulation shall be seam sealed with silicone or equivalent type material that will prevent the possible accumulation of fluid borne pathogens.

INTERIOR ADJUSTABLE SHELVES Y N___

5.2 INTERIOR ADJUSTABLE SHELVES

Where specified, interior shelves shall be made of .063 inch anodized aluminum. The shelves shall be infinitely adjustable, and bolt into position to prevent rattling. Shelf bottoms shall be lined with non-hygroscopic removable shelf liner. The front edge of the shelf shall be covered with a push on plastic trim to prevent chafing.

INTERIOR TRIM Y N___

5.5 INTERIOR TRIM

Interior Trim, Standard Y___N___

All cabinet and wall panel aluminum trim including shall be Gray anodized. All protective corner trim shall be Opaque and will include a matching domed end cap.

HEADLINER Y___N___

5.6 HEADLINER

Ceiling Medical Device Rail Y___N___

A near surface mounted Medical Device rail system shall be installed over the primary cot. Each side of the track will have a semi-transparent lens cover to house the LED strip lights. The track system to be surface mounted and run the entire length of the module with the sole intent of providing easy access to allow the medical personnel to quickly access equipment for administering aid to the patient.

The medical device rail allows for previsions for standard:
- (1) IV Hanger
- (3) Patient Lights focused at head, torso and legs

– (2) antenna accesses under cot lights.

See separate options for additional IV hangers, oxygen outlets and AM/FM speakers.

Headliner, Vinyl Ceiling, No Seams Y___N___

The headliner shall include a cushioned, 1/2 inch thick fire retardant acoustical foam, covered with a heavy grade seamless White vinyl. The vinyl shall not be glued to the foam, but stretched tightly across the entire ceiling to prevent sagging after long term usage. This soft ceiling shall provide additional safety and insulation.

Ceiling Medical Device Rail. White LED Strip Lights Y N___

LED STRIP LIGHTING

White LED strip lights shall be installed from the upper bulkhead area to the rear of the module stopping approximately 12 inches from the rear door header area on both sides. Includes an 'On/Off' switch at the rear switch panel, 'On' with module.

Ceiling Medical Device Rail, Red/Amber LED Turn/Brake Strip Lights (UM & UM- Y N___

– Red/Amber LED strip lights shall be installed in the Ceiling Medical Device Rail on both sides at the rear. Total length on each side to be 12". The lights shall be activated from the vehicle turn signals or brake light circuit to inform personnel in patient compartment when the vehicle is turning and braking.

FLOORING Y___N___

5.7 FLOORING

Flooring, Aluminum Floor/Wall Cove Molding (STANDARD) Y___N___

Seams at perpendicular floor and cabinet intersections will be finished with an aluminum cove molding trim. The seams where cabinets meet floor will be sealed with a caulking sealant / adhesive before installing the aluminum cove molding.

Flooring, Stainless Steel Rear Threshold, 45 Degree Chamfered (STANDARD) Y N___

The rear door threshold shall be 14 gauge stainless steel with 45 degree chamfered edge. The threshold will be permanently installed with Sikaflex 252 sealant/adhesive. The Sikaflex material will both secure the threshold and provide a full perimeter seal to prevent fluid borne contamination. The threshold shall include 3M "Safety Walk" anti-skid tape to prevent slipping. There will be no holes drilled in the stainless and no screw type attachments required.

Flooring, Loncoin II Flecks Choice Y N___

The patient compartment standard flooring shall be Lonseal / Loncoin II Flecks commercial grade, anti-skid flooring material.

Color - 157 Moonstone Y___N___

The flooring color shall be Moonstone #157.

Floor, Curbside Stainless Steel Threshold, 4"wide,Safety Walk Anti-SkidTape Y___N___

There shall be a 4" wide14 gauge #304 stainless steel threshold with anti skid tape at the curbside entry door. The threshold will be installed with Sikaflex 252 in a manner that provides a permanently stable attachment and full perimeter seal to prevent fluid borne pathogen contamination and enhances the cleaning process. The threshold shall include 3M "Safety Walk" anti-skid tape to prevent slipping. There will be no holes drilled in the stainless and no screw type attachments required.

HEAD BUMPERS Y N___

5.8 HEAD BUMPERS

There shall be head bumpers located over the module to cab walk-through, on all three sides of the upper CPR seat head area, on the front of the environmental cabinet, across upper rear curbside exterior compartment wall. These cushions shall be 1 inch high density flame retardant foam cushions covered with heavy grade color coordinated vinyl. The side entry door header shall have a vinyl covered foam padded cushion spanning the full width and height of the header wall above the door. The rear entry door header shall have a 2" high density flame retardant vinyl covered cushion spanning the full width and height of the header wall above the doors.

To reduce the accumulation of fluids, to prevent long term moisture damage due to water and fluid contamination, and to facilitate the cleaning process in the patient compartment; all cushions and related components shall be constructed without the use of wood products. NO EXCEPTIONS

BACKRESTS Y___N___

5.9 BACKRESTS

All of the backrests and seat cushions shall be constructed with 2 inch thick, high density fire retardant foam covered with a heavy grade color coordinated vinyl. The lower band cushions and backrests shall be thermal vacuum formed automotive vinyl. The cushions shall be backed with 10mm PVC board. Plywood or other porous materials shall not be acceptable for cushion backs. Backrest and seat cushions shall be securely fastened yet easily removable for cleaning. All other cushions shall be attached with Christmas tree type automotive blind fasteners.

Rear Entry Door Grab Handles Y N___

Rear Entry Door Grab Handles, "L" Bars, 16" Anti-Microbial Y___N___

5.10 GRAB RAILS

Each module rear entry door shall be equipped with a 1-1/4" diameter Anti-Microbial stainless steel "L" shaped grab bar. These bars shall measure approximately 16" wide by 26" high and shall have a Clear Anti-Microbial coating. The bars shall be oriented so that the horizontal portion of the "L" extends along the lower edge of the window. The vertical portion of the "L", shall be oriented toward the hinge side of the doors, and shall extend upward to a mount point above the upper edge of the window. All fasteners for the bars MUST engage internal door structure.

Ceiling Grab Rail, Center 108" Anti-Microbial Y N___

There shall be a 1-1/4 inch diameter handicap style stainless steel grab rail securely mounted to the ceiling. All fasteners for the rail MUST engage structural framing in the ceiling. The rail shall be approximately 108" long and have a Clear Anti-Microbial coating. The rail shall be mounted lengthwise and as close to center as possible over the primary cot location.

GRAB HANDLES Y___N___

Grab Bar, Additional 24", Anti microbial Y___N___

There shall be a 1.25 inch x 24 inch stainless steel Antimicrobial grab bar installed.

Grab Bar (1) 24" (specify location) Y___N___

IV FLUID HANGERS Y___N___

5.11 PLASMA HANGER

IV Hangers, CPI #IV2008 (STANDARD) Y___N___

There shall be Cast Products # IV2008-01 ceiling mounted IV hangers installed in customer specified locations. These flush mount hangers shall accommodate 2 bags and shall be equipped with stabilizer straps. The hangers shall be mounted so that in the event of a forward collision, the hangers will fold up upon impact.

IV Hangers, Quantity (2) Y N___

LEFT STACK AND BULKHEAD AREA #1 Y___N___

Interior Streetside #1 - Left Stack and Bulkhead Y___N___

5.12 LEFT STACK AREA #1

Upper Bulkhead Cabinet, Double Doors Y___N___

For access to the electrical components, the upper bulkhead cabinet shall have double hinged Kydex Thermoplastic laminate or multi-spec covered doors with locking latch on the right hand door and center mullion on the left hand door.

Left Stack, Storage Area #1 Y___N___

A two section vertical cabinet shall be provided behind the attendant seat on the streetside forward corner facing inboard. The upper section (C1) shall have one adjustable shelf. The lower section (L1) shall have no shelf and shall be vented for dissipation of heat generated by radio, battery charger, and inverter components typically stored in this area. Both sections shall have double solid aluminum, Kydex Thermoplastic laminate, or multi-spec (picked in the proper section of work order) covered doors with locking latches. This cabinet shall be per the size and configuration shown in the attached prints.

ACTION WALL AREA #2 Y N___

INTERIOR STREETSIDE #2 - ACTION AREA Y___N___

5.13 ACTION AREA WALL #2

Action Wall Area #2, Medical Device Rail Y___N___

An action wall Medical Device rail system shall be installed on the streetside wall. Each side of the track will have a solid surface accent stripe to match the action wall counter. The track system to be surface mounted and run the entire length of the action wall from the #1 compartment to the CPR seat.

The medical device rail allows for previsions for the standard (2) Oxygen Outlets, Oxygen Solenoid Valve, Suction Regulator, 12V Outlet and 110V Outlet.

, Cabinets, Upper Left U2 and U2.5, Std Configuration, CN 10 Certified Y N___

There shall be (2) cabinets located over the action area labeled U2 and U2.5. The forward upper left #2 (U2) and the rearward upper left #2.5 (U2.5) cabinets to include (1) adjustable shelf in each cabinet. Both cabinet fronts shall have sliding polycarbonate doors with spring activated latching handles and have restocking feature with integral exterior spring activated latch.

The attendant switch panel and environmental controls shall be built into a separate 6" high section below the U2.5 cabinet and tilted slightly down for ease of accessibility to the attendant..

Countertop, Forward and Rear Monitor Area. Y N___

ACTION AREA COUNTER TOP
There shall be a sealed, solid surface counter top on the forward action area and the monitor/work shelf aft of the streetside CPR seat. The color and pattern design of the solid surface counter top material shall be as follows:

Avonite Stormy Gray, F1-9010 Y N___

-Interior Streetside #3 - CPR Seat Y___N___

5.14 STREETSIDE C.P.R SEAT AREA #3

CPR Seat, Streetside, Standard Configuration Y___N___

The CPR seat shall provide a minimum 24" wide seating space. The seat and backrest cushions shall be 2 inch high density flame retardant foam covered with high grade color coordinated vinyl. The seat lid shall be hinged for storage underneath, held up with a pneumatic hold open device and be held closed with a positive latch. The upper and lower portion of the CPR seat area shall be padded on three sides for additional protection. These areas shall be a minimum of 1 inch high density flame retardant foam covered with high grade color coordinated vinyl.

CPR Seat Lid Hold-Down Y___N___

The CPR seat shall include (1) TriMark recessed Black latches to secure the lid when in the down position.

Cabinet, Upper Left U3, 9"H x 27"W, 72" Headroom ONLY Y___N___

There shall be a upper left U3 cabinet with 3/8" Lexan lift up door with restocking feature with a latch. Does not include shelf. Cabinet shall be approximately 9" high, 10-3/4" deep, and shall span the full width between the upper left U2 and U4 cabinets.

The distance between the top of the CPR seat to the bottom of the cabinet cushion shall be a minimum of 43" in compliance with KKK-A-1822F requirements for head clearance.

CPR Seat, Seat Belt, 4 Point (Per4Max) Black, Change Notice 8- Compliant Y N___

The CPR seat shall be equipped with a 4-point black restraint shall be fully retractable and utilizes four retractors for increased mobility. The restraint shall feature **controlled deceleration technology** and a **single buckle** for single point-of-release. The restraint shall meet the requirements of FMVSS 209 and 302 standards. The restraint shall have a built-in indicator to signify that the webbing has undergone a severe load and needs to be replaced.

Bidder Complies YES_____NO_____

CPR Seat, "U" Barrier Bar, Padded, 1.5" SS, Gunmetal Y___N___

CPR SEAT BARRIER BAR

A 7 1/2" high x 6 7/8" wide "U" shaped 1.5" stainless steel barrier bar shall be installed even with the upper head strike area forward of the CPR side seat. This bar shall be fitted with a padded upholstery cover to match the units interior. The padding for the bar will be 1" block foam on each side of a PVC cover shaped to fit over the bar.

Bidder Complies YES_____NO_____

INTERIOR STREETSIDE #4 - REAR AREA Y___N___

5.15 STREETSIDE REAR AREA #4

Cabinet, Upper Left U4, Standard Configuration- CN 10 Certified Y___N___

There shall be a upper left U4 cabinet with sliding polycarbonate doors with spring loaded latching handles, restocking feature with spring loaded exterior integral latch and (1) adjustable shelf. Cabinet shall be in the upper left street side rear of the module and will provide interior access only. This cabinet shall be per the size and configuration shown in the attached prints.

SQUAD BENCH AREA Y N___

INTERIOR CABINETS - SQUAD BENCH AREA Y___N___

5.16 SQUAD BENCH AREA

Squad Bench, Curbside, Two Piece Hinged Lid Y___N___

A squad bench shall be provided on the curbside of the vehicle. The bench cushions shall be 2 inch thick high density flame retardant foam, covered with high grade color coordinated vinyl. There shall be a two piece lid hinged for internal storage, and shall open to not less than 80 degrees, have pneumatic lifting supports on each side and will be held closed with positive latches. The lid shall be constructed of durable lightweight materials. No wood products shall be used. The interior of the squad bench shall be completely box pan formed aluminum, sealed and painted to create a seamless interior for easy and thorough cleaning and disinfecting.

Squad Bench, Restraint Belts Y___N___

The manufacturer shall provide a minimum of three restraint straps on the face of the squad bench for securing a patient lying on the squad bench.

Squad Bench, Medical Device Rail Y___N___

An action wall Medical Device Rail system shall be installed on the streetside wall. Each side of the track will have a solid surface accent stripe to match the action wall counter. The track system to be surface mounted. The medical device rail allows for previsions for the standard Oxygen Outlet and Ceiling Light Timer.

Squad Bench, Latches, Lids, Tri Mark, Y N___

The squad bench shall include (2) TriMark recessed black latches to secure the squad bench lids when in the down position.

Squad Bench, Seat Belts, Two 4-Point belts (Per4Max) Black, CN-8 Y___N___

The squad bench shall be equipped with two 4-point black restraint shall be fully retractable and

utilizes four retractors for increased mobility. The restraint shall feature **controlled deceleration technology** and a **single buckle** for single point-of-release. The restraint shall meet the requirements of FMVSS 209 and 302 standards. The restraint shall have a built-in indicator to signify that the webbing has undergone a severe load and needs to be replaced.

Bidder Complies YES NO

Upper Squad Bench, Cabinet, 9"H, 72" Headroom ONLY Y___N___

There shall be a cabinet located above the squad bench. The cabinet will be approximately 9"H x 8-1/2"D and will be the same length as the squad bench. The cabinet shall be divided into two (2) separate sections by a fixed center divider. Each section will have 3/8" Lexan lift up doors with restocking feature and locking latches. Does not include shelves. The distance between the top of the squad bench cushion to the bottom of the cabinet cushion shall be a minimum of 43" in compliance with KKK-A-1822F requirements for head clearance.

KKK Compliancy Regarding Overhead Cabinetry Y N___

BIOHAZARD- Y___N___

INTERIOR - BIOHAZARD Y___N___

5.17 BIOHAZARD

Squad Bench "A" Bar 14", Anti- Microbial, Waste/Sharps Y___N___

Glove Butler(s) Y___N___

GLOVE BUTLER

Glove Butler (2) Total, Surface Mounted Y___N___

There shall be (2) Glove Butler II glove boxes supplied

Sharps Container , Kendall, 5 qt. Locking Wall Mount Y___N___

There shall be a locking wall mount sharps enclosure #298516 with a 5 Qt sharps container installed in the customer specified location.

CURBSIDE RIGHT STACK STORAGE #8 Y___N___

INTERIOR CURBSIDE - RIGHT STACK STORAGE #8 Y___N___

5.18 CURBSIDE RIGHT STACK STORAGE #8

RF ALS, Upper Heater, A/C Unit , Standard Configuration Y___N___

There shall be a heat A/C unit located at the top of the right stack/ALS cabinet. Conditioned air shall be distributed through six vents evenly spaced down the full length of the ceiling. There shall be a floor to ceiling plenum with intake vents of sufficient size to allow recirculation of the conditioned air.

RF ALS, Hidden Air Intake (STANDARD) Y N___

The right stack Air Intake Chamber shall be an extension of the inboard right stack wall and will include a hidden opening at the bottom for recirculation. The air intake to be elevated from the floor to allow for cove molding and roll up flooring.

RF ALS, "A" Style Custom Configuration Y N___

The top section of the ALS cabinet shall be for the fully enclosed Heater - A/C unit.

U8, Cabinet, None Y___N___

C8, Cabinet, None Y___N___

L8 Cabinet, Door, Heavy-Duty Roll-up Locking Door, ALS Y___N___

The lower right stack ALS cabinet shall have a heavy duty locking roll-up door.

Right Stack ALS, 14 Ga. Stainless Steel Shelf Y___N___

The standard shelves in the ALS cabinet shall be made of 14Ga. Stainless Steel.

ATTENDANT SEAT Y___N___

5.19 ATTENDANT SEAT

Attendant's Seat , EVS, Child Safety, 1880, 3 point black seatbelt Y___N___

ATTENDANT SEATING

Seating for the attendant shall consist of a contoured high back padded bucket seat. The seat covering shall be an easy clean vinyl material and be impervious to blood borne pathogens and

other contaminants. Therefore, cloth seats or seats with welting seams or visible stitching will not be accepted. Seating must meet OSHA regulation 1910.1030. The seat belt must be certified to KKK - A1822 - E specification and to FMVSS and shall be an integrated black three-point harness. An integrated child safety seat shall be incorporated in the seat. Installation shall comply with FMVSS.

Bidder Complies YES_____NO_____

Color - Gunmetal Y___N___

Attendant's Seat Base, EVS Swivel 2 Pos Y___N___

ATTENDANT'S SEAT BASE

An EVS brand swivel seat base shall be provided for the rear facing attendant's seat. The assembly shall be bolted to the floor through mounting plates welded into the floor structural tubing.

Bidder Complies YES_____NO_____

INTERIOR COLORS Y___N___

5.20 INTERIOR COLORS

Multi-Spec Interior Surfaces Y___N___

LOWER BAND - The patient compartment interior surfaces will be spray painted with a "Multi-Spec" base-coat/clear coat system anywhere a "Wilsonart" type laminated surface is normally installed. This includes interior wall panels, ALS cabinet, left stack, lower left cabinet and #1 and #6 exterior compartment surfaces. The manufacturer must use the same metal prep and finish processes as used on the exterior of the module to finish the interior surfaces to the following finish:

Color, Misty Gray #6028 Y N___

"Multi-Spec" base-coat/clear coat color to be Misty Grey.

Upper Band Vinyl Color, Cabinets and Stitched Cushions Y___N___

UPPER BAND VINYL -The module interior upper band cabinets and cushions shall be covered

a color coordinated vinyl upholstery. The upper band cushions shall be stitched in the corners only. The vinyl shall be an automotive vinyl over fire retardant foam. The cushions shall be backed with 10mm PVC board. Plywood or other porous materials shall not be acceptable for cushion backs.

Color, Gunmetal Y_ N___

UPPER BAND VINYL -Gunmetal Gray.

Lower Band Vinyl Color, Vacuum Formed Cushions Y___N___

LOWER BAND VINYL -The lower band cushions and backrests shall be thermal vacuum formed automotive vinyl over fire retardant foam. The cushions shall be backed with 10mm PVC board. Plywood or other porous materials shall not be acceptable for cushion backs. Cushions shall be attached with automotive grade Dual Lock hook and loop to make them removable for cleaning. Includes squad bench seats and back rest, CPR seat and backrest, and hip cushions.

Color, Gunmetal Y N___

LOWER BAND VINYL -Gunmetal.

Poly carbonate Color Choice Y___N___

CABINET DOORS AND FRAMES

The cabinets shall have doors that follow the standards of SAE J3058 Ambulance Interior Storage Compartment Integrity.

The sliding cabinet doors shall be framed with a T6- 6063 aluminum frame with specially designed negative angled grooves for the spring latched handles to grip onto for latching. The corners of the frames shall be double keyed for stability and strength. The frame shall be gasketed to prevent intrusion of liquids into the cabinets. The sliding doors shall be made of 1/4" polycarbonate in either a clear, grey or bronze finish as specified by the end user. The tail end of the doors shall have a T6-6063 aluminum stiffener that interlocks with the mating door to give additional strength against impact. The leading handle shall be spring loaded to give a self latching function with the door frame groove to prevent the doors from inadvertently coming open. If the end user chooses to have the restocking feature, the frame will be hinged in a minimum of two locations and a seperate spring steel handle assembly shall be attached to the bottom of the cabinet to lock the frame in place when shut. This handle for unlatching and

opening the restocking feature shall be accomplished without opening the sliding doors, from the outside of the cabinet.

Bidder Complies YES_____NO_____

Poly carbonate, Clear Y___N___

The sliding doors shall be made of 1/4" polycarbonate in a clear finish as specified by the end user.

-MISC. INTERIOR OPTIONS Y___N___

5.21 INTERIOR OPTIONS

Interior Cabinet Lights, LED Strip, White Y___N___

Install LED Strip lights in upper cabinets, (1) full height strip on each side of the cabinet openings. Installed on cabinet walls just inside the window frames. Includes switch on action wall.

Upper Left Cabinets, 2, 2.5, 3, 4, 7 & 7.5 Y N___

Installed in the following cabinets:
- (1) Each side of the UL #2 cabinet. (2) Total.
- (1) Each side of the UL #2.5 cabinet. (2) Total.
- (1) Each side of the UL #3 cabinet. (2) Total.
- (1) Each side of the UL #4 cabinet. (2) Total.
- (1) Each side of the UR #7 cabinet. (2) Total.
- (1) Each side of the UR #7.5 cabinet. (2) Total.

Squad Bench & Lower Left, 11 Inch Brushed Stainless Kick panels Y___N___

There shall be a stainless steel kick panel on the face of the streetside lower left wall and curbside squad bench. The kick panel shall be approximately 11 inches high and shall run the full length of the squad bench and lower left wall.

Cabinet Latch, Southco 2" Round, Stainless Locking, CN 10-Rated 10lb Y N___

CABINET DOOR LATCHES - LOCKING

Eleven (11) locking 2" round M1 latch(es) with chrome finish shall be installed in cabinet doors as indicated in the attached drawings.

General Wiring, General Harness Y___N___

6. ELECTRICAL GENERAL

6.1 GENERAL WIRING

All added body and chassis electrical equipment shall be served by circuits separate and distinct from the chassis circuits. Wire harnesses will be built in accordance with IPC-WHMA-620 guidelines and will be compliant with KKK-A-1822F specifications. All vehicle 12VDC wiring shall be copper crosslink polyethylene GXL wiring and sized to carry 125% of the rated device load, rated to 272 degrees Fahrenheit, and conform to all SAE J1128 requirements. All splices will be soldered and covered with adhesive lined heat shrinkable tubing for a watertight seal. The wiring shall be color coded, circuit numbered, and function imprinted for identification every 6 inches and correspondence with the vehicle schematics. The harnesses shall include factory installed plugs/receptacles for standard fixture installation and for common add on type devices for easy disassembly and replacement.

The emergency lighting harness and associated cables shall be a part of the standard wiring harness, shall have the component plugs factory installed and shall not be add-on cables. The wiring shall terminate at all standard KKK-A-1822F required lighting locations. Termination points that will provide a power source for fixtures that are exposed to the elements shall include weatherproof connectors.

All heavy power distribution cables shall conform to SAE J1127 and will be enclosed in braided nylon loom. These cables shall be routed separate of the main wiring harness, secured independently on the interior of the module with insulated metal cable clamps. The battery cables which will be run underbody shall be secured to the frame with cable straps and shall run unbroken from the battery location to the main power distribution.

The manufacturer shall provide coil cord cables to enable electrical devices to be installed on the side and rear entry doors. The coil cords will be secured at both ends (on the door and at the adjacent wall) with strain relief's designed to provide a effective, stable mounting point to prevent chafing and to promote the long term reliability of the function it supports.

6.2 WIRING CRITERIA

All wiring devices, switches, outlets, etc. except circuit breakers, shall be rated to carry 125% of the maximum ampere load for which the circuit is protected. A minimum 6 inch service loop of wire shall be provided at all electrical devices (lighting, 110VAC, switch panels, etc.). There shall be sufficient length for two terminal changes on components in the power distribution area. Any circuits protected below 6 amps shall use an ATC type fuse and holder. Any circuits requiring wiring larger than 10 gauge shall include crimped and soldered copper lugs.

All vehicle electrical wiring originating at any of the system operating components shall include circuit protection to sense a short and shut down the affected circuit. All circuits shall be independently wired with grounds returned to a ground buss terminal or stud. All major power distribution components shall be located in a front bulkhead cabinet or the dead space on the bulkhead side of the #1 compartment.
Any circuits requiring wiring larger than 10 gauge shall include crimped and soldered copper lugs. There shall be a minimum of (1) spare switch at the front switch panel with corresponding output located in the power distribution center. The spare output shall be designed to allow the customer to make switch controlled additions to the standard system.

The vehicle shall be equipped with magnetic proximity switches on each entry and compartment door. The switches shall be wired to activate the individual compartment lighting associated with the individual compartment switch and the door open warning light mounted in the driver's control console.

6.3 DOCUMENTATION

Two complete sets of detailed wiring schematics (As Built) shall be provided for ease in trouble shooting. In addition, a detailed wire harness list shall be provided showing circuit numbers and functions. When optional electrical devices or systems are ordered, additional corresponding schematics shall accompany those options.

Located in the owner’s manual shall be a package of relevant electrical power distribution drawings. The drawings shall be inserted in a protective holder that shall include all of the "As Built" drawings that correspond to the specific vehicle being supplied. Generic, standard or manually modified drawings shall not be acceptable.

The manufacturer shall provide an amp load test certification. The documentation shall provide the end user with the vehicles operating load requirements and the units remaining reserve capacity.

6.4 HARNESS QUICK DISCONNECT

All wiring harnesses shall be connected to the power distribution utilizing insulated type harness plugs. These plugs shall have positive locking features and will be weather resistant. Access for disconnecting the harnesses from the cab to the module shall be provided and will be readily accessible.

6.5 ROUTING ACCESS

All cabinets at ceiling level shall be equipped with a removable back panel for access to the wiring harness. The backs shall be securely attached and will be designed to facilitate access and to support noise reduction.

Module wiring harnesses shall be routed below the roof radius extrusion and will be secured to the wall tubes. Cabinet backs and cushions to be removable for easy access to the harness's.

CAMERAS Y N___

Camera, Exterior Back-Up, Over Rear Doors for Multi-plex Y___N___

REAR CAMERA
The vehicle shall include an Audiovox ASA color backup camera mounted on the exterior of the module over the rear doors. The camera shall be wired to turn on when the vehicle is placed in reverse. The camera shall be fed directly to the front switch panel's built in Smart Display II monitor.

COMMUNICATION Y N___

6.6 COMMUNICATION

Two Way Radio Routing Path Cab to Module (STANDARD) Y___N___

The vehicle shall be equipped with a wire routing path enabling the customer's radio installer to route radio cables from the radio cabinet to the chassis cab area or from the rear action area wall to the cab area. The routing path shall allow routing of radio cables with end connectors up to 2" x 3" without having to disconnect the cable/radio connector from the radio cable.

Two Way Radio Prewire, 12VDC Power & Ground (STANDARD) Y N___

The vehicle shall be equipped with #8 gauge Red power and Black ground wiring will be labeled appropriately for future installation by a radio technician. The Black ground wire to be connected to a main ground point, the Red power wire to be left unconnected near a direct to battery connection point inside the power distribution cabinet. Both wires to route to the lower section of the Left Stack/Radio Cabinet and be of sufficient length to allow routing to the Cab Console as an alternate radio installation location. Wires to be labeled at both ends.

Antenna UHF/VHF, (2) Prewire, Y N___

The vehicle shall be equipped with two RG58AU low loss cables installed from the two-way radio cabinet to the ceiling of the module. Accessible be removing an interior light in the patient compartment ceiling. The interior light shall include an etched plastic label identifying the plate as the antenna access point. The cables shall route from the module roof to the lower section of the left stack/radio cabinet and be of sufficient length to allow routing to the cab console as an alternate radio installation location.

RADIO AND CLOCKS Y N___

Clock, Digital DDS 12/24 Hour 2.5" LED, Over Rear Doors Y___N___

Included with this vehicle, there shall be Digital 12/24 hour clock with 2.5" display recessed in the cushion over the rear doors. Clock is approximately 6" x 18" and displays hours, minutes and seconds in 12 hour or military time and adjusts automatically for daylight savings time. Operates on Internal memory battery.

07 - ELECTRICAL 12 VOLT DC Y N___

Electrical System 12V, Multiplex System, Type 3 Y___N___

7. ELECTRICAL 12 VOLT DC

Crct Pwr Accs.,Ign/Shrline,1-20 amp 12VDC to 2 locs,W/O,PD9130 chrgr Y___N___

A circuit shall be furnished (figure 5) for charging all portable battery powered devices, i.e. suction units, hand lights, portable radios, etc. This circuit shall prevent discharge of chassis batteries by only permitting the charging of portable devices when the vehicle is either running or the optional battery conditioner is connected to shore power. Circuit breaker protection shall be provided and shall have a minimum 10 amp capacity, An additional tagged, identified lead shall be furnished in both the cab and module for connection of additional (future) portable equipment that requires recharging.

Voltmeter - Standard Y___N___

7.2 VOLTMETER

The voltmeter shall be a digital display meter accurate to + or - 2%. The display must indicate the stabilized voltage of the chassis and module batteries.

Alarm, Low Voltage, With Buzzer and Indicator, in cab console Y___N___

7.2 VOLTMETER

The electrical system shall be monitored by the system that provides an audible and visual warning in case of the low voltage to persons in the ambulance of an impending electrical system failure caused by the excessive discharge of the batteries. The charge status of the battery shall be determined by direct measurement of the battery voltage. The alarm shall sound if the system voltage at the battery drops below 11.8V for 12V nominal systems for more than 120 seconds.

Ammeter - for multiplex system Y N___

7.3. AMMETER

A 300 amp ammeter display shall be part of a 6.4 inch color active matrix LCD TFT (thin film transistor) graphic display located in the front switch panel. Meter shall indicate the current flow to or from all batteries. If the ammeter registers a charge, the operator knows the charging system is supplying the entire electrical load and is also charging the batteries by the amount indicated by the display. If the ammeter registers a discharge, the operator knows the charging current is insufficient and the batteries are supplying a portion of the required load. With this condition, the operator can shut down some of the nonessential electrical systems or accelerate the engine to reach a balanced condition. The ammeter will have digital and bar graph displays. The text shall be a minimum of 24 point and shall change color in accordance with the amperage range. Green = the charge the batteries are receiving, Red = the discharge amount the batteries are under. Bar graph shall also change color. Additionally, shall come equipped with an electronic hall effect sensor mounted so that the amp load on the vehicle 12 volt system can be accurately measured at the ammeter located in the driver's control console.

BATTERY SYSTEM Y N___

7.4 BATTERY SYSTEM

The battery system shall utilize the OEM ignition switch to disconnect module power and ignition loads. The batteries shall be connected in parallel and wired directly to the OEM starter. There will be no inline splices for miscellaneous equipment, shunts or alternative electrical devices.

The ambulance electrical system shall include an ignition switch controlled battery system providing power directly to the power distribution center. The power distribution, harness distribution and all related components shall be located in a dedicated bulkhead cabinet.

There shall be a 5 minute delay prior to the batteries being disconnected from the module. The ignition switch, when shut off, will activate a timer that will leave the batteries on for five minutes so that the module dome lights can be left on for patient unloading or vehicle restocking.

Ignition Battery Shut off Timer, 5 minute, Y N___

Program the battery shut-off circuit to remain on for approximately 5 minutes after the ignition has been shut off. Shutting off the ignition will activate a timer that will leave the batteries on for approximately five minutes.
(STANDARD)

Batteries, Type 3 UM/UM-150, Chevy or Ford (1) OEM, (2) 700 CCA in 8.5 Y N___

7.5 BATTERIES

The ambulance conversion shall include (1) OEM battery under the hood and two 700CCA - AC Delco 1150 Maintenance Free batteries. In order to prevent premature failure due to excessive cycling during the

manufacturing process, these batteries shall be installed at the end of the manufacturing process when the unit is ready for delivery.

7.6 BATTERY STORAGE

(1) OEM Battery will be mounted under the hood, the additional (2) ambulance batteries shall be stored in the curbside lower #8.5 drawer style compartment. The batteries shall be mounted on a heavy duty slide out tray. The drawer slides shall be rated at 250 pounds and will include dual latches to secure the tray in the closed position. This compartment shall be vented to the underside of the module and the slide out tray shall be a fully welded aluminum pan with a black rubber matting on tray bottom.

Module Disconnect, Multiplex System Y N___

7.7 MODULE DISCONNECT

The module disconnect shall utilize a switch located on the drivers control panel. This switch shall disconnect the entire module electrical system with the exception of 12VDC features that are wired direct to battery, DOT lighting circuitry including backup alarm, the door open warning display, and the chassis circuitry. In order to prevent accidental shut-off there shall be a timing circuit that requires the button to be depressed for approximately five seconds before it shuts off. When shut off, the front LCD display shall show graphic image depicting "Mod Power Off".

The unit shall be designed with SecureAmp™ Technology (patent pending). This system automatically disables all the parasitic loads at 11.6 Volts , preventing battery drain and subsequent damage to the batteries. The system will reset after the unit is started and the charging voltage reaches 13.6 volts enabeling all loads.

Module Disconnect Additional, Rear Switch Panel Y N___

The manufacturer shall install a secondary module disconnect switch in the area of the rear switch panel allowing three way on/off switching from front to rear.

Battery Ground Y___N___

7.8 BATTERY GROUND

There shall be a total of two additional braided grounding straps besides the OEM provided chassis ground and the 3/0 battery cabling. The straps shall be braided copper with zinc coating rated at 250 amps each. There shall be two straps from the module to the chassis frame. At the frame attachment all paint must be removed and the strap attached with grade five bolts.

Power Outlets 12V, (2) Power Point Style, On with Ignition Y___N___

7.10 POWER OUTLETS - 12V

The patient compartment shall include two power point style 12VDC power outlets as standard. (1) outlet shall be mounted on the action wall and (1) outlet shall be mounted above the top shelf in the lower section of the right front stack ALS cabinet. Outlets on this circuit shall be wired "On with Ignition".

(2) Additional 12V Outlets, Direct to Battery Y N___

In addition to the standard 12VDC receptacles located in the module, the manufacturer shall supply and install (2) additional cigarette style12VDC receptacles to be wired direct to battery as follows:

Power Outlet, Kussmaul, USB Dual Port, 5VDC, 4.8 Amp, 091-219-5 Y N___

PORT 5 VOLT DC POWER USB STYLE

The Cab console switch panel shall be furnished with a 5 volt DC, 4.8 ampere capacity, separately protected circuit, with a Dual USB outlet.

FRONT CONSOLE Y___N___

Console, Drivers Switch & Radio, VMUX, E-Series, CN11 Y___N___

8.1 DRIVER'S SWITCH PANEL / RADIO CONSOLE

There shall be an aluminum formed, finished with black polyurea, console that is attached to the cab interior engine cover for two-way radios. This console shall provide sufficient space for the drivers control panel, electronic siren, and (3) two-way radio heads. The console shall be installed in such a manner that it can be quickly removed providing adequate space to remove the engine cover.

Joystick Control, Weldon V-MUX w/quick buttons Y N___

Clipboard/Map Box, Recessed in Console Face Plate Y___N___

A recessed map box shall be provided in the top of the front cab console. The box shall be approximately 6" x 12" and be approximately 8" deep. Two (2) adjustable Acrylic dividers shall

also be provided for use in creating sections within the box.

Driver's Control Panel, V-Mux, Touch Screen Y___N___

Console Mount with bezel & USB Programing Port Y_ N___

Door Open Indicators (VMUX) Y___N___

The magnetic proximity switches located at the top of the door between the jamb and the door frame will activate a door open indicator on the driver's control panel and activate the corresponding Interior compartment light. . The Vista screen located on the driver's control panel will include a digital layout with door open indicators for each module door.

ATTENDANT CONTROL PANEL Y N___

Attendant's Control Panel V-MUX,Touch Screen, w/bezel & USB Programming Port Y___N___

Weldon V-MUX style **"Touchscreen Vista"** Nodes shall be provided as touchable interactive color display interfaces for the multiplexed electrical system; to indicate real-time status of doors, seats, sensors, and other components of the vehicle. The menu oriented touch interface shall allow the user to control interior and exterior vehicle lights, interior HVAC, system Diagnostics, engine High Idle, among other multiplexed functions. The Touchscreen Vista shall support vehicle cameras and DVD video, through use of four NTSC-format video channels. The Vista touch screen is protected by an ABS housing. The housing is slightly less than double-din size to fit in most OEM radio openings. The Touchscreen Vista display shall have the ability to automatically change screens based on vehicle state so as to show warning message or status. Messages will be displayed in a variety of text fonts and color graphics. Device controls will be nominally screen based, with an integrated interface with style 6311 PODS Button Modules. USB port is integrated for updating/programming display and will remain powered for USB programming capabilities.

Power Distribution, Weldon V-MUX, Video Inputs (UM & UM-150) Y___N___

Weldon V-MUX style 6000 Input/Output **"Hercules"** Nodes shall be provided for the multiplexed electrical system; with a durable extruded aluminum enclosure, sealed Deutsch connectors, (16) switch inputs, (3) analog sensor inputs, (26) output channels, dual A & B communication ports, and built in LED status indicators . The Hercules node shall be capable of carrying up to 120 amps of load at high temperatures, be field programmable, and support complete on-board diagnostics.

09 - EMERGENCY Systems- Sirens, Speakers and Air Horns Y___N___

9. EMERGENCY SYSTEMS

Warning Audible - Siren Speakers, Air Horns-E-series Y___N___

SIREN ELECTRONIC - CONTROL HEADS / AMPS Y___N___

Siren Electronic, Federal E-Q2B, Remote Siren Y___N___

9.3 WARNING AUDIBLE - SIREN, SPEAKERS, AIR HORNS

The ambulance shall be equipped with a Federal Signal Model E-Q2B 'Self Diagnostic' remote siren. The siren shall be wired to come 'On' with the ignition switch and will include 200-watt siren system features "Q" wail, yelp, air horn, PA, radio rebroadcast, and "Q" Brake

- 122 decibels at 10 feet
- Low current draw, only 30 amps continuous
- Foot switch compatible
- Noise canceling microphone included
- Digital Signal Processor (DSP) technology creates the familiar "Q" sound

SIREN SPEAKERS Y N___

Speakers, (2) Whelen SA315, Mount Behind OEM Grille, E-Series Y___N___

The vehicle shall come equipped with Whelen #SA315 siren speakers mounted behind the OEM grill.

AIR HORNS Y___N___

Air Horns, Buell, 10" & 12" Dual Tone, Thru Bumper Valance, Tank & Comp Y___N___

This vehicle shall be equipped with (1) 12 inch and (1) 10 inch Buell Strombos airhorn mounted through the plastic lower portion of the OEM front bumper. The system shall include a frame mounted air reservoir and a 12V pump mounted in exterior compartment #2. The airhorn system shall include a foot switch for the driver. The pump will be protected by an aluminum cover.

Air Horns, Control Switch, Foot Switch, Driver's Side Y N___

The vehicle shall be equipped with a driver's side foot switch to activate the siren. It will be wired to activate when the ignition is in the "ON" position and will be "deactivated when the transmission is in "Park" or "Neutral".

Backup Alarm, w/Cut off, Auto Reset Y___N___

9.5 BACKUP ALARM

The vehicle shall be equipped with an electric back-up alarm that will produce a minimum of 97 decibels. A momentary cut-off switch with automatic reset feature will be provided.

Emergency Sequencer/Load Manager Y___N___

9.6 EMERGENCY SEQUENCER / LOAD MANAGER

The emergency light switching system shall incorporate a built in sequencer that turns on and off the emergency loads at one/half second intervals. A built in electrical load manager will be preprogrammed to shut down pre-selected and/or non-essential loads in priority order as needed to maintain sufficient charge in the 12VDC system.

Rear Traffic Advisor Y N___

FedSig #MPSUSM42-A-30 42" 6-Lamp Arrow Stick IATS Y___N___

STANDARD LIGHTING POSITIONS --- Y___N___

FRONT WARNING LIGHT CONFIGURATION Y___N___

Visual Warning Front Upper - (5) "Cool Bar" (2) Front Wall Configuration Y___N___

WARNING VISUAL - FRONT UPPER (ZONE A)

The front wall of the module shall have a total (5) five warning lights evenly spaced in a straight line. There shall be (2) two on the module wall outboard corners and (5) three warning lights mounted with (3) three center forward facing and (2) two mounted on the angled intersection surface of the Cool Bar. The light shall be arranged as follows from the streetside corner to the curbside corner:

AUXILLARY EMERGENCY LIGHTS Y N___

Traffic Pre-Empt - GTT Opticom Model 794H LED, Module Front Wall Y___N___

TRAFFIC EMITTER

There shall be a GTT Opticom #794H LED pedestal mounted on the module front wall. The Opticom will be ON with the Master Emergency switch and will be disengaged when the unit is in "park" or "neutral". A separate cutout switch will be installed on the front switch panel.

PLEASE SPECIFY SPECIAL PROGRAMMING NOTES:
CATEGORY: _____
EQUIPMENT: _____

Click to add Rear Chevron Lighting Y___N___

Warning Light Flasher, Federal Signal AF16, Intelli-flash #650302 Y___N___

9.8 WARNING VISUAL - FLASHER

The ambulance shall be equipped with an Federal Signal AF16 Intilli-flash 650302 programmable electronic flasher unit.

Emergency Flashers Set to, KKK-A-1822F Flash Pattern Y___N___

WARNING VISUAL - FLASH PATTERN

The vehicles emergency flashers shall flash in a KKK-A-1822F Flash pattern.

Primary Mode:
(8) Red module corner flashers and rear center Amber flasher to flash opposite of the grill and intersection lights.

Secondary Mode:
(8) Red module corner flashers and rear center Amber only.

Additional Flashers - Pick from Package to add Y___N___

WARNING LIGHTS Y___N___

LED Series - 9X7 Federal Signal Quadraflare (Flange Separate) Y___N___

Light, 9X7, Quadraflare LED, R/R Split, Red Lens, w/Flng, Intnl Flash Y___N___

This light shall be a Federal Signal Quadraflare. Split 9X7 with Red/Red-LED with chrome flange and includes internal flasher. The lens color shall be Red.

Light, 9X7, Quadraflare LED, A/A Split, Amber Lens, w/Flng, Intnl Flash Y___N___

Alsip Fire Department

Ambulance Specification

This light shall be a Federal Signal Quadraflare. Split 9X7 with Amber/Amber-LED with chrome flange and includes internal flasher. The lens color shall be Amber.

Light, 9X7, Quadraflare LED, W/W, Clear Lens ,w/Flng, Intnl Flash Y___N___

This light shall be a Federal Signal Quadraflare. Split 9X7 with White/White-LED with chrome flange and includes internal flasher. The lens color shall be White.

FedSig LEDTCL97C-W 9x7 QUAD, LED, TCL, WHT, CLR LENS, Center Coolbar Y___N___

LED Series - 7X3 Federal Signal Quadraflare (Flange Separate) Y___N___

Light, Federal, 7X3 Quadraflare, Red LED, Clear Lens, w/Int Flash Y___N___

The ambulance shall be equipped with a Federal Signal, Quadraflare 7X3 LED, With Internal Flasher. Led color to be Red and lens shall be Clear.

Bezel, 7x3, Fireray, FR7MC, Chrome Y___N___

Four (4) four (4) Chrome bezel shall be installed on the Fireray 7x3 warning lights.

LED Series - 6X4 Federal Signal Quadraflare (Flange Separate) Y___N___

Light, 6X4 Quadraflare, Amber Led, W/flange, W /Internal Flash Y___N___

– The ambulance shall be equipped with a Federal Signal, Quadraflare LED light with chrome flange, with Internal Flasher. Led color to be Blue and Lens color to be Blue.

Light, 6X4 Quadraflare, White Led, W/flange, W/Internal Flash Y___N___

– The ambulance shall be equipped with a Federal Signal, Quadraflare LED light with chrome flange, with Internal Flasher. Led color to be Blue and Lens color to be Blue.

Federal Signal, MPSW9-R, Red , Internal Flash, W-Chrome Flange Y___N___

two (2) Federal Signal Micro Pulse Wide Angle Red LED with chrome flange shall be installed per the requirements of this agency.

Does your bid comply with this requirement?

Yes ( ) No ( )

EXTERIOR AUTOMOTIVE LIGHTING Y___N___

10 LIGHTING - EXTERIOR

10.1 LIGHTING - EXTERIOR AUTOMOTIVE

The basic exterior vehicle lighting shall include headlights, parking lights, directional signal lights, tail and stop lights, license plate light, back-up lights, hazard warning lights, clearance lights and reflectors, as required by F.M.V.S.S. 571.108.

The rear lights shall be Federal Signal Quadraflares 6X4 LED brake/tail and amber turn signals with arrow. These lights shall have chrome trim rings (Picked Separately) and be mounted vertically above the rear diamond plate area.

Marker/Clearance Lights, Front, Trucklite Model 33 LED, Amber Y N___

The front of the module shall have (5) amber clearance lights. The clearance lights shall be Trucklite Model 33 grommet mounted 3/4" round Amber LED.

Marker/Clearance Lights, Side Only, TruckLite Model 33 LED, Red/Amber Y___N___

The side body marker lights shall be TruckLite Model 33 LED type. There shall be (2) Amber mounted at the forward end of each side module roof extrusion, (2) Red mounted at the rearward end of each side module roof extrusion. In addition, there shall be (2) Red marker lights on each side in the midline of the body at the rear. (1) On each side shall function as a marker light and (1) will function as a turn signal.

Federal LED Quadraflare BTT/BU In Triple Lamp Housing, Vertical QL64Z3V R&L Y N___

Outboard Rear Flashers, Wired to OEM Brake Lights Y___N___

The outboard rear emergency flashers shall be wired to the OEM brake lights. These lights shall NOT function as brake lights when Emergency Flashers are on.

FLOOD AND LOAD SYSTEMS Y___N___

FedSig QL97LEDSCENE Lights on Module w/ QL97MC Bezel ILOS Y___N___

Lighting Operation, Side Scene, Rear Load & Back-Up Lights Y___N___

The electrical system shall be wired so that the rear module load lights and the lower back-up lights will operate when the rear doors are open, the switch on the front panel is activated, or when the vehicle is placed in reverse. With the module power switch "off", both the lower back-up lights and the upper load lights will operate when the vehicle is placed in reverse. The curbside scene lights will operate when the curbside door is opened.

Cab Entry - Lighting Y N___

11 - INTERIOR LIGHTING Y___N___

11. INTERIOR LIGHTING

FedSig Commander 8" Dome Light s Model #COM8PTC ILOS Y___N___

Timer -15 minute- Restocking Y___N___

LIGHTING - TIMER

The vehicle shall be equipped with a momentary switch that will activate a fifteen minute timer, wired direct to battery, to allow operation of the module dome lights while the vehicle is off. This feature will enable personnel to clean and restock the vehicle but eliminates the risk of leaving the lights on and draining the batteries. The momentary switch shall be located on the curbside wall near the side entrance door.

SPOTLIGHTS / HANDHELD LIGHTS Y N___

Handheld Spotlight - Sho-Me 300,000 CP Y_ N___

11.2 LIGHTING - SPOTLIGHT, HANDHELD

The cab shall be equipped with a spotlight with a coiled cord that is hardwired "On" with Ignition. The handle shall include a momentary switch. The bulb shall be a 12V - 300,000 candle power sealed beam non-glare bulb.

ATTENDANT LIGHT Y N___

Attendant Light - Kinequip LED Rail Light, 12" Swivel Mount Y___N___

11.3 LIGHTING - ATTENDANT

The action wall area shall be illuminated by a 12" surface mount LED strip light. The on/off switch shall not be in a remote location but shall be an integral part of the light and easily accessible. The light fixture shall pivot so that light may be directed toward the action wall, straight down to action counter surface, or out toward the attendant seat/aisle area.

SHORELINE INLET Y N___

12.1 125 VOLT AC SHORELINE INLET

Shoreline Inlet, Kussmaul Super Auto-Eject, 20A Y___N___

12.1 SHORE INLET

This vehicle shall be equipped with a 20 AMP/125 VAC Kussmaul Super Auto-Eject shoreline inlet with a matching female connector. It shall include a 20 amp GFI circuit breaker.

Kussmaul, Eject,Cover,15 or 20A,White Y___N___

GFI Box Location- Behind Driver's Seat Y___N___

Outlets, Interior, 125V-15A (1) Action Wall, (1) Right Stack Y___N___

12.2 INTERIOR 110VAC - RECEPTACLES

There shall be two 125VAC 2-wire plus ground illuminated 15 amp duplex outlets, one located on the action area wall, and one in the right front stack ALS cabinet. The outlet in the ALS cabinet shall be located on the inboard wall of the lower section, above the top shelf. All 125VAC outlets shall be hospital grade. Wiring shall be Type SO rubber cord with spit loom cover and all connections shall be made in UL approved junction boxes.

BLOCKHEATERS Y N___

Block Heater - With OEM Plug Y___N___

ENGINE BLOCK HEATER

The chassis shall include a 110VAC powered engine block heater. The block heater shall have an OEM plug located in the engine compartment.

INVERTER - 125VAC Y___N___

Inverter Charger - Vanner LifeSine, with charger indicator on Console Y___N___

INVERTER CHARGER
The vehicle shall be equipped with a Vanner 'UL' listed 1100 watt Pure sine wave power inverter/55 amp battery charger, #LSC-12-1100 with internal transfer relay. This system includes a battery charger indicator mounted on driver side of the radio console.

13 - ENVIRONMENTAL SYSTEMS Y N___

13. ENVIRONMENTAL SYSTEMS

ENVIROMENTAL CLIMATE CONTROL SYSTEM Y___N___

HVAC - Central Air Flow Discharge (UM & UM-150) Y___N___

The design of the Heat/AC environmental system is to provide optimal air flow and distribution of conditioned air evenly to all areas of the module interior. Conditioned air shall not be discharged from one vent area but shall be distributed through multiple vents evenly spaced in a line down the length of the module ceiling. The plenum that supplies the vents shall be built into the module roof structure and shall not be visible. In order to support the efficient and effective performance of the system and to prevent the build-up of condensation inside, the interior of the plenum will be completely insulated with a reflective barrier insulation material.

Climate Control Y N___

13.1 ENVIROMENTAL CLIMATE CONTROL SYSTEM

An OEM air conditioning and high output heater shall be provided in the cab. The module system shall incorporate a combination heating and air conditioning unit. The chassis and module heating and A/C system controls shall function independently of each other.

The module heater A/C shall be a combination unit capable of 43,600 BTU heat, and 32,,000 BTU cool, with a 580 CFM blower. The unit shall have an integral molded drain tray with a drain hose and built in anti splash shields. Design of tray to insure that all moisture is drained out of the interior of the cabinet. All heater hoses shall be 5/8 inch QVM approved Nomex. Hot water flow shall be controlled by two (2) vacuum actuated inline water valves. All A/C fittings shall be ferruled, banded, or snap ring type. Clamps will not be acceptable. No Exception.
The warranty for this unit shall be 3 year parts and labor.

The thermostat and Heat/AC controls in the patient compartment shall be incorporated into a single control panel located within easy reach of the main attendant seat. This control panel shall provide separate switches for:

- (1) Heat/AC mode selection
- (2) Target temperature selection
- (3) Fan speed

Temperatures shall be displayed by a digital LED readout incorporated into the sealed face of the control panel. The switches shall be fully sealed membrane switches. Once the temperature control and heat/cool switch is set, the system shall automatically maintain the set module temperature every time the vehicle is operated.

The design of the Heat/AC environmental system is to provide optimal air flow and distribution of conditioned air evenly to all areas of the module interior. Conditioned air shall not be discharged from one vent area but shall be distributed through multiple vents evenly spaced in a line down the length of the module ceiling. The plenum that supplies the vents shall be built into the module roof structure and shall not be visible. In order to support the efficient and effective performance of the system and to prevent the build-up of condensation inside, the interior of the plenum will be completely insulated with a reflective barrier insulation material.

Exhaust Fan - 100 CFM Standard Location Y N___

The patient compartment shall include a 100CFM, high output exhaust fan and exhaust cowl vent installed on the rear of the module on the streetside rear panel. The exhaust fan shall include an On/Off switch in the rear control panel.

HVAC BASE SYSTEM - HOSELINE Y N___

HVAC Aux Front Wall Coolbar, Hoseline, Ford E-series Multiplex Y___N___

The ambulance shall include a Hoseline 12VDC combination A/C-heater system mounted above the right front cabinet. The air flow from the system will be discharged through a plenum located in the center of the patient compartment ceiling. The return air will be circulated back through a louvered grille located at the lower front of the right front cabinet and a sealed air duct into the A/C-heater system. The system will include a 12VDC inline water pump to provide adequate hot water flow to the rear heater unit and two (2) vacuum actuated water valves to be mounted in the cabinet with the A/C-heater system to facilitate service.The “Cool Bar” is a custom housing designed to hold a Hoseline condenser on the front of the module and allow for additional lighting mounted on the housing. The “Cool Bar” measures 65.38 inches along the rear (box side) and 40.5 inches on the forward facing side. The housing is 12.38 inches deep by 9 inches high. There are two Angled portions to allow for additional lighting for intersection clearing 17.55 inches by 9 inches at an approximate angle of 45 degrees. The condensers shall

be Hoseline 2050D. They shall provide 2948 CFM of air flow across the condenser cooling coils with four 12VDC fans and provide 50,000 BTU's of cooling for the 12V side.

Cover, Cool Bar, (5) 900 series lights, LED Lights Y___N___

Return Air System Y___N___

13.3 RETURN AIR SYSTEM

The air return intake shall not be less than 50 square inches. This return system shall allow the existing air in the module to be recirculated back through the heat A/C unit, thus allowing faster cooling or heating of the module environment.

Return Air Central Plenum Y N___

To achieve true air recirculation in the module, return air to the system shall be supplied through a return air duct built into the inboard wall of the right front ALS cabinet and will include a hidden opening at the bottom. The air intake to be elevated from the floor to allow for cove molding and roll up flooring.

Heat/AC Cabinet Y N___

The heater-A/C evaporator unit shall be stored in a self contained cabinet at the top of the bulkhead. It shall be sealed so the intake can only draw from the return air duct.

14 - MEDICAL SYSTEMS Y___N___

14. MEDICAL SYSTEMS

COT MOUNTING PROVISIONS Y___N___

Cot Mounting, Hardware Y___N___

14.1 COT MOUNTING HARDWARE

The manufacturer shall install a cot mounting system that incorporates cast housings mounted below the floor level to prevent fluid contamination and to prevent exhaust fumes from entering the module through the floor.

The manufacturer shall install 1/4 inch plates below the floor to accept the mounting of the cot plates. Cot plates will be mounted with the cot manufacturer's approved bolts and torque settings.

Post & Wheel Cups, None Y___N___

The manufacturer shall provide cushions on the squad bench that are full width and length of the squad bench lids. There will be no cut-outs for post and wheel cups.

Safety Hook, Ship Loose Y___N___

A cot safety hook with appropriate fasteners shall be shipped loose with the vehicle.

Safety Hook, Stryker with bolts, Shipped Loose Y___N___

A Stryker cot safety hook with appropriate fasteners shall be shipped loose with the vehicle.

Cot Mount, Stryker Power Load, No Wheel guide, CN 8 Compliant Y___N___

Install a Stryker #6390 Power-LOAD system. Includes battery hot power source to keep the batteries charged.

Center Mount Y___N___

OXYGEN AND AIR SYSTEMS Y___N___

O2 System, Multiplex Y___N___

14.2 OXYGEN AND AIR SYSTEM

The entire oxygen system shall be assembled with certified O2 hose (250 PSI burst strength), stainless steel tees and stainless steel permanent crimps, that are accessible throughout the module. All O2 hose running throughout the module shall also be encased in a flexible plastic loom for additional protection from chafing. To provide strain relief and protect low pressure O2 line from damage during bottle changes, the line shall be mounted securely to the wall above the O2 bottle. The system shall be pressure tested in accordance with AMD standard 015, and a signed inspection sticker shall be in plain view of the attendant.

The oxygen supply system shall be installed in the patient compartment in compliance with KKK-A-1822F. Unless otherwise specified, the system shall consist of three Ohio style oxygen outlets. Two outlets shall be

located on the action wall and one outlet shall be located on the forward end of the curb side wall above the squad bench. This system shall be set up so a change in outlet style is readily made by just removing the front plate, thereby not compromising integrity of the system with field changes.

Built into the rear switch panel shall be a high pressure oxygen monitoring system. The rear panel shall display tank pressure in PSI. When the front switch panel includes an display screen, the screen shall also display tank pressure in PSI and give a visual and audible warning when tank pressure drops below 500 PSI. Included with the system shall be a 50 PSI regulator. To provide strain relief and protect low pressure O2 line from damage during bottle changes, the regulator shall be mounted to a fixed aluminum diamond plate panel above the O2 bottle. A high pressure braided stainless steel hose shall connect the wall mounted regulator to the O2 bottle.

O2 Cylinder Wrench Y N___

The O2 compartment shall be equipped with a large cylinder changing wrench #5082 secured to the wall with a cable in a location convenient to the oxygen cylinder.

O2 Cylinder Bracket - Zico #QR-MV Y___N___

The oxygen bottle bracket shall be a Zico model #QR-MV universal oxygen cylinder holder. The bracket components shall be adjustable to fit 6 inch to 9 inch diameter bottles. The bracket and mounting method shall meet AMD Standard 003 for KKK-A-1822F.

O2, Bracket, Zico, to be Adjustable Y N___

The O2 compartment shall be equipped with a standard Zico universal oxygen holder that is fully adjustable including the bottom bracket.

O2 Control - Electric with Manual Bypass on Action Wall. Y___N___

The vehicle shall be equipped with an electric O2 solenoid valve to turn the 50 P.S.I. supply to the oxygen outlets on and off. The valve shall be controlled by an "On/Off" switch located on the rear switch panel. The valve shall also provide a manual by-pass feature for emergency use in the event that power to the solenoid is interrupted.

O2 Outlets, Ohio Style, (2) Action Wall, (1) Squad Bench Y N___

OXYGEN, MAIN SUPPLY AND INSTALLATION

The ambulance shall have a hospital type piped oxygen system capable of storing and supplying three thousand liters of medical oxygen. The cylinder controls shall be accessible from inside the patient compartment. The pressure gauge shall be visible from either the attendant's seat or from the squad bench. The oxygen shall be piped to three Ohio style oxygen outlets. Two outlets shall be located on the action wall and one outlet shall be located on the forward end of the curb side wall above the squad bench. The oxygen system will incorporate electrically conducted oxygen hose with a working pressure of one hundred and fifty pounds per square inch. All oxygen hose and outlets will use machine crimped brass ferrules and high pressure connectors. This system shall be set up so a change in outlet style is readily made by just removing the front plate, thereby not compromising integrity of the system with field changes. The entire oxygen delivery system will be pressured tested with a minimum of one hundred and fifty pounds per square inch of pressure of nitrogen gas for a period of four hours. The testing documentation will be delivered with the vehicle.

Bidder Complies YES_____NO_____

O2 Outlet, Ohio Style, Additional in Ceiling Y___N___

There shall be one (1) Ohmeda/Ohio style O2 outlet located in the ceiling above the primary cot location

O2 Gauge, 3000 psi, Action Wall Y___N___

O2 SYSTEM MONITOR

There patient compartment shall be equipped with a 3000 PSI analog (dial type) high pressure O2 gauge to monitor oxygen system tank pressure. High pressure hose shall be provide and secured so the stress is on the hose and not he back of the pressure gauge.

The gauge for the oxygen system shall be installed on the Action Wall to allow easy viewing from the attendant seat.

Brackets, SCBA, Zico Brkt # UN-5-30-3-SF, Exterior Compartment, Pair Y N___

SCBA BRACKET
The vehicle shall be equipped with (2) spring clip style walkaway SCBA brackets in the specified exterior compartment.

SUCTION SYSTEM Y___N___

Suction System, SSCOR On-Board Y___N___

14.3 SUCTION SYSTEM

A Lexan mounting bracket for a 1200 CC disposable suction canister shall be mounted on the action area wall. The suction pump shall be piped to an SSCOR regulator that is mounted on the action wall near the suction canister. The regulator shall be complete with indicator gauge shall be plumbed directly to the suction canister. A suction canister and a 72 inch patient suction tube with a plastic suction tip shall also be supplied with the system.

The control switch for this system will be mounted in the action area switch panel. The system shall include a suction pump mounted in the dead space of exterior compartment #1.

MISC MEDICAL Y N___

Fire Extinguisher, 5# ABC w/ Mounting Bracket Y___N___

14.4 FIRE EXTINGUISHER

The manufacturer shall supply one (1) 5# (ABC) Fire extinguisher with mounting bracket. The fire extinguisher shall be shipped loose with the vehicle.

Fire Extinguisher, 5# Fire Extinguisher, Ship Loose, Each Y___N___

The manufacturer shall ship one (1) additional 5# fire extinguisher with matching mounting bracket with the ambulance. There will be a total of two (2) 5# fire extinguishers with brackets.

Acrylic Organizer. Paramedic Designs, PD-7 Y___N___

15 - PAINT / DECALS AND NOMENCLATURE Y___N___

15. PAINT AND NOMENCLATURE

PAINT AND FINISH Y___N___

Manufacturers Paint Process Y___N___

15.0 PAINT AND FINISH

The primer, paint and paint finishing materials utilized by the manufacturer shall be components of the Akzo Nobel "Sikkens" Paint System. In order to ensure system process integrity and full warranty coverage, the

entire body process from body preparation to final sand, buff and glaze shall be a process that is designed and approved by Akzo Nobel for the manufacturer.

As a standard part of the manufacturer's paint system process the following process shall be adhered to:

BODY PREP

- All surface body welds and imperfections shall be ground flush, and body filled as needed to provide a smooth even surface that facilitates a flat smooth paint finish.
- The entire exterior surface of the module shall be sanded with a minimum 180 grit sandpaper and then washed to provide a clean, unblemished surface prior to the chemical wash process.
- Apply Akzo-Nobel Acid Aldine 5700 series to the entire exterior body and doors.
- The entire exterior surface of the module shall be washed with M-600 cleaner/degreaser to remove any metal, oil or contaminant residue prior to the application of the seam seal process.
- All seams shall be caulked with a high quality seam sealer and then allowed to cure for 24 hours to provide a stable application environment for the primer and final paint processes.

All of the module entry and compartment doors shall be removed prior to painting and be painted separately and identically to the module process to insure complete coverage and electrolysis protection between the stainless steel hinge and the aluminum door and frame surfaces.

PRIMER

The entire exterior surface of the module shall be coated with a primary application of Akzo Nobel "Sikkens" High Build Autocoat BT LV262 Epoxy Primer surface, the module will then be baked dry at 140 degrees Fahrenheit substrate temperature for 45 minutes to one hour. The High Builder Urethane primer surface shall be sanded to a flat smooth finish to eliminate all nibs and imperfections in the substrate using a minimum of 320 grit sandpaper. The module will then be inspected and imperfection that are found the proper corrective action will be taken.

The entire module will then be thoroughly blown and wiped to remove all dust particles left over from the sanding process. The module will then be cleaned and degreased again using the M-600 surface cleaner to ensure a clean surface before applying the final sealer, Color, and Clearcoat. The entire area to be coated with the Urethane Sealer will be thoroughly tacked using a Tack Rag to remove any particulates before the coating process begins.

The entire surface of the module shall be coated with the application of Akzo Nobel's "Sikkens" Urethane Sealer. The sealer application will provide a uniform finish to paint on while also filling any small sand scratches as the result of sanding the Urethane Primer surface. The Sealer will be allowed to flash for 20 minutes at 70 degrees Fahrenheit before applying the basecoat Color.

BASECOAT/CLEARCOAT

The entire exterior surface of the module shall be coated with an application of Akzo Nobel "Sikkens" Basecoat/Clearcoat color until the proper opacity of the color is achieved. The base coat will then allowed to flash for a minimum of 20 minutes at 70 degrees Fahrenheit.

FINAL SAND AND BUFF

The entire exterior surface of the module shall be sanded with a minimum 1200 to 1500 grit sandpaper and then followed by 3000 grit wet sandpaper. The exterior of the module will then be polished using the 3M 3000 buffing system to provide a smooth, high gloss final surface finish. This process shall provide a smooth, high gloss finish that is resistant to scratching and chipping. If proper vehicle care is taken. Then buffed using 3M Perfect-It III buffing compound to provide a clean, high gloss final surface finish. This process shall provide a smooth, high gloss finish that is resistant to scratching and chipping.

All light holes, the license plate bracket hole, gas filler bracket hole, all door window and handle holes and exhaust fan and any other option required mounting holes shall be cut in the module prior to beginning the Akzo Nobel "Sikkens" paint process. Intersection light holes shall be cut in the chassis fenders and cut out must be coated with a corrosion resistant material to comply with requirements to prevent oxidation and rusting of the OEM metal surface.

The entire exterior surface of the module shall be painted to match the customer's specified color requirements. Unless otherwise specified by the customer, the standard application process will ensure that the module, module roof and cab are all painted the same color.

NO EXCEPTIONS

Module Paint, Single Color, OEM White Y N___

MODULE - PAINT FINISH COLOR
The standard modular ambulance paint finish shall be produced by the application of a certified Akzo Nobel "Sikkens" paint process. The standard process shall produce a white finish to match the standard OEM chassis white. The finished paint process shall provide a single color, solid surface paint application.

Cab Paint - Single Color, OEM White Y N___

CHASSIS CAB - PAINT FINISH COLOR
Standard OEM White

Click to Add Paint Stripe Design Y___N___

GRAPHICS AND LETTERING Y___N___

Complete graphics and Lettering package as specified by the Alsip Fire Department shall be provided and installed by the successful dealer prior to final delivery of the completed unit to the department.

Bidder Complies YES_____NO_____

Badge Logos Y___N___

15.3 GRAPHICS AND LETTERING

Manufacturer Logo badge. Install (1) on the rear module streetside wall above the treadbrite area.

Logos and Model Name Y___N___

As a standard part of the manufacturer's production process, logos shall be applied to the following locations:

Manufacturers - Black Logos Y___N___

- (3) White Scotchlite Manufacturers Logos: (1) on each entry door lock box.
- (2) Black Scotchlite Manufacturers Logos: (1) on each cab fender just below the "A" pillar.
- (2) Black Scotchcal Manufacturers Logo: (1) each on the #4 and #6 compartment doors.
- (1) Manufacturers Installed just above the rear diamond plate wrap on the driver side.

RR, Nomenclature Plaques. DIESEL. Y___N___

The following labels and placards shall be provided as with this vehicle.
- SHORE INLET 110VAC 60 HZ
- ANTENNA ACESS
- 110VAC OUTLET
- 12VDC OULET
- DIESEL ONLY
- NO SMOKING / OXYGEN EQUIPPED
- FASTEN SEAT BELTS

Manufacturers, Owner's Manual Y___N___

OWNERS MANUAL

An Owner's Manual is provided with each vehicle, and consists of the following items:
1. Chassis Warranty Card & Owner's Information
2. Chassis Maintenance and Operating Tips
3. Extra Set of Keys
4. Limited Lifetime Module Warranty- Defined as 25 years
5. 2 Year/30,000 mile Conversion Warranty
6. 7 Year Electrical Warranty
7. Care and Maintenance Instruction
8. Module Remounting Procedure
9. Heater/AC Information & Warranty
10. OEM Chassis Manual
11. Schematics for Standard Systems:
    - Charging System
    - Power Distribution
    - Front Switch Panel
    - Rear Switch Panel
    - Climate Control System
    - OEM Drawings
    - Wire Harness list
    - Circuit Diagrams for all Systems
12. Conversion Component Information
13. Operations Manual
14. Warranty and Parts List - Siren, Light bar, Etc.

Indemnification Statement Y___N___

== Dealer Ship Loose - EMS Equipment - 1.003 Y___N___

- Provide and Install a CAPS Active Air Purification System inside the rear Patient Module. Wire into shoreline so that it can provide 24/7 operation / purification.

Designed with advanced photohydroionization (PHI) and UV technology, the Active Air Purification System kills 99% of pathogens, including COVID-19, in the air and on surfaces delivering better air quality and a safer cab environment for your crew.

- Kills 99% of germs, microbes, viruses, and bacteria in the air and on surfaces.
- Proven reduction in sneeze germs by 99% within three feet
- Proven efficiency on microbes (3rd party tested H1N1, vain Flu, sneeze test)

- Proven Impact on odor reduction

Bidder Complies YES_____NO_____

Alsip Fire Department

Ambulance Specification

Additional Dealer Supplied Equipment - EMS Equipment Y_ N___

- Model 6507-0555-0001 **Stryker Power-PRO-2** Cot High Configuration
- Include Second Lithium Ion Battery (Sold Separately)

Bidder Complies YES____NO____

stryker

Power-PRO™ 2 powered ambulance cot

MTS configurations

Features	High configuration (PN 650705550001)	Mid configuration (PN 650705550002)
Siderails	XPS	Standard side rails
Wheel lock	Quad wheel/steer-lock	Dual wheel/steer-lock
Mattress	XPS knee Gatch bolster mattress	Knee Gatch bolster mattress
Backrest storage	Dual-sided backrest pouch	None
Battery	One lithium-ion battery	One lithium-ion battery
Compatibility	Power-LOAD® powered cot fastener and Performance-LOAD® manual fastener compatibility	Power-LOAD and Performance-LOAD compatibility
Connectivity	Wi-Fi® enabled	Wi-Fi enabled
IV pole	IV pole, 3-stage, PR	IV pole, 3-stage, PR
O_2	O_2 bottle holder, head section	O_2 bottle holder, head section
Restraints	X-restraint	X-restraint
Storage	Head end storage flat	Head end storage flat
Knee Gatch	Knee Gatch/Trendelenburg	Knee Gatch/Trendelenburg
Hook	Equipment hook	Equipment hook
Manual	Operations manual	Operations manual

Standard features

- Bumper detection
- Transport height and handle
- Three position foot section
- Light/reflectors
- Flat raise
- High speed extend and retract legs

Additional accessories (sold separately)

- Base storage net
- Belt extender
- Additional batteries
- Charger
- Power adapter

High configuration

*Features only available on high configuration Power-PRO 2. For features available on the mid configuration model, please see the comparison table above.