Issue Date:	Crescent Springs / Villa Hills Fire Department Request for Bid Proposals, Ambulance Unit 2025/2026	
Bid Due, Date & Time:		Number of Pages:
General Contact Information: Crescent Springs / Villa Hills Fire Department 777 Overlook Drive, Crescent Springs, Kentucky 41017 Phone: (859) 341-3840 Fax: (859) 341-2939	Bid Primary Contacts: Lieutenant Carissa Hoyle Email: choyle@csvfd.com Phone: (859) 446-7277	

Bidders must complete the following and return this entire document with their bid submission

Bidder Name & Address	Bidder Name & Signatory (Please write & sign name)
Bidder Contact Numbers (phone & fax)	Bidder Email Address(es)
Any Additional Information	
Bid Issued By	Date

PURPOSE AND SCOPE

The Crescent Springs / Villa Hills Fire Department (the department) is accepting bids within the herein timeline for the purchase of one (1) new Type I, ambulance unit. All items must be bid on and conform to the specific requirements contained within this document.

This bid package is to conform to all legal requirements from the Department of Transportation Regulations as well as all Local and U.S. Codes of Federal Regulations; and Title IV Rights of the Civil Rights Act of 1964.

LEGAL RIGHT TO SPECIFY

The department chooses to exercise its legal right to specify as determined by the U.S. Supreme Court affirmation of the decision handed down in the case of Whitten Corporation vs. Paddock, by the U.S. District Court of Massachusetts, the First District Court, which states:

1. That as trained professionals, the dept can make informed judgments on products that they feel best suits their needs. Also, that proprietary specifications, if chosen, do not violate any antitrust laws, and that if the dept wants to limit the specification to one source, the dept has the right to do so.
2. Only the dept has the sole responsibility and judgment for determining whether a proposed substitution is equal in quality.
3. That from start to finish in the purchasing process, only the dept can ultimately decide of another product is available.
4. Finally, that the courts concluded, “The burden is on the supplier or manufacturer, who has not been yet specified, to convince the dept that their product is equal for the purpose of a particular product.”

The department reserves the right to accept a bid that is not the lowest received, if the department’s judgment as such is in the best interest of the department and the public. Furthermore, the department reserves the right to reject any and all bids.

Schedule of Events

Bids Published & Available for issue	April 15, 2024
Deadline for receipt of questions & concerns	May 1, 2024
Bid Package due date & opening	May 1, 2024, 1800hrs
Deadline Notification of Award of Contract	May 20, 2024
Deadline for Delivery of Product	October 1, 2026

Terms and Conditions

1. This bid document is the "Official" bid specification of the Crescent Springs / Villa Hills Fire Department. This bid specification must be included in its entirety with each bidder's proposal. Bidders shall not include any other bid specification except the "Official" bid specification contained herein. If the bidder does include their respective bid specification and/or shop order the bidder's proposal will be rejected.

2. No submissions received after the date and time stated within this document or at any other place other than stated herein will be considered. The department holds no responsibility for prematurely opened bids which were not correctly addressed and identified.

3. No alternate bids taking total exception: Bidders are required under this bid invitation to give, for the consideration of the purchaser, a proposal that will comply with the written bid specifications and schedules supplied herein. The bid specifications supplied represent a compilation of input from all disciplines of users, patients, maintenance, and management personnel who are directly affected by the vehicle performance. All the personnel who have direct working contact with the vehicle specified herein base careful consideration pertaining to safety, configuration, construction, and workmanship on working experiences. The intent of this ambulance was created as a result of resolving issues and improvement suggestions that have originated from the personnel most qualified to make such input. A bidder who submits a bid that takes "TOTAL EXCEPTION "and makes an offering of some "Stock" or "Standard" unit will be viewed by this department as a bidder who did not make and is not prepared to make a valid bid and is not qualified to manufacture the ambulance as specified herein. Alternate bids shall not be considered. No Exception

4. All bid proposals cost that is to be read aloud at the bid opening must provide the "true" cost of the vehicle according to these bid specifications to include all optional items etc. Any bidder that submits a cost of a standard or stock unit with an a la carte listing separate optional cost will be rejected upon grounds of deception.

5. A bidder may withdraw their submission before the expiration of the time during which submissions may be submitted without prejudice to the bidder, by submitting a written request of withdrawal to the bid contract.

6. The department may reject any and all submissions, and must reject a submission of any party who has been delinquent, unfaithful, and or illegal in any formal contract with the department. Also, the right is reserved to waive any irregularities or informalities in any submission in the proposal.

   The department is the sole judge as to which submission is best, and in ascertaining this, will take into consideration the business integrity, financial resources, work facilities, and experience in similar operations of the various submissions.

7. The bidder may be required, upon request, to prove to the department that they have the skill, experience, financial resources, and necessary facilities to conform to the requirements of this contract. If the available evidence of competency is not satisfactory, the submission may be rejected. The successful bidder is required by this contract to abide by all applicable Local and Federal laws in effect at the time the contract is awarded.

8. By providing a bid submission, the bidder represents and warrants that such a submission is genuine and not made in the interest of any person not therein named, and that the bidder has not directly or indirectly induced or solicited any other bidder to put in a sham submission, or any other person, firm or corporation to refrain from bidding and that the bidder has not in any manner sought by collusion to secure to that bidder any advantage over any other bidder.

9. By providing a bid submission, the bidder represents and warrants that no person employed by the Crescent / Villa Hills Fire Authority; Crescent Springs Volunteer Fire Department Incorporated; City Of Crescent Springs, Kentucky; City Of Villa Hills, Kentucky; or the department has in any manner, an interest, directly or indirectly in the submission or in the contract which may be made under it, or in any expected profits arise there from.

10. The notice, schedule of events, standard terms and conditions, instructions for bidders, product specifications, submission documents, and any other agenda, if any, are all deemed part of the contract.

11. The successful bidder shall not begin performance of the project prior to the execution of a written and signed contract with the department. Any bidder's beginning performance prior to the execution of such a contract shall be deemed to be proceeding at the bidder's sole risk and shall not be entitled to any compensation for such performance. In addition, the department reserves the right to withdraw or cancel such a bid.

12. The instructions contained herein shall be construed as a part of any bid invitation and/or specifications issued by the department and must be followed.

13. The written specifications contained within this document shall not be changed or superseded except by written addendum from the dept. Failure to comply with the written specifications for this bid may result in disqualification by the department.

14. Telephone, telegraphic, emailed, or facsimile bids will not be accepted.

15. Unless otherwise stated, all bids submitted shall be locked and may not be withdrawn for a period of 60 days from the due date.

16. All materials and complete products are to be manufactured and assembled within the United States of America.

17. Delivery of complete product shall be completed within 875-900 days from signed Purchase Agreement and delivery of approved chassis to ambulance manufacturer. A penalty of not more than $200.00 per day is invoked as liquidated damages for each subsequent to the specified delivery date.

18. NOTICE TO BIDDERS: On the bottom of each page of this specification, the bid preparer must initial that there bid proposal meets this specification in its entirety. If your bid proposal does not meet this bid specification as written, there must be a written detailed description of what you are bidding and how it is equal to or better than what has been specified on a separate page that shall be included within the proposal. There shall not be any writing on the pages such as phrases as “See the bidder’s specifications etc.” Even if a bidder complies with only parts of an item(s), they must provide what they comply to and what they do not comply with on a separate page. Failure to comply with these strict guidelines shall be grounds for rejection.

Instructions for Bidders

1. All bids' proposals must be sealed, received in hand by the due date and time, at the **Crescent Springs / Villa Hills Fire Station**. Each bidder assumes the responsibility for having their bid proposal received at the designated time and place of the bid due date.

2. The info line "Ambulance Bid 2025/2026" will be clearly written on the outside of the envelope to avoid opening in error.

3. Bidders have the allotted time defined within this document to relay any questions, preferably via email to the stated primary contact. All queries will be returned within the quickest timeframe possible from the department.

4. The attached specifications checklist shall be checked off by the bidder and initialed certifying compliance. Any item not meeting the requirements of this specification will also include an explanation of their product's differences and why such a substitution should be granted.

5. A Certificate of current liability insurance, with a Ten (10) million dollar minimum shall be supplied with the bid submission. The certificate of insurance shall bear the insurance carrier's name, address, and phone number. The Certificate shall also bear the name and address of the insured. This document shall contain the coverage schedule, explaining the type of insurance, the policy number, the effective date of coverage, the policy expiration date, and the individual limits of liability.

6. Enclosed within the bidder's document package shall be any other documents relating to the official certifications of the bidder's product.

7. A public bid opening will be conducted at the **Crescent Springs / Villa Hills Fire Station** on the stated date and time within this document.

Detailed Specifications for 1 (one) Type I Ambulance Unit

INTENT OF THE SPECIFICATION

It shall be the intent of these specifications to cover the furnishing and delivery of 1 (one) new and complete ambulance unit equipped as specified within this document. These specifications cover only the general requirements set forth by the dept as to the type of construction and requirements to which the vehicle shall conform. Minor details of construction and materials, which are not otherwise specified, are left to the discretion of the bidding organization. At a minimum, the bidder shall meet all current mandated and voluntary ambulance design standards in effect at the date of the proposal submission. All current Federal Motor Vehicle Safety Standards (FMVSS), Department of Transportation Ambulance Design Standards (KKK-A-1822) must be met.

PRELIMINARY DRAWING

A design drawing of the vehicle shall be provided with the bid submittal. Computer Aided Design drawings of both the interior and exterior as well as overall layouts are mandatory. All options and elements required within this specification shall be depicted on the drawing. These drawings, as submitted, shall accurately depict the exact vehicle that is being proposed.

PRE-CONSTRUCTION CONFERENCE

A meeting shall be held between the ambulance committee and the sales representative of the manufacturer prior to construction of the ambulance. At this meeting all questions and concerns, including decisions to be made as stated within this document, as well as the above drawing shall be approved before construction begins. The finalized and approved drawing shall become part of the official contract documents.

PRE-DELIVERY INSTRUCTIONS

There shall be up to three (3) pre-delivery inspections performed by the representatives of the ambulance committee at the manufacturing location. Inspection visits shall be scheduled by the new ambulance committee, with the manufacturer. These inspections shall occur before the vehicle leaves the factory for delivery to the dept. All travel and lodging costs for these inspections will be at the expense of the manufacturer. Approval at the Pre-Delivery Inspection shall not constitute acceptance of the ambulance.

DELIVERY

The vehicle, to ensure proper working condition, shall be delivered to the Crescent Springs / Villa Hills fire station under their own power; freight delivery of the vehicle will not be accepted. A qualified representative of the manufacturer shall be available to instruct personnel in the proper operation, care, and maintenance of the vehicle.

REQUIRED DELIVERY ITEMS

Upon a successful bid award, the vendor shall provide the following to the purchaser, upon ambulance delivery:

1. Manufacturer's Quality Assurance Vehicle Testing and acceptance documents.
2. One (1) copy of conversion parts, service, and operational manuals.
3. OEM Chassis Owner's Guide materials as provided by the chassis manufacturer.
4. Two (2) copies of "as built" customized electrical schematics for the ambulance conversion.

WARRANTY

The prescribed within minimum warranties shall be supplied with each manufacturer's proposal and be printed upon company letterhead. The winning manufacturer shall provide Warranty coverage from the date of delivery. Copies of these Warranties shall be provided to the purchaser in the bid response.

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AMBULANCE SPECIFICATIONS

SPECIFICATIONS FOR A NEW EMERGENCY MEDICAL VEHICLE:

BIDDER INSTRUCTIONS:

The following specification describes a new ambulance that is expected to be acquired by the Crescent – Villa Fire Authority. The specification describes the needs of this purchaser as far as chassis configuration and module body design. A state-of-the-art vehicle is required. However, manufacturers that utilize prototype equipment or manufacturing processes will not be considered. The builder's manufacturing history shall be supported by documentation where applicable, and by the reference section within this specification. The benchmark for the initial configuration of this ambulance shall be the current KKK Federal Specification for Ambulances, NFPA 1917 Standard for Automotive Ambulances, or CAAS certification. However, most requirements in this specification exceed the federal specifications because of the specific needs of this purchaser.

Please note that the following specifications represent minimum general terms or requirements. While it is not the intent of this purchaser to preclude any qualified bidder from submitting a proposal, it must be clear that any bidder deviating in any substantial manner from these specifications will be rejected as being non-compliant.

Finally, manufacturers or distributors for manufacturers submitting bids shall include the following information with their proposal:

MINIMUM REQUIRED STANDARDS:

The highest degree of quality, both in the materials and in the building processes, is required for the emergency medical vehicle being proposed. At a minimum the manufacturer being proposed must meet all current mandated ambulance design standards in effect at the date of the proposal submission. All current Federal Motor Vehicle Safety Standards (FMVSS) must be met, as well as all current Federal Ambulance Design specifications as well as NFPA Standards.

The bidder shall state the date of certification for the current

KKK-A-1822: _____

NFPA 1917: _____

CAAS GVS V.1.0: _____

The manufacturer shall also comply with Ford Motor Company's QVM program. A copy of the manufacturer's current QVM certification must be submitted with the bid.

The current QVM certification is included.

Yes_____ No_____ Initial: _____

PROPOSAL COMPLETION PROCESS:

Various areas in the following specifications require a response from the bidder. To aid in the evaluation, process all responses must be consistent and, most importantly, legible. Therefore, the areas that are to be completed by the bidder, along with any other materials that may be submitted by the bidder, must be typed. Bids that are submitted with either hand-written responses or with hand stamped responses shall be automatically rejected as being non-compliant.

Does the bidder understand this requirement?

Yes_____ No_____ Initial: _____

SINGLE SOURCE MANUFACTURER:

To simplify warranty coverage and to assure a consistent level of quality throughout the vehicle, a manufacturer is desired that manufactures the major components for the ambulance (excluding the chassis). Major components are defined as the module body, the interior cabinets, and the converter-added electrical system. This purchaser understands that manufacturers may purchase some elements, such as switches, boards, etc. with which to manufacture a system.

Further, this specification requires the vehicle manufacturer to own the design of, as well as the rights to, the onboard converter-added electrical system. Generic aftermarket systems that are manufactured by an outside company and installed by the vehicle converter are not acceptable.

These requirements are addressed elsewhere within this specification where the specific defined items are located. Manufacturers who outsource any of the above-referenced components shall be considered non-responsive and will be rejected.

Bidder states that the represented vehicle builder manufactures all the major components as defined above:

Yes_____ No_____ Initial: _____

Bidder states that the represented vehicle builder owns the design of the converter-added electrical system, as well as all rights to that system and any software that may be required:

Yes_____ No_____ Initial: _____

Component manufacturer (by company name):

Modular Body: _____

Interior Cabinets: _____

Electrical Wiring System: _____

QUOTATION:

The overall quotation shall include a firm price for a vehicle meeting these specifications. The length of time that the price will be held shall be clearly stated in the quotation. The quotation shall include a specific delivery window based on the number of calendar days following the award of the contract. The model year of both the chassis and the conversion shall be clearly stated in the contract.

WARRANTY:

The proposal shall include all warranties that are required in the following detailed specification. Lifetime warranties will not be accepted because of their unclear nature of duration. All warranties must have specific time durations and shall define warranties on specific components. The minimum acceptable warranty periods are noted below. In the blank lines the bidder shall note the terms of the warranties that apply to the manufacturer being proposed.

MODULAR BODY STRUCTURAL WARRANTY: 30 years/Unlimited Miles

Proposed warranty term: __ years/_____ Miles

Note: The structural warranty, as noted in the structural section of this specification, will include the module doors, continued module body door alignment, and all interior cabinet construction.

Does the structural warranty proposed comply with the above-stated terms and conditions? Yes_____ No_____

ELECTRICAL WARRANTY: 7 years/100,000 Miles

Proposed warranty term: _____ year(s), _____ Miles

CONVERSION WARRANTY: 2 Years/24,000 Miles

Proposed warranty term: _____ year(s), _____ Miles

PAINT WARRANTY: 7 Years/84,000 Miles

Proposed warranty term: _____ year(s), _____ Miles

The following schedule shall apply in regard to any claims submitted for paint under this warranty:

0 – 4 years = 100% / 5 years = 50% / 6 years = 35% / 7 years = 20%

Proposed warranty term: __ year(s), _____ Miles

(No paint vendor warranties will be accepted)

For verification of the completed warranty terms stated above the bidder must include printed manufacturer's warranty certificates that meet or exceed the minimum required periods stated above.

Are the manufacturers warranties included? Yes____ No____

Warranties shall be transferable for their duration. All warranties shall be from the manufacturer as opposed to a distributor or service center. This is necessary for the protection of the purchaser, and to guarantee a certain known level of service and warranty. If, however, the bidder feels that it is necessary to modify the manufacturer's warranties, then the bidder shall state why this modification is necessary. In addition, the bidder shall provide a full descriptive warranty certificate describing the warranty modification and the fact that it takes specific precedence over the warranty offered by the manufacturer. If no such certificate is provided, then the modified warranty shall be considered invalid and the manufacturer's warranty shall remain in force. If a warranty modification is proposed through either a distributor or service center, then complete financial statements for that business covering the past five (5) years MUST BE SUBMITTED with the bid. If the manufacturer states that no party is permitted to modify its warranty, then any warranty modification provided by the bidder, despite being in writing, shall automatically be rejected.

Does the bidder conform to the above-written section? Yes____ No____

To simplify the evaluation process, the following questions must be answered, and this section must be initialed by the bidder.

Are the warranties transferable? Yes____ No____

If yes explain. _____

_____

Has the bidder modified the manufacturer's warranties? Yes____ No____

If yes explain. _____

_____

_____

If yes was chosen above, has the bidder included modified written warranties? Yes____ No____

If no explain. _____

_____

If 'yes' was chosen above, has the bidder included financial statements for the last five (5) years of the warranty modifier? Yes____ No____

If no explain.

_____

_____

Bidder shall initial that this section is understood and has been answered truthfully.

Initials: _____

Note: Bidders who are found to be untruthful in this, or in any other section of this bid, will have their bid automatically rejected.

SERVICE AVAILABILITY:

Service will be a major factor in the award of this proposal. Convenience and experience will be determining factors in defining acceptable service. A service facility within a radius as described below will be required. Personnel performing the service shall be trained by the manufacturer with emphasis in the area of electrical service. In order to evaluate the proposed service facility, the following information shall be provided on the appropriate lines.

Distance from Crescent-Villa Headquarters: _____ miles.

Facility name: _____

Address: _____

City: _____ State: _____

Contact: _____

Phone #: 1-(_____)-_____-_____

ENGINEERING SUPPORT:

Due to the complexity of the design of the vehicle, proposals will be accepted only from manufacturers that utilize well-defined engineering techniques. Computer Aided Design (CAD) drawings of both the interior of the patient area and the overall layout of the module body will be mandatory. At a minimum these drawings shall include all exterior elevations, all interior views (4), and a plan view of the roof/ceiling. All options and elements required within these specifications shall be depicted on the prints. The purpose of this requirement is to assure this purchaser that vehicle proposals indeed meet the stated requirements as set forth in these specifications. Generic CAD drawings are not acceptable. The drawings, as submitted, shall accurately depict the exact vehicle that is being proposed. Bidders not including the required drawings will be considered non-responsive and will, therefore, be rejected.

Are the required drawings included with this bid? Yes_____ No_____

DRAWINGS:

The above-referenced drawings shall be furnished in standard 8.5" x 11". Drawings that are “D” size may be required at pre bid. Drawings not meeting the criteria set forth in the Engineering Support section above will be considered non-responsive and will, therefore, be rejected. Likewise, bids stating that drawings "will be furnished at a later date" will be rejected based on non-compliance.

Are the drawings included with this bid? Yes_____ No_____ Initial: _____

SAFETY CERTIFICATION:

The verification of construction techniques used throughout the building process must be furnished by the manufacturer/bidder. The installation methods and construction techniques associated with seat belt retention, cabinet construction and installation, oxygen cylinder retention and module to chassis mounting systems must be verified through a controlled Hygee sled test that simulates an actual impact condition. This test must be performed, under both side and frontal impact conditions, by a testing agency that is independent of the manufacturer.

As proof of this verification process being performed, the bidder must provide the following information (leave blank if this is not a sled test being verified):

Testing Facility Name: _____

Date Tested: _____/_____/_____

'G' Force Tested To: _____ G's

The bidder must perform and certify to dynamic sled or impact testing run on the ambulance body. The body tested shall include normally installed components for each of the following areas of the vehicle. The body structure and installed components shall not show evidence of structural failure or separation from its mounted position as a result of the test. All test results must be witnessed and verified by a Registered Professional Engineer.

Certification of Registered Professional Engineer

The completed bid must include certification, signed by a Registered Professional Engineer, attesting to compliance with this section.

Documentation Furnished with Proposal: Yes_____ No_____

Finally, a manufacturer is desired that has had an ongoing testing program. The testing, as described above, is to have been performed on a body built using the same materials and designs as those currently used by the manufacturer. Furthermore, the testing program must have been conducted on a continuous basis for a period of time not less than ten (10) years. Therefore, the bidder is required to answer the following questions and to initial the response to confirm that the question is understood and answered truthfully.

Has this specified body construction method been tested? Yes_____No_____ Initials_____

If not, what body construction method was tested? _____ Initials_____

Has the testing program been in place for a period of at least ten (10) years? Yes_____ No_____ Initials_____

If the program has not been in place for at least ten (10) years, then how long has the testing program been in place? _____

Initials _____

Note: This requirement is in addition to the current minimum KKK, NFPA 1917 or CAAS requirements. Those requirements do not suffice as a substitute for this requirement as they do not address impact crash testing. It should also be noted that neither photographs of vehicles involved in accidents nor written

observations of accident damage suffice to fulfill this requirement. This requirement will be fulfilled only when testing verification, signed by an accredited independent engineer, is furnished with the bid. The testing being described takes place in a controlled environment where meaningful data can be collected and used to further the design and safety of the vehicle. Actual accidents present too many variables that hinder the collection of meaningful data. Bidders who submit photographs or written observations, from customers or manufacturers' representatives, should note that such information is considered invalid and will not be a factor in the purchase decision.

Does the bidder understand these requirements?

Yes_____ No_____ Initials: _____

If the bidder does not perform sled testing, then the bidder is asked to take exception to this requirement so that the purchaser may evaluate bids on a legitimate basis. Bidders not taking exception shall have all appropriate documentation, as described above, included with the proposal. Bidders who do not take exception, and who do not include all appropriate documentation will be considered non-responsive and will, therefore, be rejected. This also applies to any subsequent sections of this specification that require sled testing where the bid response indicates that no exception has been taken.

Does the bidder understand this requirement? Yes_____No_____ Initials: ___

Is the bidder certifying sled test compliance and NFPA 1917/Federal KKK/CAAS compliance?

Sled Testing _____ KKK compliance _____ NFPA_____ CAAS_____ Initials: _____

Ford Customer F.I.N. Code QZ774 (apply discount to pricing)

Newest Available 2025 or 2026 Ford F-550 4 x 4, 193 Diesel. Chassis to be supplied by manufacture.

CHASSIS ORDERED WITH ALUMINUM WHEELS
The chassis shall be ordered equipped with OEM aluminum wheels in lieu of steel.

Bid complies _____

Bid does not comply _____

PASS THROUGH CAB/MODULE, F SERIES
There shall be pass-through access between the cab and the patient compartment. A flexible weather-tight bellows shall be installed around the perimeter of the opening between the back of the cab and the front of the module body.

Bid complies _____

Bid does not comply _____

DIESEL EXHAUST FLUID FILL, F SERIES
The fill for the DEF tank will be located on the driver's side of the body forward of the rear wheels. Install a label next to the DEF fill stating that the fill is to be used for DEF only.

Bid complies _____

Bid does not comply _____

VALVE EXTENSIONS, ALUM WHEELS, F SERIES
The rear wheels shall include braided stainless-steel filler extensions on the rear tires. The extensions shall be fastened to the center wheel hub with stainless steel brackets. Designs that do not incorporate the filler extensions will be unacceptable as they hinder inflation of the inner tires.

Bid complies _____

Bid does not comply _____

STANDARD CAB HEIGHT
The body design and placement of components mounted either to the chassis or to the front of the body must consider the cab height for the chassis selected.

Bid Complies _____

Bid does not comply _____

MUD FLAPS, REAR, LARGE W/LOGO
Install individual rear mud flaps behind each set of rear wheels. Mud flaps to be made of a durable heavy-duty rubber and are to be securely attached to the vehicle. Mudflaps are to be sized appropriately for the chassis selected so as not to drag the ground and are to include the vehicle manufacturer's color logo embedded into the material. Separate logos that are affixed to generic mudflaps will not be considered.

Bid complies _____

Bid does not comply _____

REAR DOCK BUMPERS
The rear step end caps shall include two heavy duty black rubber dock bumpers installed on the outer face of the diamond plate. These bumpers shall serve to protect the diamond plate from damage due to minor contact.

Bid complies _____

Bid does not comply _____

REINFORCE REAR BUMPER END CAPS
The rear bumper end caps shall be reinforced for greater impact resistance.

Bid complies _____

Bid does not comply _____

RUNNING BOARDS: EMB.W/GRIP STRUT. F SERIES
Embossed diamond plate running boards shall be installed on each side of the cab at the cab entry points. The running boards shall be constructed with .125" thick 3003-H14 alloy polished aluminum diamond tread plate. The running boards shall include splash shields at the forward end to protect the vehicle from spray and road debris. Sections of grip strut material shall be welded into the stepping surface on either side for additional foot grip and drainage.

Bid complies _____

Bid does not comply _____

REAR TOW HOOKS
Two tow hooks, painted black, shall be bolted to the rear bumper frame.

Bid complies _____

Bid does not comply _____

REAR STEP/ BUMPER ASSEMBLY, F SERIES
The rear of the vehicle shall be equipped with a step/bumper assembly to be fabricated from .125" polished aluminum diamond Treadplate. The assembly shall be spaced out from the rear kick plate a minimum of 1.5". The center section of the assembly shall pivot up and over center on two (2) .5" bolts to stay in the 'up' position. This section shall be a minimum of 9.5" deep and shall be constructed with grip-strut on the stepping surface to provide for better footing. The ends of the assembly shall be fixed diamond tread plate. The distance between the top of the step and the ground shall not be less than 16". The fold-up portion of the step shall be firmly held down with two (2) pin and socket holders to prevent rattling while the vehicle is in motion.

Bid complies _____

Bid does not comply _____

LIQUID SPRING SUSPENSION, F 550
The vehicle shall include a Liquid Spring hydraulic rear suspension. The system shall include a dump feature, wired through the left rear entry door magnetic switch, to lower the cot loading height. Manual controls for this system shall be installed in the cab near the driver.

Bid complies _____

Bid does not comply _____

RECEIVER/DRYER KIT, FORD F-SERIES CHASSIS
A receiver/dryer kit with pressure switch shall be installed in the air conditioning system.

Bid complies _____

Bid does not comply _____

BODY

AMBULANCE BODY
The completed vehicle shall have the following minimum dimensions:

(Body)
-Height: 91"
-Width: 96.25"
-Length: 167"
(Interior)
-Height: 72"
-Aisle 48"
-Length: 163"

Bid complies _____

Bid does not comply _____

DESIGN REQUIREMENTS:

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

1. The greatest possible load carrying capacity is desired.
2. The safety of all vehicle occupants is of paramount concern.
3. The body design, including construction materials and fabrication techniques shall be proven to be durable.
4. The body shall be easily retrofitted to a new chassis should that need ever arise.

With these concerns in mind the following requirements have been established for the purposes of this specification:

The vehicle converter shall design and construct its own module bodies and maintain an engineering staff at its manufacturing facility to handle any custom body changes that may be necessitated by this design. It is the intent of this purchaser to receive a finished product of the highest standards of quality available. Vehicle manufacturers who design and build their own bodies and who have the expertise of an engineering staff will possess a greater capacity as far as handling a custom project of this type than manufacturers who purchase their bodies from an outside vendor. Accountability and quality of the design and construction of the body are enhanced when the vehicle converter manufactures the body.

Bid complies _____

Bid does not comply _____

BODY CONSTRUCTION:

The construction process described within this specification will ensure that the body shall remain structurally intact. However, to achieve this level of quality and durability, the module body, including all doors, must be constructed correctly initially. This specification requires that the module body, including all doors, be built within a tolerance of one five-thousandths of one inch. To achieve this the vehicle manufacturer must use, as standard practice, CNC machinery to provide for both accuracy and repeatability within the manufacturing process. Use of precision equipment will ensure that all door openings, door handles and latches, body windows, and warning light assembly installation locations are of the correct size and square to the body. Repeatability must translate to interchangeability between parts of the same construction. Parts manufactured via this method shall be interchangeable with like parts to the extent that all extrusions, jambs, mounting holes, and any other fabricated component or characteristic can be directly installed in place of an existing like part on another unit. Cutting done by hand, such as with a jigsaw, is not desired unless it involves the chassis, or unless a warning light assembly must be located in such a way that it depends on the layout of the finished vehicle. (E.g. when a light must be centered within a paint stripe since the exact stripe location will not be determined until the module is built and mounted.) In addition, utilization of CNC equipment will simplify the production of replacement body panels in the event of an accident since the computer can duplicate a

given part exactly. This includes documentation of all body light locations. Manufacturing processes that do not utilize CNC machinery will not meet the requirements of this document and will be rejected.

Bid complies _____

Bid does not comply _____

PAYLOAD REQUIREMENTS:

The vehicle payload shall meet or exceed that called for in the current KKK-A-1822 specification or NFPA 1917 standard. The vehicle manufacturer shall, upon notice by this purchaser, provide a written statement from an independent engineer that the model being offered has met this set of criteria. Before delivery of the completed unit the manufacturer shall weigh the vehicle. A written statement of those weights shall be affixed to the inside of the street side front #1 compartment door. This purchaser reserves the right to have the finished vehicle weighed independently upon delivery. If it is found that the written statement of weight provided by the manufacturer is inaccurate beyond what may be reasonably explained as a slight difference in the calibration of the scales, then the vehicle will be rejected. It should be noted that this purchaser, while interested in attaining the greatest possible payload, is unwilling to compromise on the structural requirements of a strong, durable, and safe body. All bidders must understand these factors supersede concern over payload, and that the lightest body (greatest payload) will not necessarily be deemed sufficient to meet the stringent quality and safety requirements set forth herein.

Bid complies _____

Bid does not comply _____

MODULE BODY CONSTRUCTION AND WARRANTY:

The module body shall be constructed per the following detailed specifications. Generally speaking, the body shall be of all-aluminum construction. Aluminum is shown to reduce weight over several other materials. It also possesses anti-corrosion properties that are essential for a vehicle of this type. The exact aluminum material requirements are explained in further detail below. The choice of materials and the design shall allow the manufacturer to warrant the materials and workmanship of the module body for a period of thirty (30) years as set forth in the warranty section of this specification. The manufacturers structural warranty shall specifically cover:

-The continued and correct alignment of both compartment and access doors.
-Seam or joint separation in door construction.
-Aluminum interior cabinetry.

The warranty shall be fully transferable to a new owner should the vehicle ever be sold. In addition, should the manufacturer bidding this proposal re-chassis the vehicle within the period of the initial structural warranty, then an additional 5 years shall be added to the remaining amount of warranty coverage left at the time of re-chassis. This warranty shall be revalidated in five-year increments each time the body is mounted to a new chassis provided that the warranty has not expired, that this purchaser authorizes any necessary repairs, and provided that the original manufacturer performs the re-chassis.

Bid complies _____

Bid does not comply _____

CORNER POST SUPPORTS:

The body structure must be able to support the loaded weight of the vehicle in the unlikely event of a rollover. A structure is required that will enhance the safety of both patients and attendants in the event of an accidental collision. The foundation of a solidly built module body is the utilization of strong corner posts in both the sidewalls and the roof. A one-piece 90-degree radius post is required. The posts shall include a full-length W shaped extrusion that forms a fully encased web inside the post for strength. This reinforcing member shall angle inward just before it joins the radius to form a small slot where the edges of the aluminum skin will be inserted prior to the final welding. Because the structural integrity of a body is derived from the corner posts, subfloor, and framework, corner posts that are a part of the exterior body skin (e.g. rolled corner posts) will not be considered, nor will corner posts which do not have an integral center reinforcement as part of the extrusion.

Bid complies _____

Bid does not comply _____

CORNER POST STRENGTH:

The corner post extrusions shall possess a minimum ultimate tensile strength of 27,000 psi (6063-T5).

Bid complies _____

Bid does not comply _____

ROOF EXTRUSIONS:

The horizontal roof extrusions shall conform to the same construction description as the vertical wall extrusions. They will, however, include an extruded drip rail as a part of the one-piece posts. Because the drip rail is a part of the post itself there will be no seams between the rail and the body above the rail. In addition, there shall be drip rails installed above all body doors that are not full height. These rails shall attach via a durable adhesive.

Bid complies _____

Bid does not comply _____

WALL AND ROOF SKIN SUPPORTS:

The exterior wall and roof skins shall be supported on the inside by 2" square tubing with .125" wall. These structural supports shall be strategically located at the load bearing points of the module body. The roof structural support beams shall be spaced on minimum 12" centers for adequate load support. Wall tubing of .125" thickness or less will not be acceptable.

Bid complies _____

Bid does not comply _____

HORIZONTAL WALL SUPPORTS:

In addition to the vertical wall supports there shall be a horizontal beam, located in the beltline area, to provide additional protection in the event of a side body collision.

Bid complies _____

Bid does not comply _____

GUSSET ENHANCEMENT:

Gusset supports, made from 2" square tubing, shall be installed throughout the vehicle for added strength. Each gusset shall be a minimum of 5" long at its longest point. A minimum of twenty-four (24) of these gussets shall be welded into the vehicle support structure. Areas of installation shall include but not be limited to: all door openings, all body corners, and above all wheel wells. Designs that utilize no gussets, or gussets of lesser material size or strength, are not acceptable.

EXTERIOR BODY PANELS:

The materials selected for the body skin have been chosen because of this vehicle expected heavy-duty cycle and the good wear characteristics that this material has shown in the field. The material shall be a minimum 5052-H34 alloy with an ultimate tensile strength of 38,000 psi. This material has been chosen because it is less prone to fail due to stress than other weaker materials such as 5052-H32 alloy.

Bid complies _____

Bid does not comply _____

EXTERIOR BODY PANEL MATERIAL:

The thickness required for exterior body panels is:
-Side, front, and rear walls: .125"
-Ceiling and floor panels: .090"
Note: The roof shall be constructed with a single sheet of 5052-H34 .090" thick aluminum. This one-piece construction is preferred over a multiple piece design. The roof shall incorporate a 3/8" crown designed to allow water to drain.

Bid complies _____

Bid does not comply _____

FLOOR CONSTRUCTION:

Floors that are uneven or are incapable of adequately supporting the load being carried on the vehicle are unacceptable. For that reason, thin floor panels and/or a lack of floor supports are not desirable. To prevent buckling, sagging, oil canning or any other structural breakdown of the flooring system a detailed description of the required construction process is provided.

The body subfloor shall be constructed of .090" 5052-H34 aluminum. The floor, from the front to the rear and from curbside to street side shall be supported by a minimum 2" x 3" tubular beams with a .25" wall. The floor just behind the axle shall be supported by a minimum 1.5" x 3" tubular beam with a .25" wall. All beams shall be strategically located at the load bearing points of the floor and welded into place. The interior of this vehicle shall contain no wood or wood products of any kind. The subfloor, above the aluminum sheet shall be specially constructed to provide both acoustic and thermal protection for the patient interior. It shall consist of the .090" aluminum with tubular

understructure as noted above. The underside of this area is to be sprayed with a sound reduction coating. In addition, a .125" damping pad, a .125" sound barrier sheet, and a .625" composite floor panel shall be installed prior to installation of the vinyl floor covering. This panel must be hydrophobic so as to resist mildew and degradation. It shall also utilize Royal Watson surfaces featuring Bio Stat technology which prohibits bacterial of fungal growth over the life of the product. The material is to be 100% recyclable and CA Prop 65 compliant as well as FMVSS 302 compliant. The material manufacturer must have tested the material including ASTMD 3040-3-point bend and 25#slug 8' and 24' drop test. The subfloor must have been tested and certified by a third party for compliance to AMD 020 Floor Distributed Load Test. The purchaser reserves the right to inspect the process proposed by the bidder and to make determinations regarding the acceptability of that process. The resultant subfloor shall have no organic, wood, or wood products and shall be guaranteed against rotting or water absorption for a minimum of fifteen years. It shall not support or attract mold or fungus.

Bid complies _____

Bid does not comply _____

SKIN TO SUPPORT ATTACHMENT:

All exterior aluminum body panels shall be attached to the underlying structural supports via high performance polyurethane two-sided tape. The tape shall have a polyurethane foam core for environmental resistance and an acrylic adhesive for a durable bond. The tape will be used as an insulating agent to hold the panels tightly against the structural supports, thus eliminating vibration and oil-canning. In addition to the tape attachment system, all panels shall be welded to structural members at the perimeters only. Welding in the center of the panels is not desired as the process will cause heat distortion of the body panels and lessen the overall quality of the finished appearance. Use of the tape, as described here, will eliminate heat distortion without damaging the structural integrity of the module body.

Each body panel shall be welded to all horizontal frame members, including the roof extrusions. In addition, the panels shall be welded to the vertical corner posts. In the case of the roof, the perimeter of the one-piece roof sheet shall be stitch welded. This method of attachment shall provide a total welding application to the entire perimeter of the body skin and a taped/insulating application to the interior surfaces of all walls. Methods of panel attachment that utilize rivets will not be acceptable.

Bid complies _____

Bid does not comply _____

STRUCTURAL INTEGRITY VERIFICATION:

Structural integrity, as stated elsewhere in this specification, is of extreme importance to this purchaser. As such, it is required that the manufacturer maintain a program of simulated crash tests. The manufacturers Hygee sled testing program must be current and have been maintained on a continuous basis for a period of time not less than ten years. In addition, the sled testing shall have subjected a body, built to the above-written specifications, to a minimum of 30 G's in both side and frontal impact conditions. Neither photographs of vehicles that have been involved in accidents, nor statements or observations relevant to an accident, be it from a customer or a manufacturer's representative, shall suffice as a substitute for this requirement. The sled testing must take place in a controlled environment whereupon meaningful engineering data can be gathered and applied to the structural design of the module body. Accidents that take place outside of this controlled environment do not yield any meaningful data. Therefore, real

world accidents are considered anecdotal and cannot realistically be used by the manufacturer to judge the safety of a design.

Bid complies _____

Bid does not comply _____

MODULAR DOOR DESIGN:

Door panel separation, dirt accumulation at seams, paint imperfections, misalignment, and even malfunctions whereupon the door cannot be operated have been observed in many styles of door construction. These problems, along with the expected rugged use of the vehicle doors, shall be eliminated with a good overall design and construction process. With these thoughts in mind the modular doors shall be constructed as follows:

OUTER DOOR SKIN:

The door facing and edges shall be formed from a single sheet of aluminum. The aluminum used for the doors shall not be less than 5052-H34 alloy with an ultimate tensile strength of 38,000 psi. The material shall be .125" thick. All module doors shall be flush fit to the body side. The door panels must be welded at the corners.

Bid complies _____

Bid does not comply _____

INNER DOOR REINFORCEMENT:

Each door shall include an internal extrusion for added reinforcement. The extrusions shall extend around the entire perimeter of the door. Additional reinforcement shall be installed through the center of the door and around each window where applicable. In addition to the extrusions reinforcing each outer door pan, the extrusions themselves shall be reinforced through a dual joining method. First, each mitered corner, where the frame corners join, shall be fitted with a one-way solid aluminum insertable key. This key shall prevent the corner from pulling apart, and shall act as a solid aluminum internal gusset. Secondly, each corner where the frame joins shall be welded to further prevent any separation. The end result will be a rigid door that will not bend or flex and that will eliminate the other commonly seen structural defects described above.

Bid complies _____

Bid does not comply _____

INNER DOOR PAN:

An inner door pan shall fit flush with the inner edges of the door. Inner door pans that do not fit flush will have sharp or ragged edges exposed and will not be acceptable. The panels must be attached to the door structure with machine screws and "T" style Nutserts to prevent spinning stripping. Sheet metal screws or rivets will not be accepted. Lastly, a closed cell cross-linked polyolefin foam tape shall be used beneath the inner door panels to isolate the panels from the door frames. This process will prevent door rattling.

Bid complies _____

Bid does not comply _____

DOOR SEAL:

All module doors shall incorporate an extruded rubber seal located around the perimeter of the door. The seal shall insert into a groove in the inner door extrusion. Seals that are installed around compartment openings will be easily torn by the movement of equipment across them. In addition, glue will not be permitted except in the case of a double door compartment. The requested design does not include a groove on the underlying door edge of a double door compartment. That edge alone will require an adhesive. Glue for all seals is not desirable because of increased replacement time and insufficient durability.

Bid complies _____

Bid does not comply _____

DOOR JAMB:

All doorjambs must be separate from the body skin and must be welded to the 2" x 2" tubular body frame members so as to ensure continued door alignment and proper latching. The compartment frame shall be designed in such a manner as to provide extra protection around the compartment openings. The reinforcement tube shall be at least 1" wide. For added strength, the frame shall be at least .188" thick where screws are attached.

Prior to door installation the doors shall be true fit to the doorjambs. The fitting, prior to installation, shall provide added assurance that the door aligns properly with the doorjamb.

Bid complies _____

Bid does not comply _____

HINGING:

All doors shall have full-length stainless-steel hinges. The hinges shall be .070" thick and shall incorporate a .25" diameter pin.

All hinges shall have un-slotted mounting holes for an exact and permanent installation. Hinges that utilize slotted mounting holes are unacceptable because of the continued adjustments that they require.

There shall be an anti-corrosive material installed along the length of the hinge where the hinge meets the door frame to separate the stainless hinge from the aluminum body. This material shall be transparent so as not to be visible at any point while the door is being used.

Bid complies _____

Bid does not comply _____

HOLD-OPEN DEVICES:

The following door hold-open devices shall be installed:

-Compartment doors: Gas filled, 100-degree extension actuator
-Side access door: Gas filled, 110-degree extension actuator
-Rear doors: Cast Products grabber style devices

Spring-loaded devices are not desired because of their weaker holding capabilities and a lack of smooth door operation.

Bid complies _____

Bid does not comply _____

DOOR HANDLES AND LATCHING:

A door latching system is required that provides safety to all on-board personnel and security to all stored equipment. The patient area must be capable of being quickly secured. The following minimum features are to be designed into the module door latching system:

-All door handles shall be rugged automotive style handles that are near flush with the outer door panel. Each handle shall actuate a Nader rotary safety latch.
-The handle and latching system shall be designed by their manufacturer to accommodate electromagnetic activation. *Paddle style or D ring style handles that must be retrofitted for this application are unacceptable.
-The entire exterior handle assembly shall be Tri/Mark Series 2200 cast metal that is chrome plated and buffed to a high luster.
-All doors shall have an exterior key lock.
-All three patient area access doors shall include both interior and exterior latch activators. The rear doors shall have an activator installed on the outside of each door. The interior activators shall be located in a recessed pan on the door. A manual lock/unlock device shall be located within the pan. This pan shall be powder coated cast aluminum for extra durability and for ease of decontamination. No plastic products shall be used for this application.
-Exterior double door compartments shall include two exterior latching devices, one on each door.
-The entry doors shall incorporate emergency release levers located at each rotary latch. The emergency release handle shall allow emergency exit if a latch failure would occur.

The latching system shall be a proven system that has been subjected to the simulated sled tests as described elsewhere in this specification. Latching systems that have not been subjected to these tests will not have reliable data available as to installation and retention characteristics. Again, only controlled testing fulfills this requirement. Neither pictures of accidents, nor common observations gathered from damage surveys will suffice.

Bid complies _____

Bid does not comply _____

PATIENT AREA DOOR OPENINGS:

REAR DOORS:

Two (2) doors shall be provided at the rear of the module body. The overall opening of the access to be a minimum of 54.3" in height x 46.75" in width. Both inside and outside door handles shall be installed on each rear door. Left rear doors that can only be activated from the inside are not acceptable. These doors are to incorporate emergency release levers as described above.

Bid complies _____

Bid does not comply _____

SIDE DOOR:

One (1) side door shall be provided on the curb side of the module body. The opening shall have minimum overall dimensions of 71.1" in height x 30" in width.

Bid complies _____

Bid does not comply _____

INSULATION:

The patient area, including the doors, shall be insulated with 2" Technicon polyfiber for both thermal and acoustic insulation. The headliner area of the vehicle shall also include a barrier insulation of Reflectix material for increased protection. Bidder should note additional insulation requirements specified elsewhere within this document.

Bid complies _____

Bid does not comply _____

HEADROOM, 72"
The interior headroom of the finished patient area shall be 72".

Bid complies _____

Bid does not comply _____

ALUM. DIAMONDPLATE AT SIDE STEPWELL
The side door stepwell is to be fabricated from .125" 3003-H14 polished aluminum diamond tread plate.

Bid complies _____

Bid does not comply _____

DOUBLE STEP CURBSIDE ENTRY, 6" DROP SKIRT
The curbside body skirt, forward of the rear wheel well, shall be dropped six (6) inches. Two integral aluminum diamond plate steps shall be installed within the side access doorstep well for improved accessibility to the patient compartment. Under no circumstances shall this be accomplished by bolting an additional step to the step well. The design must be such that all steps are integral. The use of bolts, rivets, or any other type of fastener is prohibited.

Bid complies _____

Bid does not comply _____

STREETSIDE 6" DROP SKIRT

The streetside body skirt, forward of the rear wheel well, shall be dropped six (6) inches. The extra 6" is to be added to the applicable compartments in this area.

Bid complies _____

Bid does not comply _____

SOUND PROOFING/ACOUSTIC ENHANCEMENT PACKAGE

To ensure good working conditions and to create a stable patient environment, the vehicle shall be manufactured with particular attention paid to sound control. The following process must be performed throughout the manufacturing cycle of the vehicle:

1. Underbody shall be completely sprayed with non-flammable latex sound control coating

2. Body Interior walls, roofs and interior compartment walls shall be sprayed with non-flammable latex sound control coating

3. The interiors of all access doors shall be sprayed with non-flammable latex coating

4. The backs of all aluminum interior cabinets shall be wrapped in antiphon damping material

5. Door interiors are to be lined with Polydamp Intefoam extensional damping pad

6. The body structural tubes shall be filled with non-resonating dampening material

7. Side stepwell areas are to be backed with PT Damping Pad

8. All walls shall be insulated with 2" Technicon Polyfiber acoustic insulation.

9. Headliners shall be double insulated with 2" Technicon Polyfiber and a Reflectix barrier.

10. A .125" damping pad, a .125" sound barrier sheet, and a .625" composite floor panel sandwiched between aluminum sheets shall be installed prior to installation of the vinyl floor covering.

11. A chassis tuned mounting system shall be used to provide vibration reduction and structure borne noise attenuation. Chassis OEM puck style mounts will not be accepted as "equivalent to" or "exceeding" this requirement. See body mounting specification within this document for additional information.

Bid complies _____

Bid does not comply _____

ROOF POCKET, AUXILIARY CONDENSER

The roof of the body shall be designed with an integral recessed pocket to allow for the specified recessed rooftop condenser, a CoolTech I Unit. The pocket is to be sealed off except for a drain line to the ground to prevent build-up of water inside the pocket.

Bid complies _____

Bid does not comply _____

WINDOWS, FIXED, REAR ENTRY DOORS

The rear module body access doors shall include clear fixed windows. Each of these windows shall measure 16.5"h x 17"w and shall meet FMVSS requirements. The windows shall be encased in extruded aluminum frames. Under no circumstances will RV style windows, windows that rely on rubber gaskets, windows that do not feature extruded aluminum frames, or windows that do not meet the above stated minimum dimensions be acceptable.

Bid complies _____

Bid does not comply _____

WINDOW, SLIDING FOR SIDE ENTRY DOOR

The side entry door shall have a clear sliding window. This window shall measure 16.5"h x 17"w and shall meet FMVSS requirements. The window shall be encased in an extruded aluminum frame. Under no circumstances will RV style windows, windows that rely on rubber gaskets, windows that do not feature extruded aluminum frames, or windows that do not meet the above stated minimum dimensions be acceptable.

Bid complies _____

Bid does not comply _____

EMERGENCY RELEASE, REAR DOORS

The manufacturer shall install emergency release latches at the top and bottom of the interior of the rear entry doors. These will allow egress in the event of a door latch failure. The release knobs are to activate the rotary at the top and bottom of the door. Doors without this feature will not be considered.

Bid complies _____

Bid does not comply _____

EMERGENCY RELEASE, SIDE ACCESS DOOR

The manufacturer shall install emergency release latches at the top and bottom of the interior of the side entry door. These will allow egress in the event of a door latch failure. The release knobs are to activate the rotary at the top and bottom of the door. Doors without this feature will not be considered.

Bid complies _____

Bid does not comply _____

DOOR HANDLES

The vehicle is to include Tri-Mark free floating door handles. The handles shall include a chrome finish and are to activate the door latches using pre-stretched stainless-steel cables. Latches using cables made of any other material or that are not pre-stretched are not acceptable. The interior door panels are to be three piece with a removeable center section allowing access to the latch mechanism for lubrication and maintenance on all access doors.

Bid complies _____

Bid does not comply _____

VI-TECH MOUNTING, F SERIES

This purchaser requires a mounting system that provides a stable and durable attachment of the module body to the chassis frame. To accomplish this requirement the following body attachment method shall be used:

A minimum of (4) four Mounting platforms shall be attached along the outside of each chassis frame rail for a total of (8) eight. Each platform shall consist of (1) top plate of .375" thick steel and (2) side reinforcement plates made of .25" steel. There shall be a .375" full backing plate where the mount attaches to the frame rail. The plates shall be welded along all seams with a heavy continuous weld. The body substructure shall include a 1" by 3" solid aluminum tie down bar welded to each sub structure cross member. To complete the body to chassis attachment, a tuned mounting system shall be used. The elastomer mount shall be custom-tuned to the specific chassis type for vibration reduction, structure borne noise attenuation and to provide low profile, low frequency isolation necessary for ideal patient compartment conditions. Standard chassis furnished mounting donuts will not meet the requirements of this specification. The mount shall be attached to each platform by (2) .625" Grade 8 bolts with washers and locking nuts. The platform shall be attached to the chassis frame rail with a minimum of (3) .625" diameter Grade 8 bolts with washers and locking nuts. The fail-safe elastomer isolation mount shall then attach to the aluminum body tie down bar with a .75" diameter Grade 8 bolt, a washer, and a locking nut.

The mounting system must have been subjected to a documented Hygee dynamic frontal impact test of at least 30 G's to verify the integrity of the mounting system in the event of a serious accident. No exceptions to this requirement are permissible.

Bid complies _____

Bid does not comply _____

MIRROR STAINLESS STEEL SPLASH SHIELDS

Stainless steel splash shields are to be installed on the lower front face of the module body just behind the cab access doors. These shields are to have a #8 mirror finish and shall match the height of the diamond plate corner guards.

Bid complies _____

Bid does not comply _____

PRE-PUNCH SPLASH SHIELDS

The holes for the specified running board lights are to be pre-punched into the splash shields. Manual cutting of these holes is not acceptable.

Bid complies _____

Bid does not comply _____

INSTALL FULL HEIGHT STAINLESS STEEL CORONER GUARDS. NOTE: THERE WILL BE 36" LONG SECTIONS REQUIRING MULTIPLE PIECES ON BOTH FRONT BODY CORNERS.

Bid complies _____

Bid does not comply _____

FENDERS, STAINLESS, STD, CS 6" DROP SKIRT

A polished stainless-steel fender flare shall be installed above the curbside (passenger's side) rear wheel well opening. The mounting of the flare shall provide for no contact between the stainless-steel fender, fasteners, and the aluminum body skin. This is done to eliminate any contact between dissimilar metals and the electrolysis that may result. The fender shall be designed specifically for the specified 6" drop skirt. Designs requiring multiple pieces, or that do not adequately cover the drop skirt portion of the body, will not be considered.

Bid complies _____

Bid does not comply _____

FENDERS, STAINLESS, STD, SS 6" DROP SKIRT

A polished stainless-steel fender flare shall be installed above the streetside (driver's side) rear wheel well opening. The mounting of the flare shall provide for no contact between the stainless-steel fender, fasteners, and the aluminum body skin. This is done to eliminate any contact between dissimilar metals and the electrolysis that may result. The fender shall be designed specifically for the specified 6" drop skirt. Designs requiring multiple pieces, or that do not adequately cover the drop skirt portion of the body, will not be considered.

Bid complies _____

Bid does not comply _____

POLISHED STAINLESS RUB RAILS, LIGHTED

Polished stainless lower body rub rails shall be installed on each side of the module body. Each rail shall be securely installed yet simple to remove and replace in the event of damage. Each rail is to be a three-piece assembly to include a channel style rub rail and two removable end caps. These rails are to have a #8 mirror finish and shall include cutouts for the LED strip lighting specified elsewhere within this document. Rubber rub rails are not acceptable to this purchaser nor are rub rails without the precision cut slots that allow for the specified recessed strip lights.

Bid complies _____

Bid does not comply _____

STANDARD CORNER GUARDS

Polished aluminum diamond tread plate corner guards shall be installed on the lower corners of the body. The guards are to be formed to match the contour of the body corner posts.

Bid complies _____

Bid does not comply _____

REAR DOOR HOLD OPENS, GRABBER

Chrome Cast Products "Grabber" style rear door hold-open devices shall be installed to maintain the rear access doors in the 'open' position. One loop shall be installed on each door, and the appropriate socket shall be installed on the body. These devices are to be chrome finish in lieu of Cast Products' standard finish.

Bid complies _____

Bid does not comply _____

ENTRY DOOR THRESHOLDS, LINE-X
The one-piece stainless steel thresholds at both the side and rear entry doors are to be covered with black Line-X material. No anti-slip adhesive tapes are to be used.

Bid complies _____

Bid does not comply _____

REAR RISER ADP
Install a polished aluminum diamond tread plate riser between the bottom of the rear entry door opening and the bottom of the body. The manufacturer shall include any necessary holes to accommodate other items installed in this area.

Bid complies _____

Bid does not comply _____

LICENSE PLATE BRACKET, CENTER OF RISER
A recessed rear license plate bracket shall be provided at the location described above. An LED license plate light is to be included.

Bid complies _____

Bid does not comply _____

FUEL FILL PLATE
A stainless-steel plate shall be installed on the body face below the fuel fill housing. The plate shall run from the fuel fill to the bottom of the body to protect the paint from fuel spills.

Bid complies _____

Bid does not comply _____

DEF FILL PLATE
A stainless-steel plate shall be installed on the body face below the DEF fill housing. The plate shall run to the bottom of the body to protect against fluid spillage.

Bid complies _____

Bid does not comply _____

DOOR REFLECTORS

Install red reflectors on the interior panels of all patient compartment access doors. Install in the corners so as to be visually conspicuous when the doors are open.

Bid complies _____

Bid does not comply _____

Install (8) 3" wide x width of the door(s). Aluminum panels mounted on the Inside door panel rear facing compartment(s) doors. Panels to be uniform/location on each door.

Bid complies _____

Bid does not comply _____

COMPARTMENTATION

STREETSIDE FORWARD COMPARTMENTS

The compartments described above shall be reduced. A smaller upper electrical compartment shall sit above the primary compartment and is to house electrical equipment items as detailed within this document. Both compartments are to include standard LED strip lighting and single hinged doors. The compartments shall be vented to the outside in such a way as to prevent moisture from entering the compartments. In addition, the upper door shall include a vent in the door to promote heat dissipation from the electrical components inside the compartment. All electrical components usually installed in the intermediate compartment shall be relocated to this compartment.

Bid complies _____

Bid does not comply _____

SS FORWARD COMPT. DIAMONDPLATE

The streetside forward compartment is to be fabricated from .125" polished aluminum diamond plate that is continuously welded at all seams.

Bid complies _____

Bid does not comply _____

SWEEP OUT COMPARTMENT FLOOR, SS FRONT

The floor of the streetside forward compartment shall be flush with the door frame so as to provide a sweep-out style compartment bottom. There shall be no lip at the forward edge of the compartment bottom, or any other obstruction, that may hinder the purchaser's ability to sweep the compartment free of dirt and/or debris.

Bid complies _____

Bid does not comply _____

STREETSIDE INTERMEDIATE COMPARTMENT

The compartment described above shall be accessed through double hinged doors meeting the standards for door construction, hinging, and latching outlined within this specification. The compartment shall be vented to the outside in such a way as to prevent moisture from entering the compartment. Under no circumstances shall vents be installed within the compartment door. The compartment itself shall be constructed as an individual box and welded into the

body structural framing. The compartment shall include two strips of LED lights, one to either side of the compartment door, to provide lighting inside the compartment. The compartment is to be full available height to the bottom of the interior countertop. Compartment dimensions are detailed on the drawings provided with this document.

Bid complies _____

Bid does not comply _____

SS INTRMDT COMPT. DIAMONDPLATE
The streetside intermediate compartment is to be fabricated from .125" polished aluminum diamond plate that is continuously welded at all seams.

Bid complies _____

Bid does not comply _____

ADJUSTABLE SHELF STREETSIDE INTERMEDIATE Center of compartment
Shelving shall be installed as noted and as depicted in the drawings. All shelving is to be fabricated from 3003-H14 aluminum diamond plate. This material shall be .125" thick. All shelving is to include a 2" integral lip to prevent equipment from sliding off of the shelf. The compartment light shall meet the lighting criteria as described elsewhere within this specification. Shelving is to be secured using four (4) 'C' channels, two (2) on each the right- and left-hand wall, allowing the shelving to be infinitely adjustable within the compartment.

Bid complies _____

Bid does not comply _____

SWEEP OUT COMPARTMENT FLOOR SS INTERMEDIATE COMPT
The floor of the streetside intermediate compartment shall be flush with the door frame so as to provide a sweep-out style compartment bottom. There shall be no lip at the forward edge of the compartment bottom, or any other obstruction, that may hinder the purchaser's ability to sweep the compartment free of dirt and/or debris.

Bid complies _____

Bid does not comply _____

STREETSIDE REAR COMPARTMENT
The compartment described above shall be accessed through a single hinged door meeting the standards for door construction, hinging, and latching outlined within this specification. The compartment shall be vented to the outside in such a way as to prevent moisture from entering the compartment. Under no circumstances shall vents be installed within the compartment door. The compartment itself shall be constructed as an individual box and welded into the body structural framing. The compartment shall include two strips of LED lights, one to either side of the compartment door, to provide lighting inside the compartment. Compartment dimensions are detailed on the drawings provided with this document.

Bid complies _____

Bid does not comply _____

SS REAR COMPT. DIAMONDPLATE
The streetside rear compartment is to be fabricated from .125" polished aluminum diamond plate that is continuously welded at all seams.

Bid complies _____

Bid does not comply _____

ADJUSTABLE SHELF STREETSIDE REAR Centered from bottom of I/O. Spaced evenly in I/O
Shelving shall be installed as noted and as depicted in the drawings. All shelving is to be fabricated from 3003-H14 aluminum diamond plate. This material shall be .125" thick. All shelving is to include a 2" integral lip to prevent equipment from sliding off of the shelf. The compartment light shall meet the lighting criteria as described elsewhere within this specification. Shelving is to be secured using four (4) 'C' channels, two (2) on each the right- and left-hand wall, allowing the shelving to be infinitely adjustable within the compartment.

Bid complies _____

Bid does not comply _____

SWEEP OUT COMPARTMENT FLOOR SS REAR COMPT
The floor of the streetside rear compartment shall be flush with the door frame so as to provide a sweep-out style compartment bottom. There shall be no lip at the forward edge of the compartment bottom, or any other obstruction, that may hinder the purchaser's ability to sweep the compartment free of dirt and/or debris.

Bid complies _____

Bid does not comply _____

CURBSIDE REAR COMPARTMENT
The compartment described above shall be accessed through a single hinged door meeting the standards for door construction, hinging, and latching outlined within this specification. The compartment shall be vented to the outside in such a way as to prevent moisture from entering the compartment. Under no circumstances shall vents be installed within the compartment door. The compartment itself shall be constructed as an individual box and welded into the body structural framing. The compartment shall include two strips of LED lights, one to either side of the compartment door, to provide lighting inside the compartment.

Bid complies _____

Bid does not comply _____

CS REAR COMPT. FLAT ALUMINUM
The curbside rear compartment is to be fabricated from .125" flat aluminum material that is continuously welded at all seams.

Bid complies _____

Bid does not comply _____

FIXED VERTICAL DIVIDER, CURBSIDE REAR Middle of compartment, allow room for an interior backwall cabinet that will host a Med Vault 2 and glove box cabinet.
A 16" deep vertical divider shall be installed in the curbside rear compartment as noted, and as depicted in the drawings. The divider shall be non-adjustable and shall be fabricated from the same material used in the construction of the compartment in which it is to be installed.

Bid complies _____

Bid does not comply _____

ROK BACKBOARD STRAP CURBSIDE REAR, Rear left side of compartment, mid height
A Rok buckle style backboard strap shall be installed in the compartment designated above. The straps shall attach to the compartment wall/divider through footman's loops that are screwed into place.

Bid complies _____

Bid does not comply _____

SWEEP OUT COMPARTMENT FLOOR CS REAR COMPT
The floor of the curbside rear compartment shall be flush with the door frame so as to provide a sweep-out style compartment bottom. There shall be no lip at the forward edge of the compartment bottom, or any other obstruction, that may hinder the purchaser's ability to sweep the compartment free of dirt and/or debris.

Bid complies _____

Bid does not comply _____

STAIR CHAIR POCKET, CURBSIDE REAR
A pocket shall be recessed into the inner compartment door panel in the curbside rear compartment for stair chair storage. The pocket shall be installed as close to the bottom and hinged side of door as possible. A Stryker #6252 stair chair will be stored as noted. This is for the sizing/placement purposes only.

Bid complies _____

Bid does not comply _____

CURBSIDE INTERMEDIATE COMPARTMENT
Install a compartment between the curbside rear compartment and the wheel house. The floor of the curbside intermediate compartment shall be flush with the door frame so as to provide a sweep-out style compartment bottom. There shall be no lip at the forward edge of the compartment bottom, or any other obstruction, that may hinder the purchaser's ability to sweep the compartment free of dirt and/or debris. Compartment is to include standard LED strip lighting and a single hinged door.

Bid complies _____

Bid does not comply _____

CS INTERMEDIATE COMPARTMENT DIAMONDPLATE
The curbside intermediate compartment is to be fabricated from diamond plate.

Bid complies _____

Bid does not comply _____

CURBSIDE FORWARD COMPARTMENT
The compartment described above shall be accessed through a single hinged door meeting the standards for door construction, hinging, and latching outlined within this specification. Under no circumstances shall vents be installed within the compartment door. This door shall provide access to the front wall cabinet on the vehicle interior. The cabinet shall include LED strip lights to provide lighting inside the cabinet.

Bid complies _____

Bid does not comply _____

SWEEP OUT COMPARTMENT FLOOR CS FRONT COMPT
The floor of the curbside forward compartment shall be flush with the door frame so as to provide a sweep-out style compartment bottom. There shall be no lip at the forward edge of the compartment bottom, or any other obstruction, that may hinder the purchaser's ability to sweep the compartment free of dirt and/or debris.

Bid complies _____

Bid does not comply _____

RUBBER MATTING IN EXTERIOR COMPARTMENTS
Black rubber matting, with a ribbed texture, shall be provided and installed in the bottoms of all exterior compartments and compartment shelves.

Bid complies _____

Bid does not comply _____

RUBBER WALLS IN BB COMPT, GRAY
The walls of the backboard compartment shall be covered with self-adhesive textured gray rubber matting to protect the walls and the equipment stored in this area from any damage.

Bid complies _____

Bid does not comply _____

PAINT AND GRAPHICS

CHASSIS PAINT: WHITE
The OEM chassis manufacturer's bright white paint shall be ordered on the chassis. The bidder is not to repaint the chassis.

Bid complies _____

Bid does not comply _____

MODULE PAINT, WHITE

A paint process is required that provides the highest possible gloss as well as superior color and luster retention characteristics. In addition, the paint process must provide a high resistance to chemical sprays, salt sprays, humidity, and temperature changes. Lastly, this process, given the expected life of the vehicle and its heavy-duty cycle, must resist chipping. The final paint application shall be free of material application imperfections such as orange peel, streaking, or a dull finish. Once painted, the vehicle shall be inspected under a black light to bring any small imperfections, not seen with the naked eye, to attention. Any such imperfections shall be repaired prior to the conclusion of the paint inspection process. The final application shall provide a high gloss finish.

Bid complies _____

Bid does not comply _____

To produce an acceptable paint finish, the following paint process must be used:

All body doors and hardware must be removed prior to any wash, prime, or final paint application. All material impurities and oils must be removed from the bare aluminum body. The entire module body, excluding the underside, will have all visible welds ground down and all material imperfections filled. The entire body, including the compartment doors, must be finished with a DA. It is also required that all door jamb areas be sanded to ensure that no areas are missed with the DA process mentioned above. Again, all module doors, though handled separately from the body, shall undergo the same process as described above.

Bid complies _____

Bid does not comply _____

Immediately after application of the sealer/primer the manufacturer shall apply a finish color coat of Sikkens BTLV 650 paint. The color coat is to be immediately followed by a clear coat. Once all coats are applied the unit is to be baked dry. This base coat/clear coat 'wet on wet' process is required over any other proposed process. Processes not meeting these specific requirements must be explained thoroughly within the bid.

Bid complies _____

Bid does not comply _____

Following the drying of all paint coats the unit is to be thoroughly inspected as noted above. The unit is to be polished and any blemishes repaired. All paint lines must be sanded and cleaned.

Bid complies _____

Bid does not comply _____

The manufacturer shall maintain an outside paint audit system. As part of that audit the paint manufacturer shall regularly receive and test sample paint panels that are painted along with module bodies. The paint manufacturer shall also provide regular onsite inspections of the vehicle manufacturers paint process to assure a consistent level of quality. Audit reports from these inspections shall be provided to management.

Bid complies _____

Bid does not comply _____

All locations where fasteners penetrate the outer skin of the module body shall be coated with ECK anti-corrosion agent. In addition, all fasteners that penetrate the outer skin of the module body shall be treated with an anti-corrosion agent to assure the maximum protection against vehicle corrosion and electrolysis.

Bid complies _____

Bid does not comply _____

Locations where light heads and fenders attach to the aluminum body shall utilize threaded Nylon inserts to isolate the fasteners from the aluminum module body skin and structure. This practice, along with the other measures described above, shall act to minimize the threat of electrolysis.

Bid complies _____

Bid does not comply _____

The paint warranty provided by the converter must meet all warranty standards as set forth elsewhere within this specification. Bidder must submit a manufacturer's paint warranty certificate with the bid. Failure to do so will result in automatic rejection of the bidder's proposal.

Bid complies _____

Bid does not comply _____

The paint color is to be white.

Bid complies _____

Bid does not comply _____

SCOTCHLITE CHEVRON, FULL REAR Red, Yellow
Scotchlite chevron striping shall be installed on the rear body face inboard of the body corner posts and below the upper drip rail. Striping is to cover the access doors as well.

Bid complies _____

Bid does not comply _____

Gerber Vision The rear door windows are to be a continuation of the chevrons in Gerber Vision. Color to match the 3M red and yellow Scotchlite pattern.

Bid complies _____

Bid does not comply _____

STAR OF LIFE, 36"
The bidder shall provide a 'Star of Life' emblem on the module body roof per “K” requirements. The emblem shall be 36" blue Scotchlite with black shade and outline. A Mylar laminate shall be applied to the emblem's surface in order to

protect against scuffing, and to provide added longevity. Emblems that do not have this protective covering are not acceptable.

Bid complies _____

Bid does not comply _____

ACCESS DOORS RED SCOTCHLITE STRIP
Red Scotchlite strips, measuring 2" x 6". shall be installed horizontally on the interior panels of all patient area access doors near the top.

Bid complies _____

Bid does not comply _____

ACCESS DOORS RED SCOTCHLITE STRIP
Red Scotchlite strips, measuring 2" x 6". shall be installed horizontally on the interior panels of all patient area access doors near the top.

Bid complies _____

Bid does not comply _____

ACCESS DOORS DEMO STYLE R/W CHEVRON SCOTCHLITE STRIP

Install red/white printed Scotchlite demo style chevrons on the inner door center halfway down panels of all entry doors.

Bid complies _____

Bid does not comply _____

PAINTED PLACARD AND HOLDERS

INSTALL PAINTED PLACARD AND HOLDERS ON EACH SIDE OF BODY. LOCATION: TO BE INSTALLED AT DELIVERY

Bid complies _____

Bid does not comply _____

INTERIOR FEATURES

ACRYLIC COLOR: LIGHT TINT
All acrylic cabinet door material is to be the manufacturer's 'light tint'.

Bid complies _____

Bid does not comply _____

COUNTERTOP, GRAY GRANITE Forward CPR, After CPR and Curbside Special Cabinet
The patient area countertop material shall be solid surface. The countertop material shall incorporate a 1" radiused retention lip around the perimeter. This radiused corner shall also be tapered to avoid any sharps edges and is to have a polished finish. A radius cove molding shall be installed at either end of the countertops where the material meets the cabinet wall. The rear edge of the material, adjoining the side wall of the vehicle, shall be sealed with silicone. In addition, any and all areas that require seams due to manufacturing processes shall be sealed with silicone. This material shall be uniform throughout so that scratches can be buffed out without causing adverse effects on the appearance of the material. The material color is to be Gray Granite. Locate as noted above.

Bid complies _____

Bid does not comply _____

PAINTED STANDARD INHALATION AREA WALLS
The walls surrounding the work areas within the main cabinet wall are to be painted to match the interior cabinet color.

Bid complies _____

Bid does not comply _____

INHALATION PANEL, LAMINATE COVERED
To prevent contamination of the inhalation panel the panel shall be fabricated using no wood or wood-based products. The material used shall be an aluminum composite material. This material shall not absorb liquids and shall not attract bacteria, molds or fungi. The material is to be covered with Formica material in a color matching that required within this document.

Bid complies _____

Bid does not comply _____

INHALATION PANEL CLOSEOUT
A D/A finished aluminum panel will be installed on the bottom of the inhalation panel. The close-out will include a hinged-down door for access to the O2 bypass valves.

Bid complies _____

Bid does not comply _____

LONCOIN FLECKSTONE MOONSTONE #157TS
The patient area floor is to be covered in Loncoin Fleckstone Moonstone #157TS.

Bid complies _____

Bid does not comply _____

STAINLESS STEEL RISERS
The interior risers shall be covered with a single sheet of stainless steel. The stainless material shall be installed flush with the riser and trimmed at the top and both sides so as to cover the edges. The bottom of the material shall be

formed at a 90-degree angle so that, upon installation, the 4" rolled floor will seal against the stainless steel. Designs that do not include this stainless-steel riser will not be considered as they will not be capable of protecting the riser from damage due to cot movement, Etc. In addition, stainless steel risers that have exposed edges, or that are more than one piece, will not be acceptable. Drawer and tip-out faces within the risers will be constructed with brushed aluminum laminate to mimic the appearance of the stainless and to provide aesthetic continuity.

Bid complies _____

Bid does not comply _____

LAMINATE COVERED LOWER DOOR PANELS
The lower portion of the patient area entry doors shall be covered with laminate material to match the color selection in the "Interior Colors" section of this specification.

Bid complies _____

Bid does not comply _____

WILSONART FASHION GRAY #D381, WALLS
The interior walls are to be constructed without the use of wood, wood-based products, or any other organic material. The use of laminated structural composite material is required. The walls shall be finished with Wilsonart Fashion Gray #D381 laminate. The finish in the areas surrounding the inhalation/CPR seat areas are detailed separately within this document.

Bid complies _____

Bid does not comply _____

FASHION GREY CABINET COLOR
All interior storage cabinets, including the interior of the squad bench, shall be painted for ease of cleaning. Under no circumstances shall carpet be used within these storage cabinets as it is impossible to decontaminate. The paint color is to be Fashion Grey. The paint shall be treated with an antimicrobial agent.

Bid complies _____

Bid does not comply _____

CABINET PAINT TO BE TEXTURED
The cabinet paint specified is to have a textured finish.

Bid complies _____

Bid does not comply _____

FLINT GREY VINYL COLOR
The patient area upholstery, including seat cushions, backrest and vinyl closeouts, is to be Flint Grey in color.

Bid complies _____

Bid does not comply _____

STANDARD FIXED SEATBASE

An attendant's seat base shall be fabricated from aluminum and shall be installed in a position at the head of the cot. The base shall house the vehicle's heat/AC unit as described in that section of this specification. The material shall be perforated to promote airflow to the unit. The entire seating assembly, as described here, shall be subjected to a Hygee sled test of at least 30 G's to test the structural integrity of the design in order to assure a certain level of safety for the vehicle occupants. Swivel or aftermarket Seat Bases are not substitutes for this requirement.

Bid complies _____

Bid does not comply _____

USSC CHILD, BLACK 4-POINT, FLINT GREY

Install a Flint Grey USSC high back bucket seat with integral child safety seat and black 4pt seatbelt with safety vest. The seat to be adjustable front to rear and is to be mounted at the head of the cot.

Bid complies _____

Bid does not comply _____

4 POINT SEAT BELT HEAD OF BENCH, BLACK

A 4-point seatbelt, black in color, shall be provided and installed at the head bench position. The belt shall include a retractor system to allow all four belts to be fully retractable. The belt shall also include quick one click design for ease of use. The belt is to be outfitted with a removeable vest designed to guide the belt into the proper position, prevent the buckle from moving up or down and side to side, and offer better support and comfort to the seat occupant. Installation hardware and wall anchorages are to have been tested and certified to meet all applicable requirements relative to occupant restraints.

Bid complies _____

Bid does not comply _____

4 POINT SEAT BELT, CPR SEAT, BLACK

A 4-point seatbelt, black in color, shall be provided and installed at the CPR seat position. The belt shall include a retractor system to allow all four belts to be fully retractable. The belt shall also include quick one click design for ease of use. The belt is to be outfitted with a removeable vest designed to guide the belt into the proper position, prevent the buckle from moving up or down and side to side, and offer better support and comfort to the seat occupant. Installation hardware and wall anchorages are to have been tested and certified to meet all applicable requirements relative to occupant restraints.

Bid complies _____

Bid does not comply _____

ALUMINUM INTERIOR CABINETS

This specification requires an all- aluminum modular cabinet design. Aluminum, a minimum of .063" thickness, is required over wooden cabinetry due to its lighter weight, greater durability, and the ease with which it can be decontaminated. The main cabinet wall shall be of modular construction. All individual cabinets shall be of welded

construction. Each modular cabinet shall then be bolted/welded together to comprise the main wall of cabinets inside the vehicle. All cabinets, including the main cabinet wall, shall be insulated against noise and temperature. Each cabinet is to be wrapped on the back side in an insulating layer. Cabinets that are joined together shall also be insulated with expandable spray foam in between each cabinet. The face of all cabinets is to be trimmed in an aesthetically pleasing manner to match the patient compartment interior colors.

Bid complies _____

Bid does not comply _____

To ensure the safety of patients and attendants in the rear of the vehicle, the main cabinet wall installation shall have been tested to a minimum frontal impact of 30 G's per the requirements of the Safety Certification section of this specification. The main cabinet wall may not be constructed of any wood or wood product. Wooden cabinetry can warp, expand, contract, splinter, separate, or crack. Wood will also harbor bloodborne pathogens whereas aluminum can be easily cleaned. Aluminum will remain stable and securely mounted (no fibers to compress) over many years and miles of continuous service. For these reasons, wooden cabinets, even when laminated with another material, will not be acceptable. Bids received that utilize any material other than that which is specified above will be considered non-responsive and will be rejected without further consideration.

Bid complies _____

Bid does not comply _____

All of the aluminum cabinetry within the vehicle shall be of welded construction. Methods of cabinet construction that utilize rivets or adhesives of any type will not be considered.

Bid complies _____

Bid does not comply _____

The all- aluminum cabinet construction, as described within this section, shall be warranted against any structural defects for a period of time not less than 30 years. This warranty shall be stated within the manufacturer's structural warranty document, and shall not be subject to any mileage limitations.

Bid complies _____

Bid does not comply _____

TUBULAR AIRBAG, ATTENDANT'S SEAT

The vehicle shall be equipped with a tubular airbag to the right of the attendant's seat. Unit uses an angled upper inhalation cabinet and includes a cabinet beneath the main countertop. The bag shall be triggered by an electronic roll sensor to inflate and protect the seat occupant against severe head strikes typical in a roll over collision. In addition to being field proven, the system shall have been developed using laboratory-controlled roll over testing. The testing must have been done on the manufacturer's specific ambulance body. Generic testing or "real world" scenarios do not suffice to meet this requirement. The system must be offered by the bidder as standard equipment and must have been in production for a minimum of five (5) years. No prototype systems will be acceptable. There will be absolutely no exceptions taken to this requirement.

Bid complies _____

Bid does not comply _____

HEAD CURTAIN AIRBAG, ATTENDANT'S SEAT

The vehicle shall be equipped with a head curtain airbag to the right of the attendant's seat. The bag shall be triggered by an electronic roll sensor to inflate and protect the seat occupant against severe head strikes typical in a roll over collision. In addition to being field proven, the system shall have been developed using laboratory-controlled roll over testing. The testing must have been done on the manufacturer's specific ambulance body. Generic testing or "real world" scenarios do not suffice to meet this requirement. The system must be offered by the bidder as standard equipment and must have been in production for a minimum of five (5) years. No prototype systems will be acceptable. There will be absolutely no exceptions taken to this requirement.

Bid complies _____

Bid does not comply _____

ROLL SENSOR

The roll sensor used in conjunction with the specified airbag system is to be installed in the streetside (driver's side) intermediate compartment on the ceiling. Components are to be covered with a polished aluminum diamond plate closeout attached with tamper-proof screws.

Bid complies _____

Bid does not comply _____

TUBULAR AIRBAG, CPR SEAT LOCATION.

The vehicle shall be equipped with a tubular airbag forward of the CPR seat. The bag shall be triggered by an electronic roll sensor to inflate and protect the seat occupant against severe head strikes typical in a roll over collision. In addition to being field proven, the system shall have been developed using laboratory-controlled roll over testing. The testing must have been done on the manufacturer's specific ambulance body. Generic testing or "real world" scenarios do not suffice to meet this requirement. The system must be offered by the bidder as standard equipment and must have been in production for a minimum of five (5) years. No prototype systems will be acceptable. There will be absolutely no exceptions taken to this requirement.

Bid complies _____

Bid does not comply _____

CABINET TRIM RADIUSED

The interior of the ambulance module shall have radius corner extrusions, wherever possible, to round off cabinet corners. The radius shall be a minimum of one and a half inches. The radius trim shall also include a removable cap that can be field replaced if damage occurs. No exceptions to this requirement are permissible.

Bid complies _____

Bid does not comply _____

TECHNIMOUNT LIFEPAK 15 SHELF MOUNT

Two Technimount shelf mount with base plate for a Lifepak 15 shall be installed. This mount shall be compliant with Change Notice 10.

Bid complies _____

Bid does not comply _____

A Technimount Life Pak Bracket is to be installed on the countertop of the Curbside Cabinet at the head of the squad bench. Reinforce cabinet as needed. A second Technimount Life Pak Bracket is to be installed on the countertop of the Streetside Cabinet aft of the CPR seat. Reinforce cabinet as needed.

IV HANGER, CP WITH RUBBER ARM COT CHEST over chest area

A Cast Products recessed swing-down IV hanger shall be installed above the primary cot position near the patient's chest area. This hanger is to be near flush mounted into the patient area ceiling to reduce interference with the walkway when not in use. The arms of the hanger shall be rubberized so as to reduce the possibility of injury that may occur if contact is made with them. This style IV hanger shall be sufficient to meet Federal KKK-1822-E.

Bid complies _____

Bid does not comply _____

IV HANGER, CP WITH RUBBER ARM COT WAIST over waist area

A Cast Products recessed swing-down IV hanger shall be installed above the primary cot position near the patient's waist area. This hanger is to be near flush mounted into the patient area ceiling to reduce interference with the walkway when not in use. The arms of the hanger shall be rubberized so as to reduce the possibility of injury that may occur if contact is made with them. This style IV hanger shall be sufficient to meet Federal KKK-1822-E.

Bid complies _____

Bid does not comply _____

GRAB RAIL: 6FT WITH ANTI-MIC, OVER BENCH Offset toward the bench wall in the patient area ceiling

An 6' long grab rail shall be installed, offset toward the bench wall, approximately over the aisle edge of the bench cushions, in the patient area ceiling. This rail is to be constructed of stainless steel. Integral stanchions shall be welded into place at fixed points along the length of the rail for attachment to the ceiling. The rail shall attach through aluminum mounting plates that are welded to the module roof structure for strength and durability. Because contamination occurs most often as a result of contact, this feature must be treated with an anti-microbial agent consisting of an inorganic ceramic coating embedded with silver ions. This coating shall be effective against a broad range of microbes including bacteria, molds, algae and fungi. The coating shall be integral and shall not consist of an agent that will need to be reapplied over time.

Bid complies _____

Bid does not comply _____

GRAB RAIL: 8FT ANTI-MIC CENTER Ceiling center

An 8' long grab rail shall be installed centered in the patient area ceiling. This rail is to be constructed of stainless steel. Integral stanchions shall be welded into place at fixed points along the length of the rail for attachment to the ceiling. The rail shall attach through aluminum mounting plates that are welded to the module roof structure for strength and durability. Because contamination occurs most often as a result of contact, this feature must be treated with an anti-microbial agent consisting of an inorganic ceramic coating embedded with silver ions. This coating shall be effective against a broad range of microbes including bacteria, molds, algae and fungi. The coating shall be integral and shall not consist of an agent that will need to be reapplied over time.

Bid complies _____

Bid does not comply _____

VERTICAL RAIL, 2' ANTI-MIC ANTI-SLIP, BOLSTER

Install a 2' long grab rail on the left side of the side entry door on the squad bench bolster. Install at an angle to assist entry and exit through the side access door. This rail is to be constructed of stainless steel. Integral stanchions shall be welded into place at either end of the rail for attachment to the bolster. The rail shall attach through aluminum substructure inside the bolster for strength and durability. Because contamination occurs most often as a result of contact, this feature must be treated with an anti-microbial agent consisting of an inorganic ceramic coating embedded with silver ions. This coating shall be effective against a broad range of microbes including bacteria, molds, algae and fungi. The coating shall be integral and shall not consist of an agent that will need to be reapplied over time. For enhanced grip the rail is to have a cross-hatched pattern cut into the stainless steel.

Bid complies _____

Bid does not comply _____

VERTICAL RAIL, 2' ANTI-MIC ANTI-SLIP, RIGHT FRONT

Install a 2' long grab rail just inside and to the right of the side entry door. Install vertically to assist entry and exit through the door. This rail is to be constructed of stainless steel. Integral stanchions shall be welded into place at either end of the rail for attachment to the ALS cabinet. The rail shall attach through aluminum substructure at the attachment point for strength and durability. Because contamination occurs most often as a result of contact, this feature must be treated with an anti-microbial agent consisting of an inorganic ceramic coating embedded with silver ions. This coating shall be effective against a broad range of microbes including bacteria, molds, algae and fungi. The coating shall be integral and shall not consist of an agent that will need to be reapplied over time. For enhanced grip the rail is to have a cross-hatched pattern cut into the stainless steel.

Bid complies _____

Bid does not comply _____

VERT GRAB RAIL, 2' ANTI-MIC ANTI-SLIP MAIN WALL

Install a 2' long grab rail just inside and to the left of the rear entry doors. Install vertically to assist entry and exit through the rear access doors. This rail is to be constructed of stainless steel. Integral stanchions shall be welded into place at either end of the rail for attachment to the cabinets and riser. The rail shall attach through aluminum substructure at the attachment point for strength and durability. Because contamination occurs most often as a result of contact, this feature must be treated with an anti-microbial agent consisting of an inorganic ceramic coating embedded with silver ions. This coating shall be effective against a broad range of microbes including bacteria, molds, algae and fungi. The coating shall be integral and shall not consist of an agent that will need to be reapplied over time. For enhanced grip the rail is to have a cross-hatched pattern cut into the stainless steel.

Bid complies _____

Bid does not comply _____

VERT GRAB RAIL, 2' ANTI-MIC ANTI-SLIP REAR DOORS

Install a 2' long grab rail just inside and to the right of the rear entry doors. Install vertically to assist entry and exit through the rear access doors. This rail is to be constructed of stainless steel. Integral stanchions shall be welded into place at either end of the rail for attachment to the cabinets and riser. The rail shall attach through aluminum substructure at the attachment point for strength and durability. Because contamination occurs most often as a result of contact, this feature must be treated with an anti-microbial agent consisting of an inorganic ceramic coating embedded with silver ions. This coating shall be effective against a broad range of microbes including bacteria, molds, algae and fungi. The coating shall be integral and shall not consist of an agent that will need to be reapplied over time. For enhanced grip the rail is to have a cross-hatched pattern cut into the stainless steel.

Bid complies _____

Bid does not comply _____

PATIENT DOOR GRAB RAILS: ANTI-MICROBIAL/ANTI-SLIP

Angled door handles shall be installed on the interior door panels of each access door. The handles shall be one-piece and shall be constructed of stainless steel. The overall design shall incorporate a smooth radius to for a 'V' shape, but shall otherwise mimic the design and appearance of other grab rails specified to be installed on this vehicle. The handles shall feature smooth radius corners and flange mounts at each of three (3) attachment points per rail. Because contamination occurs most often as a result of contact, this feature must be treated with an anti-microbial agent consisting of an inorganic ceramic coating embedded with silver ions. This coating shall be effective against a broad range of microbes including bacteria, molds, algae and fungi. The coating shall be integral and shall not consist of an agent that will need to be reapplied over time. For enhanced grip the rail is to have a cross-hatched pattern cut into the stainless steel.

Bid complies _____

Bid does not comply _____

CEILING MATERIAL, PLATINUM WHITE COMPOSITE
The patient area ceiling shall be constructed of a bright white aluminum composite material consisting of a polyethylene core laminated between two sheets of coated aluminum. The headliner shall be smooth, impervious to moisture, easy to clean and durable. It shall have the same rate of expansion and contraction as the aluminum body. Headliner that is padded or upholstered in any way will not be considered, nor will any headliner made of wood or wood products due to the lower degree of durability and the risk of contamination inherent in such materials. Plastic, fiberglass or ABS headliner materials are not acceptable due to the cracking commonly causing by the differing rates of expansion. Lastly, the headliner material shall be treated with an antimicrobial agent.

Bid complies _____

Bid does not comply _____

FIRE EXTINGUISHERS: 5LB ABC, INSTALLED Install behind passenger seat in cab
The finished vehicle shall include a 5# ABS fire extinguisher installed as specified.

Bid complies _____

Bid does not comply _____

FIRE EXTINGUISHERS: 5LB ABC, INSTALLED SHIP LOOSE
Supply and ship loose a second 5lb ABC fire extinguisher.

Bid complies _____

Bid does not comply _____

STREETSIDE CABINETRY

Install a "Pull-Out" Drawer in the lower portion of the Linen Cabinet. Will host (2) portable "D" size Oxygen Cylinders with (2) #QRD2 cylinder brackets.

Bid complies _____

Bid does not comply _____

FIXED SHELF, UPPER LINEN CLOSET
The upper section of the linen cabinet shall include a fixed aluminum shelf with 1" integral retaining lips around its perimeter. The shelf is to be painted to match the interior of the cabinet.

Bid complies _____

Bid does not comply _____

SOLID LAMINATE-COVERED LINEN CLOSET DOOR
The linen cabinet is to include solid vertically hinged doors. The door construction is to utilize aluminum composite material that is laminated with a color coordinating outer layer on its face. Doors constructed of wood or any other

type of organic material will not suffice to comply with this requirement due to the danger of contamination, rotting, compression at the attachment points which could lead to loosening and rattling, and the weaker structural characteristics inherent in such materials.

Bid complies _____

Bid does not comply _____

PIANO HINGE FOR LINEN CLOSET TOP DOOR
The upper section of the linen cabinet shall include piano style hinge.

Bid complies _____

Bid does not comply _____

PIANO HINGE FOR LINEN CLOSET LOWER DOOR
The lower section of the linen cabinet shall include piano style hinge.

Bid complies _____

Bid does not comply _____

SOUTHCO LOCKING LATCH, LINEN CABINET DOOR TOP,
The upper linen cabinet door is to utilize a Southco Stainless Steel flush-style locking latch. The latch shall feature a recessed pull ring style handle. The latch shall be both positive (mechanical latching) and passive (latches automatically).

Bid complies _____

Bid does not comply _____

SOUTHCO LATCH FOR LINEN CABINET DOOR, LOWER
The lower linen cabinet door is to utilize a Southco Stainless Steel flush-style latch. The latch shall feature a recessed pull ring style handle. The latch shall be both positive (mechanical latching) and passive (latches automatically).

Bid complies _____

Bid does not comply _____

STREETSIDE WALL WITH CPR SEAT
The main cabinet wall inside the patient compartment is to be designed per the requirements of this document and shall include a CPR seat.

Bid complies _____

Bid does not comply _____

CPR SEAT, 28" WIDTH
The CPR seat shall measure 28" wide.

Bid complies _____

Bid does not comply _____

CPR SEAT BACK CUSHION, DOVE GREY
The MBrace backrest cushions for the CPR seat are to be Dove Grey #8567 in color. Seat cushion and closeout colors are listed separately.

Bid complies _____

Bid does not comply _____

ANGLED UPPER CABINET, FORWARD OF CPR SEAT
The upper cabinet, forward of the CPR seat, is to be angled.

Bid complies _____

Bid does not comply _____

ANGLED UPPER CABINET, AFT OF CPR SEAT
The upper cabinet, aft of the CPR seat, is to be angled.

Bid complies _____

Bid does not comply _____

CUSTOM CABINET, Cabinet 1 Dimensions: 18.75"H x 30.5"W x 16(ID) - Location: UPPER REAR MAIN WALL
The cabinet designated as 'Cabinet #1' is to meet all applicable specifications regarding cabinet materials and construction listed throughout this document. The cabinet dimensions are to be as noted above. Note that these dimensions represent the measurements on the inside of the cabinet and do not include any trim required for doors or cabinet faces.

Bid complies _____

Bid does not comply _____

ACRYLIC SLIDING, Cabinet 1
The cabinet notated above is to include sliding acrylic doors. The door frame is to be designed with an integral groove that incorporates a Nylon/felt insert that allows for smooth and rattle-free operation. Designs that do not comply with this section will not be accepted.

Bid complies _____

Bid does not comply _____

LIFT UP CABINET FRAMES INTERIOR Cabinet 1
The specified sliding cabinet doors on the cabinet referenced above shall feature a flip-up restocking style door frame. The frame, in which the sliding doors are installed, is to include a piano style hinge to provide a larger clear opening

for ease of restocking supplies and cleaning. This feature is in addition to the normal sliding mode of operation. The door frame shall be held in the "open" position with two gas-charged cylinders, and in the down position with two sliding dead bolt type latches. The remainder of the door construction shall adhere to the appropriate section of this specification.

Bid complies _____

Bid does not comply _____

INTERIOR ADJUSTABLE SHELVING Cabinet 1

Cabinet #1 shall include an adjustable aluminum shelf with 1" integral retaining lips around its perimeter. The shelf is to attach to four (4) tracks installed on each the right-and left-hand walls, two (2) per side. The shelf is to be painted to match the interior of the cabinet.

Bid complies _____

Bid does not comply _____

CUSTOM CABINET, Cabinet 2 Dimensions: Inside/Outside - Location: LOWER REAR MAIN WALL

The cabinet designated as 'Cabinet #2' is to meet all applicable specifications regarding cabinet materials and construction listed throughout this document. The cabinet dimensions are to be as noted above. Note that these dimensions represent the measurements on the inside of the cabinet and do not include any trim required for doors or cabinet faces.

Bid complies _____

Bid does not comply _____

ACRYLIC SLIDING, Cabinet 2

The cabinet notated above is to include sliding 3/8" acrylic doors. The door frame is to be designed with an integral groove that incorporates a Nylon/felt insert that allows for smooth and rattle-free operation. Designs that do not comply with this section will not be accepted.

Bid complies _____

Bid does not comply _____

PASS-THROUGH ACCESS, CABINET 2

An inside/outside dual access storage area shall be provided into the exterior compartment adjacent to cabinet #2. This area shall be trimmed around the opening and is to be accessible through both an exterior compartment door, and an interior cabinet door.

Bid complies _____

Bid does not comply _____

LIFT UP CABINET FRAMES, UPPER INHALATION CABINET

The specified sliding cabinet doors on the cabinet referenced above shall feature a flip-up restocking style door frame. The frame, in which the sliding doors are installed, is to include a piano style hinge to provide a larger clear opening for ease of restocking supplies and cleaning. This feature is in addition to the normal sliding mode of operation. The door frame shall be held in the "open" position with two gas-charged cylinders, and in the down position with two horizontal sliding dead bolt type latches. The remainder of the door construction shall adhere to the appropriate section of this specification.

Bid complies _____

Bid does not comply _____

UPPER INHALATION CABINET 12.75H x 40.75W x 16D

The cabinet located above the main inhalation/action area is to meet all applicable specifications regarding cabinet materials and construction listed throughout this document. The cabinet dimensions are to be as noted above. Note that these dimensions represent the measurements on the inside of the cabinet and do not include any trim required for doors or cabinet faces.

Bid complies _____

Bid does not comply _____

ACRYLIC SLIDING DOORS, UPPER INHALATION CAB.

The cabinet notated above is to include sliding 3/8" acrylic doors. The door frame is to be designed with an integral groove that incorporates a Nylon/felt insert that allows for smooth and rattle-free operation. Designs that do not comply with this section will not be accepted.

Bid complies _____

Bid does not comply _____

Area below the rear counter is to be for (2) drawers with painted interiors. Include Southco latches and (2) dividers in each drawer. 16.75W x 6.5H x 16.25D

Bid complies _____

Bid does not comply _____

INTERIOR SHELVING, UPPER INHALATION CABINET

The upper inhalation cabinet, above the main action area, shall include an adjustable aluminum shelf with 1" integral retaining lips around its perimeter. The shelf is to attach to four (4) tracks installed on each the right- and left-hand walls, two (2) per side. The shelf is to be painted to match the interior of the cabinet.

Bid complies _____

Bid does not comply _____

CURBSIDE CABINETRY

RELOCATE THE REAR I4G CONTROL PANEL TO A ANGLED CONSOLE AT THE HEAD OF THE SQUAD BENCH. TO BE ENLARGED SO THAT IT WILL ACCOMMODATE A CUSTOMER SUPPLIED 2-WAY RADIO HEAD UNDER THE I4G SCREEN. CONSOLE TO HAVE AN OXYGEN OUTLET ON THE FORWARD EDGE OF THE CONSOLE.

Bid complies _____

Bid does not comply _____

INSTALL A FORWARD FACING RECESSED GLOVE BOX CABINET AT THE REAR OF THE SQUAD BENCH. CABINET TO BE LARGE ENOUGH TO HOST (3) GLOVE BOXES WITH ACRYLIC DOOR AND SOUTHCO LATCH. BELOW GLOVE BOX CABINET THERE SHOULD BE AN RECESSED OPEN AREA TO HOST A CUSTOMER SUPPLIED KNOX MED VAULT 2. PREWIRE AREA WITH 12 VOLT AND INSTALL MED VAULT 2 WITH FLANGES BELOW THE RECESSED GLOVE BOX CABINET. INSTALL A CLOSE OUT IN THE CURBSIDE REAR COMPARTMENT TO COVER THE CABINET AND THE MED VAULT.

Bid complies _____

Bid does not comply _____

CURBSIDE ENTRY DOOR GLOVE STORAGE 10.5”W x 5.35”H x 4”D

Install storage for (2) glove boxes over the Curbside Entry Door. Include Acrylic door and piano hinge. Glove box size 10.5”W x 5.35”H x 4”D

Bid complies _____

Bid does not comply _____

RECESSED GLOVE STORAGE, Install a (2) Glove Box storage cabinet in the Rear Streetside Riser as close as possible to the left entry door.

Bid complies _____

Bid does not comply _____

Install a forward-facing recessed glove box cabinet at the rear of the Squad Bench. Cabinet to be large enough to host (3) glove boxes with acrylic door and Southco latch.
Below Glove Box cabinet there should be a Recessed Open area to host a customer supplied Knox Med Vault 2. Prewire area with 12 volt and install Med Vault 2 with flanges below the recessed glove box cabinet. Install a Close Out in the Curbside Rear Compartment to cover the cabinet and the Med Vault.

Bid complies _____

Bid does not comply _____

Install storage for (2) glove boxes over the Curbside Entry Door. Include Acrylic door and piano hinge. Glove Box size: 10.5" W x 5.5" H x 4" D

Bid complies _____

Bid does not comply _____

SQUAD BENCH WITH NO CUPS OR WELLS
A storage area, fabricated from .125" 5052-H34 aluminum, shall be installed beneath the squad bench cushion(s). This storage area shall be painted and trimmed per the cabinet construction section of this specification. Access to this area shall be gained by raising the bench cushion. This area shall be as large as possible given the presence of the wheelhouse directly beneath this area. Note that storage areas made of wood, whether they are laminated or otherwise covered with another material, will not be acceptable. The bench shall meet all applicable testing for crashworthiness. This testing shall have been performed by an independent accredited outside testing facility.

Bid complies _____

Bid does not comply _____

SINGLE CUSHION SQUAD BENCH
The squad bench lid is to be a single piece with a full-length cushioned seating surface.

Bid complies _____

Bid does not comply _____

BENCH HOLD OPENS: GAS
24lb. Gas piston style hold-open devices shall be installed on the flip-up squad bench cushion. These devices will provide for smooth and simple operation. For that reason, substitute hold-open devices, such as ratchet style devices, will not be acceptable.

Bid complies _____

Bid does not comply _____

BENCH HOLD-DOWN: PADDLE LATCHES (SINGLE)
A paddle style latch shall be installed on the flip-up bench cushion to hold the cushion in the 'closed' position. The operation of this latch shall be passive and shall require intentional unlatching to raise the squad bench cushion. The latch is to be flush mounted in the face of the squad bench riser.

Bid complies _____

Bid does not comply _____

BENCH CUSHION EDGE TRIM:
An aluminum angled trim piece shall be installed along the bottom edge of each bench cushion. Each piece shall be bent to follow the contour of each cushion on the horizontal plane. These trim pieces shall provide added protection for the upholstery against extensive wear.

Bid complies _____

Bid does not comply _____

BENCH BACK CUSHION: FULL SIZE
A full backrest cushion shall be installed on the wall over the squad bench. The cushion is to extend the full width of the squad bench and shall be trimmed to match the interior of the vehicle. The upholstery shall be as described in the upholstery section of this document.

Bid complies _____

Bid does not comply _____

Install a Drop-in Sharps/Waste at foot of bench
Install drop-in insert for sharps and waste at the foot of the bench.

Bid complies _____

Bid does not comply _____

BENCH CABINET, HINGED DOORS
A cabinet shall be installed at ceiling level over the full length of the squad bench. This cabinet is to be fabricated from .063" 5052-H32 welded aluminum. The interior of the cabinet shall be painted per the cabinet construction description listed elsewhere within this specification. The cabinet is to be accessed through hinged 3/8" acrylic doors that are held in the 'open' position by gas piston hold-open devices. This cabinet is to be a maximum of 9" H to allow enough clearance between the bottom of the cabinet and the top of the seat below to meet KKK-F requirements.

Bid complies _____

Bid does not comply _____

SOUTHCO LATCH OVERHEAD BENCH CABINET
The hinged doors on the bench ceiling cabinet are to utilize Southco Stainless Steel flush-style latches. These latches shall feature recessed pull ring style handles. The latches shall be both positive (mechanical latching) and passive (latches automatically).

Bid complies _____

Bid does not comply _____

SELF CLOSING HINGE FOR OVERHEAD BENCH CABINET
The cabinet above the squad bench/curbside seating area shall include self-closing style hinges.

Bid complies _____

Bid does not comply _____

Install a 35" tall cabinet with (4) drawers with Southco latches. Bottom (2) drawers facing and opening into the aisle. The top (2) drawers to be rear facing. The top (3) drawers to have (3) adjustable plexiglass dividers running from front to rear of the drawer.

Bid complies _____

Bid does not comply _____

FRONT WALL CABINETRY

FRONT WALL CABINET: FLAT ALUM PAINTED
A cabinet shall be provided on the front wall of the patient area just inside the side access door. This cabinet shall run from floor to ceiling and shall be fabricated from .125" welded aluminum. The cabinet shall be anchored at both the top and bottom for stability. This stability must have been tested through a Hygee sled test of at least 30g's. Under no circumstances shall this cabinet be welded to any module body structural member. This storage area shall be used to house purchaser supplied bagged equipment and supplies.

Finish Material: UV stable light gray polyurethane elastomeric
coating
Color: Light gray
Bid complies _____

Bid does not comply _____

ACRYLIC HINGED DOORS, Upper front wall
The cabinet notated above is to include two vertically hinged doors. The doors are to be made of 3/8" acrylic material.

Bid complies _____

Bid does not comply _____

SOUTHCO FLUSH SS PULL LATCH TOP FRONT WALL DOOR
The hinged doors on the upper section of the front wall cabinet are to utilize Southco Stainless Steel flush-style latches. These latches shall feature recessed pull ring style handles. The latches shall be both positive (mechanical latching) and passive (latches automatically).

Bid complies _____

Bid does not comply _____

SELF CLOSING HINGES TOP FRONT WALL CABINET
The upper section of the front wall cabinet shall include self-closing style hinges.

Bid complies _____

Bid does not comply _____

ADJUSTABLE SHELF, UPPER FRONT WALL TOP CABINET
The upper section of the front wall cabinet shall include an adjustable aluminum shelf with 1" integral retaining lips around its perimeter. The shelf is to attach to tracks to allow for adjustment within the available space, the shelf is to be painted to match the interior of the cabinet.

Bid complies _____

Bid does not comply _____

FIXED SHELF FRONT WALL MIDDLE CABINET
The center section of the front wall cabinet shall include a fixed aluminum shelf with 1" integral retaining lips around its perimeter. The shelf is to be painted to match the interior of the cabinet.

Bid complies _____

Bid does not comply _____

ADJUSTABLE SHELF, LOWER FRONT WALL CABINET
The lower section of the front wall cabinet shall include an adjustable aluminum shelf with 1" integral retaining lips around its perimeter. The shelf is to attach to tracks to allow for adjustment within the available space, the shelf is to be painted to match the interior of the cabinet.

Bid complies _____

Bid does not comply _____

ACRYLIC HINGED DOORS, Lower front wall
The cabinet notated above is to include two vertically hinged doors. The doors are to be made of 3/8" acrylic material.

Bid complies _____

Bid does not comply _____

SOUTHCO SS PULL STYLE LATCH LOWER FRONT WALL DOOR
The hinged doors on the lower section of the front wall cabinet are to utilize Southco Stainless Steel flush-style latches. These latches shall feature recessed pull ring style handles. The latches shall be both positive (mechanical latching) and passive (latches automatically).

Bid complies _____

Bid does not comply _____

SELF CLOSING HINGES LOWER FRONT WALL CABINET
The upper section of the front wall cabinet shall include self-closing style hinges.

Bid complies _____

Bid does not comply _____

CAB TO MODULE PASSTHROUGH WINDOW
A sliding pass-through window shall be provided between the cab and the patient compartment. The window shall include a latch to secure the window in the 'closed' position.

Bid complies _____

Bid does not comply _____

COT MOUNT

STRYKER POWER LOAD, CENTERED Cot Type: Stryker Power Pro 2
Install a Stryker MTS Power Load System. Locate in the center position. Complies with GSA. Stryker MTS Power Load System and Stryker Power Pro 2 Cot to be supplied by the Purchaser.

Bid complies _____

Bid does not comply _____

VISUAL WARNING

Install a M9V2A combo warning and scene light with chrome flange in the center of the rear upper body lights.

Bid complies _____

Bid does not comply _____

WIG WAG HEADLIGHTS, F SERIES
The vehicle headlights shall alternately flash through the activation of the appropriate switch on the front control panel. This feature shall be accomplished through a solid-state flashing device that is a part of the primary electrical control system. This feature shall deactivate when the unit is in secondary mode.

Bid complies _____

Bid does not comply _____

M7, RED/RED LENS Over each rear wheel housing
Whelen M7 series LED lighting shall be installed as noted. Lighting is to be red with red lens and is to include the chrome flange. The lighting shall mount using threaded nylon inserts providing separation between the mounting hardware and the vehicle body. A switch shall be provided in the front control panel to change programmability on the specified lighting.

Bid complies _____

Bid does not comply _____

M9, AMBER/AMBER LENS Rear Window Level, above the RED M9 Lights
Whelen M9 series LED lighting shall be installed as noted. Lighting is to be amber with amber lens and is to include the chrome flange. The lighting shall mount using threaded nylon inserts providing separation between the mounting hardware and the vehicle body. A switch shall be provided in the front control panel to change flash patterns on the specified lighting.

Bid complies _____

Bid does not comply _____

M9, RED/RED LENS Streetside & Curbside upper corners
Whelen M9 series LED lighting shall be installed as noted. Lighting is to be red with red lens and is to include the chrome flange. The lighting shall mount using threaded nylon inserts providing separation between the mounting hardware and the vehicle body. A switch shall be provided in the front control panel to change flash patterns on the specified lighting.

Bid complies _____

Bid does not comply _____

M9, RED/RED LENS Rear of body at upper corners, window level below the Amber Light
Whelen M9 series LED lighting shall be installed as noted. Lighting is to be red with red lens and is to include the chrome flange. The lighting shall mount using threaded nylon inserts providing separation between the mounting hardware and the vehicle body. A switch shall be provided in the front control panel to change flash patterns on the specified lighting.

Bid complies _____

Bid does not comply _____

M9, RED/RED LENS Front face of body, positions 1,3,5,7
Whelen M9 series LED lighting shall be installed as noted. Lighting is to be red with red lens and is to include the chrome flange. The lighting shall mount using threaded nylon inserts providing separation between the mounting hardware and the vehicle body. A switch shall be provided in the front control panel to change flash patterns on the specified lighting.

Bid complies _____

Bid does not comply _____

M9, WHITE, CLEAR LENS Front face of body, positions 2 & 6
Whelen M9 series LED lighting shall be installed as noted. Lighting is to be white with clear lens and is to include the chrome flange. The lighting shall mount using threaded nylon inserts providing separation between the mounting hardware and the vehicle body. A switch shall be provided in the front control panel to change flash patterns on the specified lighting.

Bid complies _____

Bid does not comply _____

FLASH PATTERN, DOUBLE A, B, C, D
The emergency lighting flash pattern is to be programmed to a Double A/B/C/D pattern.

Bid complies _____

Bid does not comply _____

RED/CLEAR LENS, WHELEN ION GRILLE, TOP
Two (2) Whelen ION series LED lights shall be installed in the upper portion of the chassis grille. Lights are to be red with clear lenses. To include bezels where applicable and flash pattern programmability from the front control panel.

Bid complies _____

Bid does not comply _____

RED/CLEAR LENS, WHELEN ION GRILLE, BOTTOM
Two (2) Whelen ION series LED lights shall be installed in the lower portion of the chassis grille. Lights are to be red with clear lenses. A switch shall be provided in the front control panel to change flash patterns on the specified lighting.

Bid complies _____

Bid does not comply _____

RED/RED LENS M7 LED INT. LIGHTS
Two (2) Whelen M7 series LED lights shall be installed as intersection lights. Locate one (1) on each side of the chassis fender/hood area. Lights are to be red with red lenses and are to include chrome flanges/bezels where applicable and weather proof plugs.

Bid complies _____

Bid does not comply _____

AUDIBLE WARNING

SIREN, WHELEN 295HFSA7 Speaker 1- Wail, Yelp, Pierce. Speaker 2- Wail, Yelp, Pierce
The vehicle is to be equipped with a Whelen 295HFSA7 siren installed in the front console.

Bid complies _____

Bid does not comply _____

SPEAKERS, CAST PRODUCTS, F SERIES

Cast Products 100W siren speakers (2) shall be installed (1) in each end of the chassis front bumper and wired to the specified siren.

Bid complies _____

Bid does not comply _____

NON-EMERGENCY LIGHTING

KKK SIDE BODY MARKER LIGHTS, M6 SERIES LED (PAIR)

One Whelen red M6 Series LED light with a red lens and a chrome flange shall be installed on each side of the vehicle towards the rear of the body. These lights shall function as both running lights and turn signals.

Bid complies _____

Bid does not comply _____

LED EXTERIOR COMPARTMENT LIGHTING

The compartment lighting for the exterior compartments noted above, with the exception of any specified wheelwell compartments, shall consist of full available height LED lighting strips. Strips of LED lights shall be installed on each side of the compartment opening on the inside of the door jamb and shall direct the light back into the compartment. These light strips shall fit securely into clips installed in this location. These strips shall be semi rigid. Please note th at rope lighting is not an acceptable alternative to this requirement.

Bid complies _____

Bid does not comply _____

ROLLED ICC MARKER LIGHTS

The bidder shall install LED marker/ICC lights as required by FMVSS regulations. The lights are to be a rolled design to conform to the contour of the upper roof posts of the body front and rear. The lights are to be a surface mount design. Lights that must be recessed into the body are unacceptable due to the weakening of the body structure caused by cutting into the extrusions. The contour of the lights shall be such that there shall be visibility from the above as well as the front and rear of the vehicle. Exceptions to this requirement will only be allowed is ICC marker lights are included on another piece of specified equipment such as a lightbar.

Bid complies _____

Bid does not comply _____

RUNNING BOARD LIGHTS, WHELEN PAR 16 L.E.D.

Whelen PAR 16 LED light fixtures with chrome flanges shall be installed, one (1) per side, in the front face of the module body above the running boards and within the stone guards the lights shall be wired to illuminate the step/running board anytime a cab door is opened.

Bid complies _____

Bid does not comply _____

Install (2) Whelen PFH1 Pioneer LED lights over the Rear Entry Doors. Lights to be mounted using Whelen PBA103 Semi-recessed housing and mounting hardware.

Install (1) Whelen PFH1 on the upper front of the body. Light to be centered with the M9 Emergency Flashing Lights.

Bid complies _____

Bid does not comply _____

Install (1) Whelen PFH2 Dual Pioneer light recessed into each side of the body of the vehicle. Lights are to be mounted using a Whelen PBA203 semi-recessed housing. Total of (2) lights and mounting hardware.

Bid complies _____

Bid does not comply _____

L.E.D. WARNING RUB RAILS RED/WHITE

Strips of L.E.D. lights shall be flush mounted into the lower rub rails on each side of the module body. Each light shall have optics integral to the lens for maximum light disbursement. Each 12" strip shall contain twelve (12) LEDs divided into 3" sections of alternating colors. The rub rails forward of the wheel wells shall contain three (3) strips (red/white dual), and the area to the rear of the wheel wells shall contain two (2) strips (red/white dual). The vehicle electrical system shall be programmed to operate the red-light sections at a steady burn when the chassis headlights are activated, and to alternately flash the red and white light sections when the emergency lighting circuit is activated. The lenses shall be designed so that they provide a bright and intense light from a distance. As the distance is decreased the light shall become less intense so as to assure that the ability of the onboard personnel to see is not compromised. Finally, LED lights are specified due to their "cold" operating temperature, low amp requirements, and long-life expectancy. These lights are designed to enhance vehicle visibility and safety for all onboard personnel.

Bid complies _____

Bid does not comply _____

TECHNIQ E10 LED GROUND LIGHTING

The manufacturer shall install Techniq E10 LED lighting beneath the module body for use as ground lighting. The lighting is to include Stainless Steel mounting brackets.

Lights are to function as follows:

A. Includes a front control panel switch.

B. Compartment doors activate the lights in the respective quadrant of the body. Rear entry doors activate the rear corner lights.

C. Rear lights are wired reverse activated. All Lights to activate for 15 seconds when the vehicle is placed in drive.

D. Items b. thru d. are to only occur when the parking or headlights are activated.

Bid complies _____

Bid does not comply _____

TAIL LIGHTS, M6 SERIES, VERTICAL MOUNT

Whelen M6 series LED stop/tail, turn, and reverse lights are to be installed on the rear of the vehicle. The lights are to be located vertically in the rear body panels, above the rear riser, to either side of the rear access doors. All lights are to include chrome flanges.

Bid complies _____

Bid does not comply _____

The Tail Lights are to be inserted into a Whelen #M6FCV3 Chrome Housing. Location to be approximately 12" - 16" above the Rear Riser.

Bid complies _____

Bid does not comply _____

ARROW LIGHTS M6 SERIES LED, FRONT

Whelen M6 series LED turn signals (2) shall be installed on the front face of the body below the outboard emergency lighting, (1) per side. Lighting is to include the chrome flange. The lighting shall mount using threaded nylon inserts providing separation between the mounting hardware and the vehicle body.

Bid complies _____

Bid does not comply _____

Install (1) Whelen #OSR00MCR RED LED light on the upper portion of every exterior door. (on panel side) Light(s) to activate upon opening the door. (Total of 9 lights)

Bid complies _____

Bid does not comply _____

Install (1) additional cab dome light in the center line of the ceiling. The light specified is a Whelen #60CREGCS RED/WHITE light. An ALL RED light is preferred if available.

Bid complies _____

Bid does not comply _____

ELECTRICAL

The ceiling mounted light in the Electrical Compartment is to operate with the opening of the door.

Bid complies _____

Bid does not comply _____

Install a 12-volt power/ground for the installation of a customer supplied Med Vault. Med Vault is recessed into the forward-facing wall at the foot of the Squad Bench. Battery Hot.

Bid complies _____

Bid does not comply _____

STREAMLIGHT VULCAN FLASHLIGHTS
Provide (2) Streamlight Vulcan LED flashlights w/chargers. Install in the streetside intermediate compartment. Location TO BE INSTALLED IN DELIVERY.

Bid complies _____

Bid does not comply _____

Dual USB/USB-C Outlets Front Console, Install (2) pairs of USB Outlets on the upper front face of the front console.

Bid complies _____

Bid does not comply _____

ELECTRIC DOOR LOCKS COMPARTMENT EXTERIOR
Power activated door locks shall be installed on compartment doors. Locks shall be activated by switches located at each patient area access door, or via other means as may be specified within this document. Locks may be overridden by the door key.

Bid complies _____

Bid does not comply _____

ELECTRIC DOOR LOCKS ACCESS DOORS INTERIOR
Power activated door locks shall be installed on patient area access doors. Locks shall be activated by switches located at each patient area access door. Locks may be overridden by a manual slide lever or by the door key.

Bid complies _____

Bid does not comply _____

ELECTRIC DOOR LOCKS WIRED TO OEM SWITCHES
The converter-added power door locks are to be wired through the OEM chassis door lock switches.

Bid complies _____

Bid does not comply _____

ELECTRIC DOOR LOCKS CONCEALED IN GRILLE
A concealed weatherproof switch shall be installed in the chassis grille to operate the specified power door locks. The switch shall be wired to unlock only.

Bid complies _____

Bid does not comply _____

ELECTRICAL SYSTEM

The electrical control system must meet all current ambulance design standards to include, KKK 1822, NFPA 1917, CASS and AMD. A system is desired that is easy to use, simple in design and allows electrical problem diagnosis and repair time to be minimized. The electrical system must be thoroughly engineered and manufactured to allow simple personnel operation. Finally, the system must be designed so that the probability of experiencing dead batteries, shorted electrical components and engaging in lengthy troubleshooting procedures will be reduced. In some cases, the electrical output provided by the chassis charging system can be marginal and under certain circumstances the electrical load can exceed the alternator output. In addition, some electrical systems have not provided proper circuit protection and at times have not provided adequate wiring for the load. To address the above objectives, the following minimum electrical system design is required:

Chassis Charging Enhancement

The basic design for the chassis electrical output system must include equipment that provides adequate electrical needs to operate the vehicle's electrical components. In addition, a system is desired that continually monitors the chassis voltage and amperage outputs. The end result of the desired electrical output system is longer battery life, less down time associated with charging system repairs, and the fulfillment of each and every emergency response.

Bid complies _____

Bid does not comply _____

Battery Activation

Switching for battery power to the ambulance systems, either On or Off, shall be furnished as outlined elsewhere within this document. The battery switch shall not disconnect power to the OEM chassis systems.

Bid complies _____

Bid does not comply _____

Automatic Throttle Advance

In order to reduce the number of component parts and unnecessary throttle linkages, the factory electronic throttle control shall be utilized to activate the throttle advance system. The controls shall require that the chassis be placed in Park or Neutral with the Module Disconnect switch in the On position and the Park Brake engaged before activation of the throttle advance. A digital display warning on the driver console, accompanied by an audible tone, must instruct the driver to Set Park Brake or Release Park Brake to engage or disengage the automatic throttle control. No exceptions to these requirements will be accepted.

Bid complies _____

Bid does not comply _____

Automatic Load Management

In order to ensure that onboard personnel attention is focused on patient care rather than being occupied with monitoring vehicle systems, an automatic load management system is required. The bidder must provide a system that continually monitors the vehicles charging system while it is sitting on scene. The system design shall have the ability to automatically shut down not less than ten pre-programmed electrical circuits to prevent a deficit charging

condition while the vehicle is sitting at idle. The system shall be programmed to constantly scan the electrical system. If a deficit charging condition continues for more than one minute, a pre-programmed circuit shall shut down, correspondingly reducing the electrical draw. If the deficit condition continues, a second circuit shall automatically shut down. This process shall continue to repeat at one-minute intervals until at least ten circuits are shut down with corresponding load reductions.

Bid complies _____

Bid does not comply _____

In the event any circuits are being controlled (disabled) by the load management system, the driver must be informed. A digital display warning shall appear on the driver information panel indicating Load Management Active.

Bid complies _____

Bid does not comply _____

Load management systems must be programmed through a microprocessor-based logic and memory system rather than a series of mechanical relays. Systems that require manual activation of Load Management will not be acceptable. Once the deficit condition ceases to exist, the system must be capable of restarting any disabled circuit without any action required by the driver.

Bid complies _____

Bid does not comply _____

The bidder is required to furnish a system that permits the end user to determine. prior to production, the order of priority for shedding loads. Although the entire system must function automatically, it must also be designed so that it can be set by the end user to a mode for restocking, training, or maintenance convenience. The System Off setting shall default to 'on' with system power rest.

Bid complies _____

Bid does not comply _____

Low Amperage Switching

Electrical devices that are not activated automatically shall be controlled from either the cab or patient area control panels through the use of manual low amperage switches in conjunction with a programmed touch screen. Switches that are rocker style will not be acceptable due to their tendency to degrade and fail in continued field use. To eliminate loose or poor contacts, it is unacceptable to have soldered or terminal type connections for the switches. The switches must be integral to the panels.

Bid complies _____

Bid does not comply _____

Switch Indicators

All manually activated switches on the panels described below shall be programmed to change color when the circuit is active. The switch lighting must be LED.

Bid complies _____

Bid does not comply _____

Switch Panel Design

Both the driver and the patient area switch panels must be designed so they can be easily decontaminated. The panels must be sealed so as to prevent contaminates from leaching into crevices, underneath switches, etc. There shall be no printing or labeling on the face of the overlay material. The panels must be cleanable using any commercially available spray type cleaner or disinfectant commonly used by EMS systems with no damage created by fluids leaking through openings onto the circuit boards or switch contacts.

Bid complies _____

Bid does not comply _____

Switch Panel Backlighting

The switch panels shall include, on each panel, an individual intensity control as well as a backlighting color selection feature. Switch panel lighting that operates at the same level as the cab instrument panel or that illuminates both the front and rear panels at the same intensity will not be considered. The bidder must provide totally independent control for each panel. The panel perimeter lighting must have multiple color selections available with front and rear panels separately controlled.

Bid complies _____

Bid does not comply _____

Cab Control Switching and Display

Switch Activation:

The cab control center shall include 8 critical buttons installed in protective enclosure with proper ventilation to maintain temperature. The following minimum circuits shall be provided on the switch panel:

-Module Disconnect
-Emergency Master
-Emergency
-Interior Lights
-Exterior Lights
-Home
-Apps
-Options

The following displays will appear on the Home screen of the cab console:

-Voltage (to the nearest 0.10 volt)
-Amperage (to the nearest amp)
-Outside Temperature
-Inside Patient Area Temperature
-Access or Compartment Door Open Warning Message and Display
-Electrical System Diagnostics
-24 Hour Clock
-HVAC
-Emergency Brake Warning
-Accent Lighting and Backlighting Controls
-Patient Warning

Bid complies _____

Bid does not comply _____

Door Open Indicator

The front panel shall include a door open warning indicator. This shall consist of a graphical diagram of the vehicle on the touch screen. A door open will appear on the screen allowing the operator to pinpoint which door is open. An audible alarm must sound if a door is left open and the vehicle is placed into gear. Under no circumstances will flashing lights or stand-alone audible indicators suffice to meet this requirement.

Bid complies _____

Bid does not comply _____

Patient Area Control Switching and Display

The patient area control center shall match the front control panel specified above in all but function. The rear panel is to specifically control patient care functions and shall include 8 mission critical buttons installed in a backlight aluminum control panel. The following circuits shall be controlled through these switches:

-Oxygen

-Vacuum

-Interior lighting

-Climate Control

-Scene/Load lights

-Ventilation

- “Home”

Bid complies _____

Bid does not comply _____

Additional functionality shall be available via the graphical touch screen. At a minimum the following information must be available and controllable through the rear panel in addition to functionality listed above:

-Patient Status
-Stop Clock
-Oxygen Line Pressure
-Oxygen Cylinder Pressure
-Patient Area Temperature
-Thermostat Setting
-Oxygen Warning

Bid complies _____

Bid does not comply _____

Compartment and Entry Door Switches

Exterior circuits such as loading lights, side scene lights and compartment lights shall be activated by low amperage, non-mechanical switches. The type of switch desired is a magnetic sensitive switch that activates the circuit when the magnetic plane is broken. Plunger type switches are not acceptable because of their short useful life and higher amperage requirements.

Bid complies _____

Bid does not comply _____

'Door Open' Indicator

A vehicle graphic door open warning indicator, with accompanying audible chime shall be installed in both the cab and patient area. A digital display shall appear on both consoles indicating which specific door has been left ajar.

Under no circumstances will red flashing lights or systems that do not specifically pinpoint a specific open door be acceptable.

Central Electrical Distribution

The electrical system smart modules shall be independent and include their own logic. They must include RAM memory to execute commands without having to rely on a central CPU. The system must not be centered around the use of a logic-controlled microprocessor built into a single circuit board. This logic control system is required to maximize reliability of the electrical system and to minimize downtime. It must be provided in order to match the type of control system used in the chassis and to prevent communication problems caused when dissimilar systems are employed. The design of the system must totally separate chassis operation from converter feature installations. In the unlikely event of converter component failure, the chassis must still remain operable.

The computer based electrical system must utilize components similar in design to the computerized chassis functions such as the OEM cruise control system, fuel feed system, transmission control system and braking system.

Bid complies _____

Bid does not comply _____

Multiplexed Electrical Communications System

Because most chassis manufacturers have chosen multiplex electrical communication technology to operate the chassis system, this purchaser requires the same technology for the converter-added systems. A standardized electrical control and wiring system is required. "Off the shelf" third party systems are not desired. Standard systems controlled by outside vendors and modified for a specific vehicle or manufacturer will not be acceptable due to the unpredictability for future parts or service. Switch panels or modules that are not standard in design and are not interchangeable from one unit to another will not be considered. Since solid state logic-controlled technology is commonly available and not proprietary to any one manufacturer and has been proven to be more reliable with greater benefits, a blanket exception or clarification regarding the electrical specification is not acceptable and will be cause for automatic rejection of the bid.

Bid complies _____

Bid does not comply _____

In addition, the system will consist of a series of input / output control modules to manage and feed information and to control the various circuits required by this specification. Each smart module must have 32 power and 2 ground outputs and 12 inputs. The smart modules shall have a chassis gateway interface with a 120-amp max output. Universal Mate-N-Lock connectors shall be used for all load connections. Mini-Universal Mate-N-Lock connectors shall be used for data transmission lines. Under no circumstances will systems be acceptable that utilize screw type terminals or card connectors due to their susceptibility to working loose due to vibration normally encountered on a vehicle.

Bid complies _____

Bid does not comply _____

Under no circumstances may the operation of the central processing unit or the input or output modules be based upon the operation of mechanical relays. Relay based systems require higher amperage operating current and rely on mechanical contact points designed to degrade with use, creating short duty cycles for the vehicle electrical system. Relay based systems, due to those limited short duty cycles, will not be acceptable for the requirements of this specification.

Bid complies _____

Bid does not comply _____

Unit Function

The electrical control system shall be fully programmable and shall control a number of functions. The minimum functions to be controlled are as follows:

-Load Management
-Sequenced Start Circuit Activation
-Electrical System Diagnostics
-Climate Control Heat/AC operation
-Intensity Controls for Patient Dome Lights
-Oxygen Warning System (high and low pressure)
-All Warning Light Flashers and Flash Patterns
-Patient Status System
-Electrical Diagnostics

Bid complies _____

Bid does not comply _____

Unit Function Options

The electrical control system shall be capable of adding the following options:

-Up to four cameras

-Emergency GPS

-Pulse width Modulation

-USB port for field upgradability

-Seat belt monitor display

-Remote system activation from a mobile device

-Record ambulance PM schedule

The electrical control system shall include the ability to manage user defined maintenance issues. It shall also allow for the notification of critical issues such as oil changes and tire rotations.

Bid complies _____

Bid does not comply _____

Circuit Protection

Each converter added electrical circuit must have circuit protection for both over current limit and over temperature condition. The circuit protection shall be provided by solid-state circuit breaker/switching devices (MOSFETS) for both the input and output wire feeds for each circuit. The circuit protection shall require no user intervention such as that required for circuit breakers or fuses. The system shall be able to indicate an output fault warning.

Bid complies _____

Bid does not comply _____

No Prototype Systems

The converter-added electrical system represents the most important system in the design of this ambulance. Reliability and proven performance are essential. Therefore, the bidder must be able to demonstrate that they have at least ten years' experience with solid state logic-controlled electrical systems installed in emergency vehicles. Further, the bidder must be capable of all programming required by the system without turning to outside vendors. This includes custom-programmed items as may be delineated in this specification.

Bid complies _____

Bid does not comply _____

The bidder may be required to demonstrate an in production or in-service vehicle in order to guarantee compliance with this requirement. Prototype or first of a kind electrical system are not acceptable. The purchaser may require the bidder to furnish specific references to further document compliance.

Bid complies _____

Bid does not comply _____

Wiring

The following minimum wiring standards are required:

Identification

By color, by itemized number, and by actual circuit name, stamped every 4-6"

Size:

Size will vary and will be dependent upon each wire being able to carry a minimum of 125% of the actual circuit load.

Protection of Wiring:

All wiring must be run in breakaway wire loom for protection against abrasion or chafing.

Bid complies _____

Bid does not comply _____

Diagnostics

The electrical system must have built-in capability to self-check each converter-added circuit and identify a short or open circuit automatically. The system must be designed to continuously monitor all outputs and to notify the operator of any faults via a message on the front control screen.

Bid complies _____

Bid does not comply _____

Support Data

Being able to service the electrical system should the need arise is of the utmost importance. To reduce the down time associated with servicing, the following information shall be provided at the time of delivery:

1. Electrical system operating instructions
2. Patient area heating/AC schematic and parts list
3. Oxygen and vacuum system schematic, parts list and leak check instructions
4. Battery and alternator schematic and system description
5. Radio communications installation instructions
6. Wire description list for converter added wiring
7. Individual schematics for all converter added electrical circuits

Bid complies _____

Bid does not comply _____

INPOWER BATTERY SWITCH, WITH WAKE BUTTON 5 min.
Install an InPower electronic battery switch. Switch is to activate battery power through the vehicle ignition and is to include an automatic shutdown timer to deactivate battery power after the ignition is turned off.

Bid complies _____

Bid does not comply _____

INVERTER 20-1050CUL, AUTO SWITCHED
The vehicle converter shall furnish and install a Vanner 20-1050CUL inverter/charger. The inverter shall be located the vehicle's designated electrical compartment, and shall power each onboard electrical outlet. The unit is to activate automatically anytime the engine is running. The "Charger" portion of this unit shall be wired to the vehicle shoreline circuit.

Bid complies _____

Bid does not comply _____

110V INTERIOR OUTLET (1) Forward Inhalation Area, (1) Lower Front Wall Cabinet, (2) Upper Front Wall Cabinet, (1) Curbside Wall above Counter Top, (1) On floor behind each cab seat
110V lighted interior outlets are to be installed as noted.

Bid complies _____

Bid does not comply _____

INTERIOR 12VDC OUTLETS: CL TYPE/USB (1) In Inhalation Area (1) On Curbside Wall above Countertop, (1) FW, (1) Rear Console for Install of two Cust. Supplied Portable Radio chargers
12VDC combination cigarette/USB/USB-C style outlets are not be installed as noted and wired battery hot.

Bid complies _____

Bid does not comply _____

SHORELINE 1, 20A SUPER AUTO EJECT, WHITE
A Kussmaul 20A Super Auto Eject shoreline inlet shall be installed on the vehicle above the streetside (driver's side) intermediate compartment. The inlet shall be protected from the elements with a hinged cover. The shoreline system shall include a 20-amp inline GFI breaker. The shoreline cover shall be white.

Bid complies _____

Bid does not comply _____

Install the 20-amp Shoreline on an angled housing on the front of the module body, just pass the Driver's Door. Locate in such a manner so as not to interfere with opening and closing the Driver's door.

Bid complies _____

Bid does not comply _____

PD BOX LOCATION, LEFT HAND SIDE, SS INT. COMPARTMENT
The onboard power distribution panel is to be located on the left wall of the streetside (driver's side) intermediate compartment. The panel is to be covered with an aluminum closeout to match the finish in that compartment. Access to the panel shall be provided by removing the closeout.

Bid complies _____

Bid does not comply _____

KUSSMAUL EZ PLATE, 20A SUPER AUTO EJECT
The shoreline specified above as 'Shoreline #1' shall be installed as noted using a Kussmaul EZ Plate.

Bid complies _____

Bid does not comply _____

REPORT LIGHT, LED
Report lighting shall be installed above the main counter/work area. The fixture shall be 12" in length and LED. The fixture shall be controlled via a switch on the attendant control panel. This design will allow for simple "one touch" operation while still providing for flexibility in terms of lighting needs.

Bid complies _____

Bid does not comply _____

STEP WELL LIGHT VISTA LED
The side access door stepwell is to include a 10.5" LED light on the left-hand side. The light is to illuminate with the opening of the side access door through the use of a magnetic door switch. Mechanical door switches will not be accepted.

Bid complies _____

Bid does not comply _____

NFPA CAB WARNING LIGHT

Install a red LED warning light within sight of the driver. Wire to flash when the ignition is 'on' with the emergency brake disengaged and a door is open. This is in addition to the standard operation.

Bid complies _____

Bid does not comply _____

PATIENT CEILING DOME LIGHTS WHELEN LED

Whelen 80C0EHCR LED dome lights shall be installed in the patient area ceiling. Patient area lighting is to meet applicable standards for patient area illumination. The lights will have a high/low feature with the switch in the rear control panel.

Bid complies _____

Bid does not comply _____

3 SWITCH PANEL BOLSTER FACE STEPS WELL

The manufacturer shall install a 3-switch electrical control as noted above. The panel is to match the style of switches used on the main control panels.

Bid complies _____

Bid does not comply _____

TIMER, DOME LIGHTS. STEPWELL

An electronic momentary touch timer switch shall be installed in the specified switch panel on the side of the bolster facing the side stepwell. The switch will enable time limited operation of the specified dome lights with the battery switch in the 'off' position. Set timer to 15 minutes. Mechanical timers are strictly prohibited.

Bid complies _____

Bid does not comply _____

3 SWITCH PANEL INHALATION PANEL

The manufacturer shall install a 3-switch electrical control as noted above. The panel is to match the style of switches used on the main control panels.

Bid complies _____

Bid does not comply _____

SWITCH, DOME LIGHTS, INHALATION PANEL,
An electronic momentary switch shall be installed in the specified 3-switch panel on the inhalation panel. The switch will activate the specified dome lights with the battery switch in the 'off' position. The lights are to remain ‘on’ until the switch is depressed again.

Bid complies _____

Bid does not comply _____

SWITCH, O2, INHALATION PANEL
An electronic momentary switch shall be installed in the specified 3-switch panel on the inhalation panel. The switch will activate the onboard electronic oxygen system. A second depression of this switch shall deactivate the system.

Bid complies _____

Bid does not comply _____

SWITCH, SUCTION, INHALATION PANEL
An electronic momentary switch shall be installed in the specified 3-switch panel on the inhalation panel. The switch will activate the onboard aspirator system. A second depression of this switch shall deactivate the system.

Bid complies _____

Bid does not comply _____

3 SWITCH PANEL REAR DOOR PANEL
The manufacturer shall install a 3-switch electrical control as noted above. The panel is to match the style of switches used on the main control panels.

Bid complies _____

Bid does not comply _____

TIMER, DOME LIGHTS, REAR DOOR PANEL
An electronic momentary touch timer switch shall be installed in the specified switch panel on the right rear door panel. The switch will enable time limited operation of the specified dome lights with the battery switch in the 'off' position. Set timer to 15 minutes. Mechanical timers are strictly prohibited.

Bid complies _____

Bid does not comply _____

DUMP OVERRIDE, i4G, REAR DOOR PANEL
A switch shall be programmed into the specified switch panel on the interior panel of the right rear entry door to override the automatic dump feature for the rear suspension. Activation of this switch will prevent the automatic raising and lowering of the rear suspension that occurs with the opening of the left rear entry door.

Bid complies _____

Bid does not comply _____

SECURITY IDLE SYSTEM, F SERIES

A solid-state security idling system shall be provided on the vehicle. With the system in the 'on' position, via a switch in the main control panel, the driver may remove the vehicle keys with the engine running. If the vehicle is placed in gear or the brake pedal is depressed, without returning the keys to the ignition, the system will sound the vehicle horn, flash the marker lights and automatically shut down the engine to prevent vehicle theft. The desired system must be integrated into the vehicles programmed electrical system and must include a visual communication to the operator that the system is 'on'. Aftermarket add-on units are not acceptable.

Bid complies _____

Bid does not comply _____

BACKUP ALARM RESET, MOMENTARY

An audible alarm shall be installed to activate when the vehicle is placed into reverse gear. There shall be, installed on the front console and wired through the vehicle electrical system, a momentary cutoff switch to disable the alarm. This switch shall automatically reset each time the vehicle is placed into reverse gear.

Bid complies _____

Bid does not comply _____

VEHICLE CAMERA SYSTEM

The vehicle shall have (2) separate and independent close circuit cameras. Each camera's feed will be displayed in the Front Console Electrical Control Panel. The Rear Camera will default to "ON" when the vehicle is placed in reverse.

CAMERA LOCATION: OVER REAR DOORS, EXTERIOR

Bid complies _____

Bid does not comply _____

CAMERA LOCATION: OVER REAR DOORS, INTERIOR

Bid complies _____

Bid does not comply _____

PROGRAMMING

LIGHT PROGRAMMING: SIDE REAR SCENE

The rear scene lights on either side of the vehicle shall be programmed to be activated when the vehicle is placed into reverse gear. This is in addition to the other modes of operation as described elsewhere within this document. This feature shall be attained through the programming of the onboard electrical system. Systems that require additional wiring in order to provide this feature are not acceptable.

Bid complies _____

Bid does not comply _____

LIGHT PROGRAMMING: RIGHT SIDE SCENE
The curb side scene lighting shall be programmed to be activated when the patient compartment side access door is opened. This is in addition to the other modes of operation as described elsewhere within this document. This feature shall be attained through the programming of the onboard electrical system. Systems that require additional wiring in order to provide this feature are not acceptable.

Bid complies _____

Bid does not comply _____

LIGHT PROGRAMMING: LOAD LIGHT
The load lighting on the rear of the vehicle shall be programmed to be activated when the vehicle is placed into reverse gear. This is in addition to the other modes of operation as described elsewhere within this document. This feature shall be attained through the programming of the onboard electrical system. Systems that require additional wiring in order to provide this feature are not acceptable.

Bid complies _____

Bid does not comply _____

WHITE LIGHT CUTOFF SWITCH
A switch shall be installed in the front control panel that will deactivate all forward-facing white flashing lights.

Bid complies _____

Bid does not comply_____

PROGRAMMING: AUDIBLE LOW VOLTAGE ALARM
An audible alarm shall be programmed to warn the operator should the vehicle's voltage drop below 11.8 volts for 120 seconds. This function is to operate through the onboard converter-install electrical system. Add-on components will not be accepted.

Bid complies _____

Bid does not comply _____

LIGHT PROGRAMMING: PARK BRAKE
When the vehicle is placed into 'Park' or 'Neutral' with the "Module Disconnect" switch 'On', then an audible alarm, accompanied by a visual readout on the cab console digital display, shall warn the vehicle operator to engage the emergency brake. Likewise, when the vehicle is placed into gear, then the same alarm will sound with a visual display warning the operator to disengage the emergency brake.

Bid complies _____

Bid does not comply _____

HVAC

COOLTECH I, F SERIES

Install a Cool-Tech I 4 fan 100,000 BTU condenser in the recessed pocket in the roof of the body

Bid complies _____

Bid does not comply _____

12V HVAC, ATTENDANT'S SEAT

A ProAir 12V heat/AC system with brushless motor shall be installed beneath the attendant's seat. The unit shall be housed in a crash tested vented seat base. Air intake shall be through the seat base with output located over the head of the attendant's seat to create a circular uniform airflow throughout the patient compartment. The mounting plate for the attendant's seat shall be hinged with two bolts securing it in place. Access to the unit for maintenance shall be attained by flipping the attendant's seat up. Alternate designs will be not accepted.

The BTU and CFM ratings on the evaporator shall be as follows:

Heat: 65,000BTU
A/C: 100,000BTU (maximum)
CFM: 650 CFM

Units providing for lower ratings will not be accepted.

Bid complies _____

Bid does not comply _____

NEGATIVE PRESSURE SWITCH/NFPA OPTION - NFPA COMPLIANT VENTING, CAST

Install an NFPA style venting system to include a 400cfm exhaust fan along with a static vent. Install 9.5" square polished covers on both vents.
Add a negative switch option to Ventilation Control.

Bid complies _____

Bid does not comply _____

RADIO

ANTENNA COAX 1 Start: Behind Driver Seat, End: Front Center of Mod Roof

An RG 58U coax shall be installed so that the ambulance conversion need not be disassembled for installation at a later date. The termination points are noted above.

Bid complies _____

Bid does not comply _____

ANTENNA COAX 2 Start: Cab Console, End: Center of Mod Roof
A second RG 58U coax shall be installed so that the ambulance conversion need not be disassembled for installation at a later date. The termination points are noted above.

Bid complies _____

Bid does not comply _____

3/8" NMO MOUNT COAX 1
Bidder shall provide and install a 3/8" NMO antenna mount in conjunction with the coax specified as 'Coax #1'.

Bid complies _____

Bid does not comply _____

3/8" NMO MOUNT COAX 2
Bidder shall provide and install a 3/8" NMO antenna mount in conjunction with the coax specified as 'Coax #2'.

Bid complies _____

Bid does not comply _____

PULL WIRE 1 Start: Behind Driver Seat, End: Head of Bench
A pull wire shall be installed to aid radio cable installation and prevent removal of interior panels once the vehicle has been completed. Wire shall terminate as noted above.

Bid complies _____

Bid does not comply _____

RADIO PULL WIRE CONDUIT
A conduit shall be installed for the specified radio cable pull wire.

Bid complies _____

Bid does not comply _____

CONSOLE, LINE-X, W/MAP STORAGE, F SERIES
An aluminum console shall be installed in the cab. The console shall be installed at floor level and shall allow space for siren and radio head installation. The rear section of the console will have three storage sections for maps, books etc. The console shall be covered with black polyurethane elastomeric coating. The top of the console shall be on a slant and shall house the emergency control panel and display. Under no circumstances shall the console interfere with the OEM vehicle controls or gauges, nor shall the control panel be installed in such a manner as to interfere with either the OEM vehicle controls, gauges, or the driver's line of vision.

Bid complies _____

Bid does not comply _____

Glove box storage in front console for (2) Glove Boxes. Include a piano hinged lid and Southco latch with (2) oval openings. Box size: 10.5" L x 5.5" W x 4.5" D. Include Louvered Vent Holes at the rear the console.

Bid complies _____

Bid does not comply _____

Install an Adjustable I4G screen on the Cab Console. Make the console with a 12-position adjustable control panel.

Bid complies _____

Bid does not comply _____

CUP HOLDERS, 2-TIER
Two (2) dual tier style cupholders shall be installed in the front console with easy access from both the driver's and the passenger's seats.

Bid complies _____

Bid does not comply _____

Install a pair of adjustable Havis Padded Arm Rest of the Cab Console. Install in front of the Glove box Holder. Move the Cup Holder Inwards so as to not interfere with large cups. Console design to include (2) customer supplied portable chargers at the rear of the console. Provide 12V power for charges.

Bid complies _____

Bid does not comply _____

POWER TERMINAL, DUAL, HEAD OF BENCH
The manufacturer shall install three (3) 10-gauge 30-amp cables to insulated positive and ground studs at the head of the squad bench for radio power. The power is to be wired ignition hot (one stud), constant hot (one stud), and ground (one stud).

Bid complies _____

Bid does not comply _____

POWER TERMINAL, DUAL, BEHIND DRIVER
The manufacturer shall install three (3) 10-gauge 30-amp cables to insulated positive and ground studs behind the driver's seat for radio power. The power is to be wired ignition hot (one stud), constant hot (one stud), and ground (one stud).

Bid complies _____

Bid does not comply _____

POWER TERMINAL, DUAL, INSIDE CONSOLE
Battery hot, battery switched and ground studs are to be installed inside the console.

Bid complies _____

Bid does not comply _____

OXYGEN

O2 MOUNT, VERT TRACK FOR QRM-V
Vertical track for mounting of the specified QRM-V O2 bottle mount shall be welded on the back wall of the streetside forward compartment in the right-hand corner. The bracket is to be set up for an 'M' sized cylinder. Methods of attachment other than welding will not be accepted. Method of bottle bracket installation must meet all applicable standards.

Bid complies _____

Bid does not comply _____

O2 BOTTLE, BRACKET QRM-V
A Zico QRM-V oxygen cylinder bracket shall be installed in the streetside forward compartment and set up for an 'M' bottle.

Bid complies _____

Bid does not comply _____

OXYGEN ACCESS
Access to the oxygen cylinder valve through the wall from the vehicle interior is required. The door shall be hinged so that it swings into the oxygen cylinder storage compartment. Door material is to match other specified cabinet doors. The opening shall be 7" wide x 11" high and trimmed with anodized aluminum.

Bid complies _____

Bid does not comply _____

O2 OUTLET, OHIO MEDICAL (1) Inhalation Area, (1), Ceiling over head of cot, (1) Curbside Angled console
Install O2 outlets per instructions above. Outlets to be Ohio Medical style.

Bid complies _____

Bid does not comply _____

OXYGEN WRENCH
A cylinder wrench shall be installed inside the oxygen compartment. The wrench shall be installed in such a way as it will not move or rattle. The wrench shall be chained to the compartment so that it cannot be removed, however, the chain or cable used must not interfere with the operation of the wrench.

Bid complies _____

Bid does not comply _____

VACUUM OUTLET, OHIO MEDICAL 1 In Inhalation Area
A single vacuum panel shall be installed in the inhalation area. The outlet shall be Ohio Medical style and shall be connected to the onboard vacuum pump.

Bid complies _____

Bid does not comply _____

ASPIRATOR, SSCOR, INHALATION AREA
The manufacturer shall furnish and install an SSCOR suction system. The system shall include a wall-mounted regulator and a canister holder. The aspirator shall be accessible for use from the inhalation area per the attached prints and plumbed to the specified pump.

Bid complies _____

Bid does not comply _____

VACUUM PUMP CAPL #D34 SE (P282)
The aspirator system shall be operated through a CAPL #D34 SE (P282) 12V vacuum pump that is located inside an exterior compartment. The pump shall be activated by a switch on the inhalation area electrical control panel.

Bid complies _____

Bid does not comply _____

PORTABLE OXYGEN CYLINDER STORAGE, Install (2) QR-D-2 Strapless Portable Oxygen Cylinder Brackets on a Pull-Out Tray in the Forward Streetside Linen Closet.

D MT: QR-D-2 STRAPLESS, LINEN CAB LOC 1

D MT: QR-D-2 STRAPLESS, LINEN CAB LOC 2

CERTIFICATIONS

CAAS CERTIFICATION LABEL
The vehicle shall have weight/payload, electrical load, and the current CAAS certification stickers installed in the O2 compartment. Failure to provide these certification labels will be cause for rejection of the completed vehicle. Labels that are found to be falsified will also be cause for rejection of the completed vehicle. The purchaser res erves the right to request documentation showing that all required testing has been completed at the time of the bid opening. Failure to provide this documentation, if requested, will result in the bid being rejected without further consideration.

Bid complies _____

Bid does not comply _____