

BID SPECIFICATIONS & INFORMATION

FOR

ONE (1) OR MORE TYPE 1 AMBULANCE  
& EQUIPMENT

FOR



***MARYSVILLE FIRE DISTRICT***  
***1635 GROVE STREET***  
***MARYSVILLE, WASHINGTON 98270***

**FIRE CHIEF:**  
Ned Vander Pol

**PROJECT MANAGER:**  
Josh Farnes

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# **SECTION 1. BID PROPOSAL INSTRUCTIONS – DOCUMENTATION**

## **1.1. BIDDING INSTRUCTIONS**

### **1.1.1. General**

#### **1.1.1.a.**

**Bidder Complies Yes ( ) No ( )**

The Marysville Fire District (PURCHASER) shall receive sealed proposals for the supplying of One (1) or more Custom Built Type 1 Ambulance and equipment as outlined in the attached specifications, from qualified dealers (BIDDER). The District Secretary must receive the bid proposals no later than 3:00 PM, the 25th day of April, 2024. The bid opening shall take place at 1635 Grove Street, Marysville, WA 98270 3:15 PM the same day. The successful bidder, should there be one, shall be notified within 45 days of the bid opening.

#### **1.1.1.b.**

**Bidder Complies Yes ( ) No ( )**

It shall be the responsibility of the Bidder to assure that their proposal arrives at the proper location by the time indicated. Late proposals, telegrams, facsimiles, or telephone bids shall not be considered. Proposals may either be received by mail or hand delivered to the Marysville Fire District headquarters office at 1635 Grove Street, Marysville, WA. 98270. Proof of delivery resides with the Bidder.

#### **1.1.1.c.**

**Bidder Complies Yes ( ) No ( )**

In order to ensure compliance with the competitive bidding process, and avoid inadvertent “pre-opening” bid revelation, all bid proposals shall be delivered and received in a sealed envelope marked, (front and rear):

SEALED BID – DO NOT OPEN

AMBULANCE.

Bid Opening – 4/25/2024

Bids not marked appropriately and containing material irregularities shall be rejected.

#### **1.1.1.d.**

**Bidder Complies Yes ( ) No ( )**

The Purchaser reserves the right to accept or reject any or all bids, and to accept the bid deemed to be in the best interest of the Purchaser. The lowest responsible competitive Bidder most closely meeting these published specifications, and demonstrating the qualities desired by the Purchaser, shall be the successful bidder (VENDOR).

#### **1.1.1.e.**

**Bidder Complies Yes ( ) No ( )**

The following specification describes a new ambulance that is expected to be acquired by the Purchaser. The specification describes the needs of this ambulance as far as chassis

configuration and 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.

**1.1.1.f. Bidder Complies Yes ( ) No ( )**

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 shall be clear that any Bidder deviating in any substantial manner from these specifications will be rejected as being non-compliant.

**1.1.1.g. Bidder Complies Yes ( ) No ( )**

The purchaser shall consider exceptions to bid the specifications requested more than ten (10) days prior to bid opening utilizing the following criteria: units, equipment, construction techniques, and design details to be proposed shall closely meet the specific requirements and intent of the requirements as specified herein. All items proposed shall be equal or better than that specified, and conform to the character of the specified equipment as well as the purpose for which it is intended. If an exception is allowed, it will be communicated to all potential bidders by way of an Addendum or Amendment to these specifications.

**1.1.1.h. Bidder Complies Yes ( ) No ( )**

Each Bidder shall submit only one bid. In the event that the Bidder represents more than one manufacturer meeting the manufacturer requirements outlined herein, the Bidder shall only bid the highest quality vehicle that the Bidder represents. Bidders are asked to bid only the product of the highest level of quality represented by that Bidder.

**1.1.1.i. Bidder Complies Yes ( ) No ( )**

All bids shall be signed by an authorized representative of the authorized bidder. Failure to do so shall cause the bid to be considered non-responsive and rejected. No Exceptions.

**1.1.1.j. Bidder Complies Yes ( ) No ( )**

Bidder shall submit a list of no less than 5 delivered units, from the intended manufacturer, within the Pacific Northwest (Washington, Oregon, Idaho), which are currently in normal fire service use, having no defects causing the apparatus to give unsatisfactory service that is attributable to workmanship, materials, or construction techniques. These references shall be filled in on the appropriate form contained within these specifications. No Exceptions.

**1.1.1.k. Bidder Complies Yes ( ) No ( )**

Each bidder shall provide satisfactory evidence of their manufacturer's ability to construct the unit, and supply service, parts and technical assistance for the equipment specified. Bidder shall state the location of the factory at which the complete apparatus shall be constructed. Bidder shall also state the location where local post delivery service is available. No Exceptions.

**1.1.1.1.**

**Bidder Complies Yes ( ) No ( )**

Bidders shall submit photographs of the module manufacturing and installation facility; internal, external, and site/location views.

**1.1.2. Specification Addenda, Bidder Queries**

**1.1.2.a.**

**Bidder Complies Yes ( ) No ( )**

All specification addenda shall be issued by the Purchaser in written format, neither verbal forms of addenda or otherwise shall be issued or considered part of this specification no matter how minor. The Bidder shall acknowledge receipt of all written addenda on the provided price form and in the spaces provided in these documents.

**1.1.2.b.**

**Bidder Complies Yes ( ) No ( )**

All Bidder queries or questions regarding these specifications or the bidding process will be required to be submitted in written form no less than 10 (ten) days before the bid opening to the Purchasers Contact. All written questions shall be responded to in the form of a written addendum within 5 working days of receipt.

**1.1.2.c.**

**Bidder Complies Yes ( ) No ( )**

In order to receive written addenda, perspective Bidders must register their name, organization and contact information with the District Secretary no less than 10 days before the bid opening.

**1.1.3. Bid Guarantee**

**1.1.3.a.**

**Bidder Complies Yes ( ) No ( )**

A bid bond made payable to the Purchaser, for the amount equal to five (5%) percent of the total bid, shall accompany each bid. All Bidder's bid bonds shall be retained until the successful bidder has entered into a satisfactory contract and furnished bonds, as required.

**1.1.3.b.**

**Bidder Complies Yes ( ) No ( )**

A 100% Performance bond shall be required from the successful bidder. Under no circumstances shall the cab and chassis manufacturer be listed as the principal bonding for the manufacturer. No Exceptions.

**1.1.4. Exceptions to Specifications**

**1.1.4.a.**

**Bidder Complies Yes ( ) No ( )**

It is the intent of these specifications to secure competitive proposals to provide for the construction and delivery of one or more new high quality built Ambulance(s) and equipment. These specifications detail the requirements for general design criteria of the unit desired, the chassis, body, and electrical systems and equipment to be supplied. Where specific construction techniques and materials are listed, equivalent construction techniques and materials may be acceptable unless specified with the words "NO

EXCEPTIONS". A request for an equivalent shall be processed as an exception under 1.1.1g above. The Fire District reserves the right to make the final determination of what constitutes "equivalent".

**1.1.4.b. Bidder Complies: Yes ( ) No ( )**

Each bidder shall indicate compliance with these specifications by checking the "Bidder Complies" question within each section of the specifications. Checking "YES" to that section shall mean exact and full compliance with all portions of that paragraph. No Exceptions.

**1.1.4.c. Bidder Complies Yes ( ) No ( )**

The information requested within this bid shall be furnished in full. Any Bidder not completing this proposal or not furnishing any required information may be rejected as non-responsive.

**1.1.4.d. Bidder Complies Yes ( ) No ( )**

Various areas in the following specifications require a response from the Bidder. In order to aid in the evaluation process, all responses shall 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, shall be typed. Bids that are submitted with either hand-written responses, or with hand stamped responses shall be deemed materially irregular and automatically rejected as being non-compliant.

**1.1.5. Written Proposal**

**1.1.5.a. Bidder Complies Yes ( ) No ( )**

All bids shall be submitted on the enclosed bid form of these specifications. The form shall be completely filled out with all information requested, or the bid may be rejected as unresponsive. No Exceptions

**1.1.5.b. Bidder Complies Yes ( ) No ( )**

The total price on the specified bid form shall include all items and components as listed in these specifications. Listing any items contained in these specifications as an extra cost item, unless otherwise allowed in the bid form, shall automatically be cause for rejection.

**1.1.5.c. Bidder Complies Yes ( ) No ( )**

Any erasures, strikeovers and/or changes to prices written in numerals shall be initialed by the Bidder. Failure to initial may be cause to reject the bid as irregular and disqualified from consideration. Each bid shall be accompanied by a detailed description, (Manufacturer's proposal), of the work and equipment it proposes to furnish. It is the intent of these specifications to provide for the delivery of a complete and soundly engineered vehicle, equipped as specified. Minor details of construction and materials, where not otherwise specified, are left to the discretion of the contractor, who shall be solely responsible for the design and construction of all features.



**1.1.5.d.**

**Bidder Complies Yes ( ) No ( )**

Some items in these specifications have been specified by brand name or model number. These have been carefully selected because of their quality, reliability, and availability of replacement locally. In order for proposals to be considered responsive, equipment specified, or approved equals (as approved in an addendum) shall be contained in bid proposals.

**1.1.5.e.**

**Bidder Complies Yes ( ) No ( )**

All proposals shall be submitted in a hardbound binder.

**1.1.5.f.**

**Bidder Complies Yes ( ) No ( )**

The enclosed bid cost sheet shall be placed at the beginning/top of the Bidder’s proposal, so as to be the first item viewed when the bid submittal is opened.

**1.2. PURCHASE REQUIREMENTS**

**1.2.1. Price-Payment-Delivery**

**1.2.1.a.**

**Bidder Complies Yes ( ) No ( )**

The completed vehicle shall be delivered to the location of the Purchaser at the expense of the Bidder. The apparatus, to ensure proper “break-in” of all components, shall be delivered “under its own power”. Delivery via rail or truck freight will not be acceptable. If available, the Bidder shall provide a cost in the specified location of the cost sheet as to the deduction available if the Purchaser elects to pick up the vehicle at the location of the Manufacturer and assume all delivery costs.

**1.2.1.b.**

**Bidder Complies Yes ( ) No ( )**

Stated delivery time from initiation of contract to final delivery and acceptance of finished apparatus shall be included with the proposal and not expected to exceed 500 calendar days from bid award. Bids shall be evaluated by stated delivery time.

Stated Delivery Time\_\_\_\_\_

**1.2.1.c.**

**Bidder Complies Yes ( ) No ( )**

Failure of vendor to deliver a completed unit by the stated delivery time shall subject vendor to the agreed to late acceptance price reduction clause, as well as the late delivery price reduction clause, as specified in these instructions.

**1.2.1.d.**

**Bidder Complies Yes ( ) No ( )**

Only complete and finished units shall be considered as being delivered. Units requiring additional work, installation of equipment or components, application of decals or lettering, etc., will not be deemed as delivered nor complete, regardless of location or

possession, and as such, shall be subject to liquidated damages in accordance with the late acceptance and late delivery price reduction clauses.

**1.2.1.e. Bidder Complies Yes ( ) No ( )**

Final acceptance or rejection shall occur after the delivered unit has been evaluated and tested at the Purchaser's location to the full satisfaction of the Fire Chief or his designee. Housing or storing the unit shall not constitute acceptance of the unit.

**1.2.1.f. Bidder Complies Yes ( ) No ( )**

In the event the unit fails to meet the requirements on first trials, a second trial may be made within thirty (30) days of the date of the first trials. The Purchaser reserves the right to extend the requirement trial period beyond the "30 day – second trials" period, with approval of the vendor, however, the Purchaser reserves the right to impose a late acceptance price reduction of Two Hundred Dollars (\$200.00) per day, per unit, for each day acceptance is delayed as a result of failing to comply with the testing requirements, beyond the original 30 day grace period. This amount shall be deducted from the final payment at acceptance as applicable.

**1.2.1.g. Bidder Complies Yes ( ) No ( )**

The Purchaser has the right to reject the vehicle if it does not conform to these specifications to the satisfaction of the Purchaser.

**1.2.1.h. Bidder Complies Yes ( ) No ( )**

The Vendor agrees that the Purchaser reserves the right to impose a late delivery price reduction of Two Hundred Dollars (\$200.00) per day, per unit, for each day delivery is delayed beyond the stated delivery time. This amount shall be deducted from any outstanding scheduled payment(s) at time of delivery as applicable.

**1.2.1.i. Bidder Complies Yes ( ) No ( )**

The Purchaser reserves the right to reject any or all bids deemed by the Purchaser to be unresponsive.

**1.2.1.j. Bidder Complies Yes ( ) No ( )**

Bidder responsibility shall be evaluated by the Purchaser using the following criteria:

- Completeness of the proposal (i.e., the degree to which it responds to all requirements of these specifications).
- Vendors demonstrated qualifications and capabilities including ability to perform warranty work.
- Design and engineering reliability of major structural components, including ease of maintenance.
- Qualifications and capabilities of the manufacturer to produce the described apparatus.
- Quality of Workmanship to include appearance, construction design, integrity and reliability. This shall be evaluated by the Purchaser based upon references of

finished products recently delivered submitted by the Bidder as part of this bid proposal.

- Bidder's ability to produce a completed apparatus within the stated delivery time.
- Compliance with the Bidder requirements in 1.2.2 and the Manufacturer requirements in 1.2.3.

**1.2.1.k.**

**Bidder Complies Yes ( ) No ( )**

These specifications, together with any other documents required herein, shall be included in the final contract, which in the event of a dispute, shall supersede the Bidder's proposal unless a clarification or exception has been taken and accepted.

**1.2.1.l.**

**Bidder Complies Yes ( ) No ( )**

If all bids are not rejected, the final contract shall be awarded to the lowest responsible Bidder most closely meeting the Purchaser's specifications, based upon the criteria of the Purchaser. Bid award shall be made within forty-five (45) days of the bid opening.

**1.2.1.m.**

**Bidder Complies Yes ( ) No ( )**

The Purchaser reserves the right to waive any non-material informalities, irregularities and technicalities in procedure.

**1.2.2. Bidder Requirements**

No exceptions shall be allowed for any of the following instructions. Bids not submitted in accordance with these instructions shall be rejected.

**1.2.2.a.**

**Bidder Complies Yes ( ) No ( )**

Bidder shall be a licensed and bonded vehicle dealer for the State of Washington per Revised Code of Washington Sections 46.70.005 and 46.70.011. Bidder shall include proof of such certificates in their bid proposals. If the Bidder is a manufacturer bidding direct and not through a dealer or distributor, then they shall also submit a copy of the appropriate dealer's license. Bids received from Bidders not licensed, as a vehicle dealer within the State of Washington shall be immediately rejected without further explanation. No Exceptions.

**1.2.2.b.**

**Bidder Complies Yes ( ) No ( )**

The Bidder/Dealer shall be the authorized distributor of the apparatus proposed, and shall provide a notarized statement as to such with the bid proposal. Bids not complying with this provision shall not be considered. No Exceptions.

**1.2.2.c.**

**Bidder Complies Yes ( ) No ( )**

The supplier/dealer shall comply with all Federal and State of Washington Equal Employment Opportunity (EEO) status where relevant or applicable, to the end that no person shall, on the grounds of race, color, creed, age, sex, or marital status, sensory, mental or physical handicap, national origin or any other basis prohibited by federal, state

or local law be excluded from participation in, or be deprived of the benefits of, or be otherwise subjected to discrimination. No Exceptions.

### **1.2.3. Manufacturer Requirements**

**1.2.3.a.** **Bidder Complies Yes ( ) No ( )**

No exceptions shall be allowed for any of the following instructions. Bids not submitted in accordance with these instructions shall be rejected.

**1.2.3.b.** **Bidder Complies Yes ( ) No ( )**

Bids shall only be considered from companies that have an established reputation as manufacturers of similar equipment specifically for the Emergency Medical Service. To be considered a company with an established reputation, the company shall have been manufacturing similar units, and utilizing similar building techniques for not less than ten (10) years or demonstrate similar manufacturing and/or building experience. The Purchaser shall be the final judge of what constitutes acceptable equivalency. No Exceptions.

**1.2.3.c.** **Bidder Complies Yes ( ) No ( )**

The body of the vehicle, excluding the chassis as delivered, is to be completely built, painted and installed by the prime body manufacturer, which minimizes third party involvement on engineering, design, service, and warranty questions. Apparatus using a subcontracted body shall not be acceptable. No Exceptions.

### **1.2.4. Manufacturing Facility**

**1.2.4.a.** **Bidder Complies: Yes ( ) No ( )**

The Bidder shall state the location of the manufacturing facility where the apparatus is to be built and the location of the parent company if a subsidiary of a manufacturer.

**1.2.4.b.** **Bidder Complies: Yes ( ) No ( )**

The Bidder's representative shall state the length of time representing the manufacturer of specified apparatus.

### **1.2.5. Liability**

**1.2.5.a.** **Bidder Complies Yes ( ) No ( )**

The Bidder shall defend, indemnify, and save harmless the Purchaser and its officials from all claims, demands, payments, suits, actions, recoveries, and judgments of every description, whether or not well founded in law, brought or recovered against it, by reason of any act or omission of said Bidder, his agents or employees, in the execution of the contract or in consequence of insufficient protection or for the use of any patented invention by said Bidder, and a sum sufficient to cover aforesaid claims may be retained by the Purchaser from money due or to become due to the Bidder under this contract, until such claims have been discharged or satisfactorily secured.

### **1.2.6. Certificate of Insurance**

#### **1.2.6.a.**

**Bidder Complies: Yes ( ) No ( )**

Each Bidder shall furnish, with their proposal, a Certificate of Product Liability Insurance for a minimum of ten (10) million dollars. Failure to provide this documentation shall render the proposal non-responsive and the bid shall be rejected. This certificate shall be from the prime builder only. Certificates submitted from various sub-contractors in order to total the ten-million-dollar minimum will not be acceptable as meeting the requirements of this section.

#### **1.2.6.b.**

**Bidder Complies: Yes ( ) No ( )**

If one of the major portions of the apparatus (i.e. chassis or body) is not designed, fabricated, and assembled by the prime builder, a separate Certificate of Liability Insurance for a minimum of ten (10) million dollars must be provided by each additional contractor.

#### **1.2.6.c.**

**Bidder Complies: Yes ( ) No ( )**

The Certificate must be made out to the Purchaser and must be original. Submission of a non-original Certificate or a Certificate that is not made out to the Purchaser will not meet the requirements of this section.

#### **1.2.6.d.**

**Bidder Complies: Yes ( ) No ( )**

The Bidder, if their bid is accepted, shall defend any and all suits and assume all liability for the use of any patented device or article forming part of the apparatus or any appliance provided under the contract.

#### **1.2.6.e.**

**Bidder Complies Yes ( ) No ( )**

In addition, the Bidder is to assume any risk of loss to the vehicle until the vehicle is delivered to the Purchaser.

### **1.3. CONSTRUCTION REQUIREMENTS**

#### **1.3.1. General Construction**

##### **1.3.1.a.**

**Bidder Complies Yes ( ) No ( )**

The design and construction of the apparatus shall embody the latest approved automotive engineering practices. The workmanship shall be of the highest quality in the respective field. It is the desire of the Purchaser to utilize the specified apparatus for a period of no less than 15 years in service conditions, and it is thus the reason the Purchaser is justifying the type of construction and materials specified.

##### **1.3.1.b.**

**Bidder Complies Yes ( ) No ( )**

In the event the specifications cannot be complied with, the Bidder shall take exception by the exception deadline. If no exception is taken, compliance with the specifications

will be assumed. If an inability to comply is not discovered until after the contract has been executed, the manufacturer shall advise the Purchaser prior to construction of the apparatus(s). The Purchaser reserves the right to allow modifications at the cost of the Manufacturer, or pursue all legal avenues for collection including a claim on the Performance Bond.

**1.3.1.c. Bidder Complies Yes ( ) No ( )**

Minor details of construction and materials where not otherwise specified are left to the discretion of the manufacturer who shall be solely responsible for the design and construction of all features and for compliance with all applicable statutes and regulations as provided in the instructions and specifications.

**1.4. DOCUMENTATION**

**1.4.1. Safety Certification**

**1.4.1.a. Bidder Complies Yes ( ) No ( )**

The Bidder shall include with the proposal documentation of static and dynamic testing performed on the proposed ambulance. Testing shall meet or exceed SAE International recommended practices.

**1.4.1.b. Bidder Complies Yes ( ) No ( )**

The verification of construction techniques used throughout the building process shall be furnished by the Manufacturer/Bidder. The installation methods and construction techniques associated with seat belt retention, cabinet construction and installation, cylinder retention and body to chassis mounting systems shall be verified through a controlled test that simulates an actual impact condition. This test shall be performed, under both side and frontal impact conditions, to a minimum force of 20 g's. All testing shall be performed by a testing agency that is independent of the Manufacturer.

**1.4.1.c. Bidder Complies Yes ( ) No ( )**

As proof of this verification process being performed, the Bidder shall provide the following information:

Testing Facility Name: \_\_\_\_\_

Date(s) Tested: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

'G' Force/Load Tested To: \_\_\_\_\_

**1.4.1.d.**

**Bidder Complies Yes ( ) No ( )**

In addition to the above information, a signoff letter from the testing facility which includes the signature and certification stamp of the registered professional engineer responsible for the testing procedures shall be provided with the bid documentation.

**1.4.1.e.**

**Bidder Complies Yes ( ) No ( )**

The manufacturer is required to have 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 shall 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.

How many total tests has your company performed? \_\_\_\_\_ Initials \_\_\_\_\_

What was the date of the last test: \_\_\_\_\_ Initials \_\_\_\_\_

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 \_\_\_\_\_

**1.4.2. Sales Engineer**

**1.4.2.a.**

**Bidder Complies Yes ( ) No ( )**

The successful Bidder shall designate a competent individual acceptable to the Purchaser, to perform the contractors' sales engineer function. The sales engineer shall provide a single point interface between the Purchaser and the contractor on all matters concerning the successful delivery and completion of the apparatus. The sales engineer shall attend all construction meetings and inspection trips, to maintain the continuity of the sales process.

### **1.4.3. Registration**

#### **1.4.3.a.**

**Bidder Complies Yes ( ) No ( )**

All necessary paperwork to register the apparatus with the Washington State Department of Licensing as a motor vehicle shall be furnished at the time of delivery. This includes a “Manufacturer’s Statement of Origin” (MSO) and Washington State title application.

### **1.4.4. Inter-Local Purchasing Provision**

#### **1.4.4.a.**

**Bidder Complies Yes ( ) No ( )**

The successful bidder shall allow other Municipalities to purchase apparatus off this proposal in accordance with the terms and conditions submitted herein per RCW 39.34 for a period of no less than one (1) year from the time of bid award.

### **1.4.5. Contract Extension Provision**

#### **1.4.5.a.**

**Bidder Complies Yes ( ) No ( )**

The Purchaser reserves the right to exercise the purchase of additional apparatus from the final contract for a period of up to three (3) years if in the best interest of the Purchaser. Additional purchases will be based the bid price and an adjustment for the Consumer Price Index and annual adjusted rate of inflation for emergency vehicles.

### **1.4.6. Authorized Purchaser Contact**

#### **1.4.6.a.**

**Bidder Complies Yes ( ) No ( )**

The Purchasers Contact, at the time of the Call for Bids, is Fleet and Facilities Supervisor Josh Farnes at 1635 Grove Street, Marysville, WA. 98270, jfarnes@mfdrrfa.org. All communications regarding the bid, bidding process, specifications, or construction process shall be through the Authorized Purchaser Contact, unless otherwise stipulated in these specifications or as modified by the Purchaser in writing.



## **SECTION 2. WARRANTY**

### **2.1.1. WARRANTIES**

#### **2.1.1.a.**

**Bidder Complies Yes ( ) No ( )**

Warranties shall not be pro-rated in any manner and shall be transferable for their duration. All warranties shall be from the manufacturer as opposed to a distributor or dealer service center.

#### **2.1.1.b. Statement of Warranty**

**Bidder Complies: Yes ( ) No ( )**

The apparatus manufacturer shall provide at minimum a full 1-year standard warranty. All components manufactured by the apparatus manufacturer shall be covered against defects in materials or workmanship for a 1-year period. All components covered by separate suppliers such as engines, transmissions, tires, and batteries shall maintain the warranty as provided by the component supplier. A copy of the warranty document shall be provided with the proposal.

### **2.1.2. Lifetime Frame Warranty**

#### **2.1.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus manufacturer shall provide a full lifetime frame warranty. This warranty shall cover all apparatus manufacturer designed frame, frame members, and cross members against defects in materials or workmanship for the lifetime of the covered apparatus. A copy of the warranty document shall be provided with the proposal. Frame warranties that do not cover cross members for the life of the vehicle shall not be acceptable.

### **2.1.3. 10 Year 100,000 Mile Structural Warranty**

#### **2.1.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus manufacturer shall provide a comprehensive 10-year/100,000-mile structural warranty. This warranty shall cover all structural components of the cab and/or body manufactured by the apparatus manufacturer against defects in materials or workmanship for 10 years or 100,000 miles, whichever occurs first. Excluded from this warranty are all hardware, mechanical items, electrical items, or paint finishes. A copy of the warranty document shall be provided with the proposal.

#### **2.1.4. 5 Year Paint and Corrosion Warranty**

**2.1.4.a.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus manufacturer shall provide a 5-year limited paint and corrosion perforation warranty. This warranty shall cover paint delamination, peeling and discoloration provided the vehicle is used in a normal and reasonable manner. The warranty period shall begin upon delivery of the apparatus to the original user-purchaser. A copy of the warranty document shall be provided with the proposal.

#### **2.1.5. Electrical System Warranty**

**2.1.5.a.**

**Bidder Complies: Yes ( ) No ( )**

A four (4) year limited multiplex system warranty shall be provided on any multiplex system installed by the apparatus manufacture for parts and labor, while under normal use and service; against mechanical, electrical and physical defects from the date of delivery of the apparatus.

**2.1.5.b.**

**Bidder Complies: Yes ( ) No ( )**

Batteries shall have a warranty of thirty-six (36) months that shall commence upon the date of delivery of the apparatus.

#### **2.1.6. Additional Warranties**

**2.1.6.a.**

**Bidder Complies: Yes ( ) No ( )**

Warranties not listed in this section but otherwise still required shall be indicated in the individual component section of these specifications.

## **SECTION 3. SUPPORT, DELIVERY, INSPECTIONS, AND MANUALS**

### **3.1. DISTRICT INTERACTION**

**3.1.1.a.** **Bidder Complies: Yes ( ) No ( )**

The manufacture shall provide the capability for the District to view digital photos of their apparatus in the specified phases of construction. The following phases will be captured and displayed either on the manufacture's website or via email:

- Chassis when available at manufacturing facility
- Body – Prior to Paint
- Body – Painted
- Assembly – 80% Complete

Due to the complex nature of emergency medical service apparatus and the importance of communication between the manufacture and Purchaser, this line item is considered a critical requirement.

### **3.2. DRAWINGS**

#### **3.2.1. Proposal Drawings**

**3.2.1.a.** **Bidder Complies: Yes ( ) No ( )**

For purposes of evaluation, the Bidder shall provide general arrangement drawings depicting the vehicle's appearance.

**3.2.1.b.** **Bidder Complies: Yes ( ) No ( )**

The drawing shall consist of left side, right side, front, and rear exterior elevation views. The drawings shall consist of left side, right side, front, rear and overhead patient compartment interior views. The drawings shall illustrate, but not be limited to, the overall dimensions, wheelbase, and overall length of the proposed apparatus and other specified equipment.

**3.2.1.c.** **Bidder Complies Yes ( ) No ( )**

Bids stating that drawings will be furnished at a later date will be rejected on the basis of non-compliance.

**3.2.1.d.** **Bidder Complies Yes ( ) No ( )**

Bidder shall provide free of charge upon request, technical information, graphs, charts, photographs, engineering diagrams, steering geometry, instruction guides, or other

documentation as requested to show that the equipment offered fully complies with these specifications.

**3.2.1.e.** **Bidder Complies: Yes ( ) No ( )**

Failure to provide a bid evaluation drawing in accordance with these specifications shall be cause for rejection of the bid proposal.

### **3.2.2. Preconstruction Drawings**

**3.2.2.a.** **Bidder Complies: Yes ( ) No ( )**

After the award of the bid, the contractor shall provide detailed colored engineering drawings including, but not limited to, the overall dimensions, wheelbase, and overall length of the proposed apparatus for use during the pre-construction conference.

**3.2.2.b.** **Bidder Complies: Yes ( ) No ( )**

The drawings shall include, but shall not be limited to the right, left, top, front and rear views of the exterior and interior patient compartment of the apparatus.

### **3.3. DELIVERY**

**3.3.1.a.** **Bidder Complies: Yes ( ) No ( )**

The sales engineer or a qualified delivery engineer representing the manufacturer shall deliver the apparatus and instruct the Fire District personnel in the proper operation, care and maintenance of the equipment delivered.

### **3.3.2. Acceptance**

**3.3.2.a.** **Bidder Complies: Yes ( ) No ( )**

Apparatus shall be tested and inspected upon delivery for compliance with specifications, exceptions, and change orders as contracted. Final acceptance shall be in accordance with these specifications.

**3.3.2.b.** **Bidder Complies: Yes ( ) No ( )**

Deviations, changes, additions or subtractions not previously accepted in writing will not be tolerated and may be cause for rejection of delivered apparatus. Deviations, changes, additions, subtractions, clarifications and equivalents shall be processed in accordance with the guideline set forth in these specifications.

### 3.4. MANUALS

#### 3.4.1. Chassis and Body Manuals

**3.4.1.a.** **Bidder Complies: Yes ( ) No ( )**

One (1) copy of all as-built operator, service, and parts manuals shall be supplied at the time of delivery-NO EXCEPTIONS! The manual shall include the following information:

- Operating Instructions, descriptions, specifications, and ratings of the cab, chassis, body, installed components, and auxiliary systems.
- Warnings and cautions pertaining to the operation and maintenance of emergency medical service apparatus and incorporated systems.
- Charts, tables, checklists, and illustrations relating to lubrication, cleaning, troubleshooting, diagnostics and inspections.
- Instructions regarding the frequency and procedure for recommended maintenance.
- Maintenance instructions for the repair and replacement of installed components.
- Parts listing with descriptions and illustrations for identification.
- Warranty descriptions and coverage.

**3.4.1.b.** **Bidder Complies: Yes ( ) No ( )**

Electronic manuals must be formatted in such a manner as to allow not only the printing of the entire manual, but to also allow the cutting, pasting, or copying of individual documents to other electronic media, such as electronic mail, memos, and the like.

**3.4.1.c.** **Bidder Complies: Yes ( ) No ( )**

A find feature shall be included to allow for searches by text or by part number.

**3.4.1.d.** **Bidder Complies: Yes ( ) No ( )**

Electronic manuals shall be accessible from any computer operating system capable of supporting portable document format (PDF). Permanent copies of all pertinent data shall be kept on file at both the local dealership and at the manufacturer's location.

**3.4.1.e.** **Bidder Complies: Yes ( ) No ( )**

The manufacturer shall also supply a manufacturer's record of apparatus construction details, including the following information:

- Owner name and address
- Apparatus manufacturer, model, and serial number
- Chassis make, model, and serial number
- GAWR of front and rear axles
- Front tire size and total rated capacity in pounds
- Rear tire size and total rated capacity in pounds

- Chassis weight distribution in pounds with water (if applicable) and manufacturer mounted equipment (front and rear)
- Engine make, model, serial number, rated horsepower, related speed and no load governed speed
- Type of fuel and fuel tank capacity
- Electrical system voltage and alternator output in amps
- Battery make and model, capacity in CCA
- Paint numbers
- Weight documents from a certified scale showing actual loading on the front axle, rear axle(s), and overall vehicle (but without personnel, and equipment)
- Written load analysis and results of the electrical system performance tests

### **3.4.2. Diagnostic Software**

**3.4.2.a.** **Bidder Complies: Yes ( ) No ( )**

The cab and chassis shall include a diagnostic software kit for any multiplex systems installed on the vehicle by the ambulance body manufacturer.

**3.4.2.b.** **Bidder Complies: Yes ( ) No ( )**

The software kit shall include all applicable interface cables and shall be compatible with Windows 10 or newer operating system.

### **3.4.3. Warning and Information Labels**

**3.4.3.a.** **Bidder Complies: Yes ( ) No ( )**

All warning and informational labels shall be provided in English at appropriate locations to alert the operator of potential hazards and operating instructions.

## **3.5. INSPECTIONS AND CONFERENCES**

**3.5.1.** **Bidder Complies: Yes ( ) No ( )**

The factory authorized Distributor shall be required, prior to manufacturing, to have a pre-construction conference at the manufacturing facility with a factory representative present and two (2) individuals from the Marysville Fire District to finalize all construction details. The factory's authorized distributor shall, at his expense, provide transportation, lodging, and meals for the District's representatives. Any distance greater than 200 miles shall be by commercial air travel (SeaTac, Paine Field or Bellingham Airport).

**3.5.2.**

**Bidder Complies: Yes ( ) No ( )**

The factory authorized Distributor shall be required, upon completion of manufacturing, to have a final completion inspection conference at the site of the manufacturing facility with two (2) individuals from the Marysville Fire District to inspect the apparatus after construction. The factory's authorized distributor shall, at his expense, provide transportation, lodging, and meals for the District's representatives. Any distance greater than 200 miles shall be by commercial air travel (SeaTac, Paine Field or Bellingham Airport).

**3.6. DISTRICT FORMS**

**3.6.1. Bid Form**

MARYSVILLE FIRE DISTRICT  
1635 GROVE STREET  
MARYSVILLE, WASHINGTON 98270

Manufacturer's Name & Address

Bidder's Name & Address

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Contact Name

Contact Name

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Contact Phone

Contact Phone

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After reviewing the attached specifications and information, we the above listed supplier, hereby submit the following bid proposal to the above for the furnishing of one (1) or more new type 1 ambulance and equipment as specified.

Completed Apparatus with equipment as specified. \$\_\_\_\_\_ each.

(Not including applicable sales or use tax, which shall be paid by the Purchaser at time of delivery.)

Delivery shall be by the stated delivery deadline in 1,2,1.b or earlier.



5% Bid Bond included:	Comply Yes ( ) No ( )
100% Performance Bond included:	Comply Yes ( ) No ( )
Cost: \$_____	
Are there any exceptions to the specifications:	Comply Yes ( ) No ( )
Proof of insurance included and as specified:	Comply Yes ( ) No ( )
Washington State Dealer License included:	Comply Yes ( ) No ( )
License and Bonding	Comply Yes ( ) No ( )
Safety Certification Documentation:	Comply Yes ( ) No ( )
Engineering Drawings:	Comply Yes ( ) No ( )
Construction Photographs:	Comply Yes ( ) No ( )
Warranty Center Information:	Comply Yes ( ) No ( )
Warranty Documentation included as specified:	Comply Yes ( ) No ( )
Bid FOB the Purchaser:	Comply Yes ( ) No ( )

Amount included for delivery: \$\_\_\_\_\_ (to be deducted for pick up at factory).

Amount deducted for the purchase of multiple apparatus on the same order.

\$\_\_\_\_\_ each

### 3.7. REGIONAL REFERENCES

The proven durability and reliability of this product is of the utmost concern. Each bidder submitting a proposal shall furnish references consisting of in-service units, of similar chassis make and model as being proposed, within the Pacific Northwest (Washington, Oregon, Idaho). Failure to provide the requested information on the form below will be grounds for rejection of the bidder's proposal.

All references shall include owner, address, contact name and phone number, and the model owned. A minimum of five (5) references shall be provided:

1. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

2. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

3. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

4. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

5. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

THIS FORM IS TO BE PLACED IN THE FRONT OF THE BIDDERS PROPOSAL

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

6. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

7. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

8. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

9. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

10. Owner: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Phone #: 1-(\_\_\_\_)-\_\_\_\_-\_\_\_\_\_

Model: \_\_\_\_\_ Year: \_\_\_\_\_

**3.8. EXCEPTIONS/CLARIFICATIONS/EQUIVALENTS TO SPECIFICATIONS SHEET**

Exceptions, requests for clarifications or proposals for equivalents shall be noted on this sheet and submitted to the Marysville Fire District with the Bidders proposal. Exceptions, requests for clarifications or proposals for equivalents received after the bid closing will be disregarded. All exceptions taken, requests for clarifications made, and proposal for equivalent shall be recorded as per defined in this document. Each shall be noted by Page number, Paragraph number, and item Header. If additional space is required for the exception, clarification or proposal, then the bidder shall use additional paper as necessary, however the same format shall be used.

Page # \_\_\_\_\_ Paragraph # \_\_\_\_\_ Header: \_\_\_\_\_

Exception: \_\_\_\_\_

\_\_\_\_\_

Page # \_\_\_\_\_ Paragraph # \_\_\_\_\_ Header: \_\_\_\_\_

Exception: \_\_\_\_\_

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Page # \_\_\_\_\_ Paragraph # \_\_\_\_\_ Header: \_\_\_\_\_

Exception: \_\_\_\_\_

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Exception: \_\_\_\_\_

\_\_\_\_\_

## **SECTION 4. AMBULANCE SPECIFICATIONS**

### **4.1. GENERAL REQUIREMENTS**

#### **4.1.1. Intent of Specifications**

**4.1.1.a.** **Bidder Complies: Yes ( ) No ( )**

It is the intent of these specifications for the Marysville Fire District to clearly describe the furnishing and delivery to the Purchaser, a complete apparatus equipped as specified. The primary objective of this specification is to obtain the most acceptable apparatus for the service of the Marysville Fire District. This specification covers specific requirements as to the type of construction and tests the apparatus must conform, together with certain details as to finish, material preferences, equipment and appliances. Minor details of construction and materials where not otherwise specified are left to the discretion of the contractor, who shall be solely responsible for the design and construction for all features.

**4.1.1.b.** **Bidder Complies: Yes ( ) No ( )**

The design of the apparatus shall embody the latest approved automotive design practices. The workmanship will be of the highest quality in its respective field. Special consideration shall be given to service access to areas needing periodic maintenance, ease of operation, and symmetrical proportions. Construction shall be heavy duty and ample safety factors will be provided to carry loads as specified. The construction method employed will be in such a manner as to allow ready removal of any component for service or repair.

**4.1.1.c.** **Bidder Complies: Yes ( ) No ( )**

The apparatus must meet all Department of Transportation (DOT), Interstate Commerce Commission (ICC), Tire and Rim Association (TRA), Federal Motor Vehicle Safety Standards (FMVSS) and local Washington State Department of Transportation (WSDOT) motor vehicle requirements.

**4.1.1.d.** **Bidder Complies Yes ( ) No ( )**

The Bidder shall point out any discrepancies in this specification document that may violate any FMVSS or Washington State Department of Transportation requirements and take timely exception prior to bid opening. Failure of a vehicle to be certified due to omission or violation of these requirements shall be the liability of the Vendor if timely exception was not taken.

**4.1.1.e.** **Bidder Complies Yes ( ) No ( )**

The complete vehicle shall comply with the requirements of the current applicable State statutes and regulations of the Department of Labor and Industries, the Department of Transportation, and all other applicable Washington State and local regulatory agencies.

**4.1.1.f.**

**Bidder Complies: Yes ( ) No ( )**

The chassis shall be a 2024 or newer Ford F-450 XLT regular cab 4 x 4 style chassis. The construction shall provide protection from both impact and roll-over accidents for all occupants. Protection shall be documented as tested by third party engineering.

**4.1.1.g.**

**Bidder Complies: Yes ( ) No ( )**

Apparatus body shall utilize construction methods to ensure maximum strength and longevity. Body shall be constructed of aluminum extruded framework to be self-supporting and removable for service, repairs or chassis replacement. The body shall be completely independent of the chassis frame and not use the frame for any part of the body support structure.

**4.1.1.h.**

**Bidder Complies: Yes ( ) No ( )**

The bid shall be accompanied by a set of “Contractor’s Specifications” consisting of a detailed description of the apparatus being furnished under this contract which conform. Computer runoff or build sheets are not acceptable as “Contractor’s Specifications”. Item compliance shall be indicated in each item by all Bidders. No Exceptions.

**4.1.1.i.**

**Bidder Complies: Yes ( ) No ( )**

These specifications shall indicate size, type, model and make of component parts and equipment. Minor components such as bulk stock fasteners, electrical connectors and other minor components easily sourced from a typical auto/hardware store need not be listed in the specifications and bill of materials. No Exceptions

**4.1.2. Quality and Workmanship**

**4.1.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The design of the apparatus shall embody the latest approved automotive engineering practices.

**4.1.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The workmanship must be of the highest quality in its respective field. Special consideration will be given to the following points: Accessibility of the various units, which require periodic maintenance, ease of operation and symmetrical proportions.

**4.1.2.c.**

**Bidder Complies: Yes ( ) No ( )**

Construction shall be rugged and ample safety factors shall be provided to carry loads as specified and to meet both on and off road requirements and to speed conditions as set forth under “Performance Tests and Requirements”.

**4.1.2.d.**

**Bidder Complies: Yes ( ) No ( )**

Welding shall be employed in the assembly of the apparatus in a manner that will not prevent the ready removal of any component part for service or repair.

**4.1.2.e.**

**Bidder Complies: Yes ( ) No ( )**

All steel welding shall follow American Welding Society requirements for AWS D1.1:2012 Structural Welding Code for welding steel structural assemblies. All aluminum welding shall follow American Welding Society requirements for AWS D1.2/D1.2M:2003 Structural Welding Code for any type structure made from aluminum structural alloys. All sheet metal welding shall follow American Welding Society AWS D9.1M/D9.1:2006 Structural Welding code for Arc/Braze requirements of non-structural materials. Flux core arc welding to use alloy rods, type 7000, American Welding Society AWS standards A5.20-E70T1.

**4.1.2.f.**

**Bidder Complies: Yes ( ) No ( )**

Employees classified as welders shall be tested and certified to meet American Welding Society and American Society of Mechanical Engineers welding codes.

**4.1.3. Performance Tests and Requirements**

**4.1.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus, prior to delivery, will be required to meet the performance tests as per the specifications and any of the applicable NFPA Automotive Fire Apparatus Standard. NFPA required testing shall be provided at the manufacturing site.

**4.1.3.b.**

**Bidder Complies: Yes ( ) No ( )**

A road test shall be conducted with the apparatus fully loaded to its estimated in-service weight and shall be capable of the following performance while on dry paved roads that are in good condition and for a continuous run of ten (10) miles or more, during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus.

**4.1.3.c.**

**Bidder Complies: Yes ( ) No ( )**

The successful Bidder shall furnish a Weight Certificate showing weights on front axle, rear axles and total weight for the completed apparatus at time of delivery.

**4.1.3.d.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall meet the specific requirements for the State of Washington pertaining to tire loading/width and requirements, per WSDOT standards. Tires and axle ratings must meet Washington State Department of Transportation laws with a fully laden apparatus at “in service weight”. If loaded unit does not meet these laws, it will be the responsibility of the Bidder to make necessary corrections to the apparatus to meet all applicable laws.

**4.1.3.e.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall be capable of accelerating to 35 MPH from a standing start within 25 seconds on a level concrete highway without exceeding the maximum governed RPM of the engine.

**4.1.3.f.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus, fully loaded, shall be capable of obtaining a minimum top speed of 70 MPH on a level dry concrete highway with the engine not exceeding its governed RPM (fully loaded).

**4.1.3.g.**

**Bidder Complies: Yes ( ) No ( )**

The service brakes shall be capable of stopping a fully loaded vehicle in 35ft at 20 mph on a level concrete highway. Air brake systems shall conform to Federal Motor Vehicle Safety Standards (FMVSS) 121.

**4.1.3.h.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus, when fully loaded, shall have not less than 25 percent or more than 50 percent of the weight on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle.

**4.1.3.i.**

**Bidder Complies: Yes ( ) No ( )**

The contractor shall conduct the tests of the apparatus as in accordance with standard practices required by NFPA. A copy of all tests shall accompany the Apparatus.

**4.1.3.j.**

**Bidder Complies: Yes ( ) No ( )**

If the manufacturer does not have the facilities to perform any of the above tests, an outside third party agency should be contracted to have these tests performed on the apparatus.

**4.2. CONSTRUCTION**

**4.2.1. General Construction**

**4.2.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The cab and chassis shall include the applicable caution, warning, and safety notice labels with text to be written in English.

**4.2.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall be designed with due consideration to distribution of load between the front and rear axles, so that all specified equipment, a full complement of personnel and supplies will be carried without injury to the apparatus. Weight balance and distribution shall be in accordance with the most recent recommendations of the National Fire Protection Agency (NFPA) 1917 documentation.



**4.2.1.c.**

**Bidder Complies Yes ( ) No ( )**

The apparatus shall be designed to expedite the removal of contaminants associated with the by-products normally associated with emergency medical services and modern structural firefighting; coatings, coverings, and material used within the passenger and patient area shall be selected with consideration given to ease of such contaminant removal, and joints, openings and seams shall be sealed to prevent collection points of such.

**4.2.1.d.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall be designed so that all recommended daily maintenance checks can be performed easily by the operator without the need for hand tools. Apparatus components that interfere with repair or removal of other major components must be attached with fasteners (cap, screws, nuts, etc.) so that the components can be removed and installed with normal automotive hand tools. These components must not be welded, riveted, glued or otherwise permanently secured into place.

**4.2.1.e.**

**Bidder Complies: Yes ( ) No ( )**

The GAWR and GVWR of the chassis shall be adequate to carry the fully equipped apparatus including all tanks filled, unequipped personnel weight, and a miscellaneous equipment allowance per NFPA criteria. The unequipped personnel weight shall be calculated at 171 lbs. per person times the maximum number of persons and patients to ride on the apparatus.

**4.2.1.f.**

**Bidder Complies: Yes ( ) No ( )**

The height of the fully loaded vehicle's center of gravity shall not exceed the chassis manufacturer's maximum limit.

**4.2.1.g.**

**Bidder Complies: Yes ( ) No ( )**

The front to rear weight distribution of the fully loaded vehicle shall be within the limits set by the chassis manufacturer. The front axle loads shall not be less than the minimum axle loads specified by the chassis manufacturer, under full loads and all other loading conditions.

**4.2.1.h.**

**Bidder Complies: Yes ( ) No ( )**

The difference in weight on the end of each axle, from side to side, when the vehicle is fully loaded and equipped shall not exceed seven (7) percent.

**4.2.1.i.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall be so designed that the various parts are readily accessible for lubrication, inspection, adjustment and repair.

**4.2.1.j.**

**Bidder Complies: Yes ( ) No ( )**

Where special tools manufactured or designed by the contractor and are required to provide routine service on any component of the apparatus built or supplied by the contractor, such tools shall be provided with the apparatus.

**4.2.2. Size and Weight**

**4.2.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The size, weight and dimensional information on the proposed apparatus are as follows:

- Approximate Overall Length– **306 inches** from front bumper extension to the rear of the body.
- Approximate Apparatus Wheelbase– **193 inches** from the center of the front axle to the center point of the rear axle.
- Maximum Apparatus Height – **114 inches** from the ground level to the top of the highest point of the apparatus. Dimension does not include installation of antennas or optional equipment.
- Maximum Apparatus Width– **96 inches** for both the cab and body including rub rails and fender trim. Does not include mirrors, handrail, steps or other mounted components that may protrude from the side of the apparatus.
- Minimum Angle of Approach– **10 degrees** measured from the front wheel to the front bumper.
- Minimum Angle of Departure– **10 degrees** measured from the rear wheel to the rear of the body.
- Maximum Front Axle Weight – **7,500 lbs.** or the GVWR of the front axle whichever is less loaded with a full complement of equipment and personnel.
- Maximum Rear Axle Weight– **12,880 lbs.** or the GVWR of the rear axle whichever is less loaded with a full complement of equipment and personnel.
- Maximum Total Apparatus Weight – **16,500 lbs.** or the GVWR of the chassis whichever is less loaded with a full complement of equipment and personnel.

## **SECTION 5. CHASSIS SPECIFICATIONS**

### **5.1. MODEL**

**5.1.1.a.** **Bidder Complies: Yes ( ) No ( )**

The cab and chassis shall include design considerations for emergency vehicle applications, rapid transit and maneuverability. The chassis shall be manufactured for heavy duty service with the strength and capacity to support a fully laden apparatus, one hundred (100) percent of the time.

**5.1.1.b.** **Bidder Complies: Yes ( ) No ( )**

The chassis shall have a vehicle identification number that reflects a 2024 or newer model year.

**5.1.1.c.** **Bidder Complies: Yes ( ) No ( )**

The chassis shall be placed into service in the country of United States of America (USA).

**5.1.1.d.** **Bidder Complies: Yes ( ) No ( )**

The apparatus shall be an ambulance vehicle designed for emergency service use which shall be equipped with a permanently mounted patient compartment whose primary purpose is to transport emergency medical service providers and patients and associated equipment.

**5.1.1.e.** **Bidder Complies: Yes ( ) No ( )**

The chassis shall be manufactured for use as a straight truck type vehicle and designed for the installation of a permanently mounted apparatus body behind the cab.

**5.1.1.f.** **Bidder Complies: Yes ( ) No ( )**

The chassis shall feature a 4 x 4 axle configuration consisting of a dual wheel, single rear drive axle with a single front steer axle.

### **5.2. FRAME ASSEMBLY**

#### **5.2.1. Frame Rail Construction**

**5.2.1.a.** **Bidder Complies: Yes ( ) No ( )**

The frame rails shall be finished with a corrosion-inhibiting coating. The frame cross members and frame-mounted components (suspensions, axles, air tanks, battery boxes, fuel tank, etc.) shall be painted black.

### **5.3. AXLES**

#### **5.3.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The chassis shall feature a 4 x 4 axle configuration consisting of a single rear drive axle with a single front steer axle.

#### **5.3.1.b. Front Axle**

#### **5.3.1.c.**

**Bidder Complies: Yes ( ) No ( )**

This front gross axle weight rating shall be adequate to carry the weight of the completed apparatus including all equipment and personnel.

#### **5.3.1.d.**

**Bidder Complies: Yes ( ) No ( )**

The front axle shall include a conventional style hub with a standard knuckle. The weight capacity for the axle shall be rated to 7,500 pounds Front Axle Weight Rating (FAWR).

#### **5.3.1.e.**

**Bidder Complies: Yes ( ) No ( )**

A 3-year/36,000 mile parts and 3 year labor axle warranty shall be provided as standard by Ford. Bidder shall include copies of latest warranties with their bid proposals.

### **5.3.2. Rear Axle**

#### **5.3.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The rear gross axle weight rating shall be adequate to carry the weight of the completed apparatus including all equipment and personnel.

#### **5.3.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The vehicle shall be equipped with a single drive rear axle with single-reduction hypoid gearing and a manufacturer's rated capacity of 12,880 lbs. The rear axle hubs shall be designed for use with hub-piloted wheels to improve wheel centering and extend tire life.

#### **5.3.2.c.**

**Bidder Complies: Yes ( ) No ( )**

A 3 year/36,000 mileage parts and 3 year labor rear axle warranty shall be provided as standard by Ford.

### **5.4. SUSPENSIONS**

#### **5.4.1. Front Suspension**

#### **5.4.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The front suspension shall include an aftermarket stabilizer bar to improve vehicle stability, handling and safety.

**5.4.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The front suspension shall be rated at 7,500 pounds and must meet Washington State Department of Transportation unpermitted road and bridge restrictions.

**5.4.1.c.**

**Bidder Complies: Yes ( ) No ( )**

Supporting documentation/data shall be provided upon request.

**5.4.2. Rear Suspension**

**5.4.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The rear suspension shall be a LiquidSpring rear suspension system with a kneeling feature to activate when the rear streetside patient compartment entrance door opens within 60 minutes of the chassis ignition being turned off. The LiquidSpring control panel shall be installed on the chassis dash to the left of the steering wheel.

Transfer override switch labeled "DUMP OVERRIDE" on the curbside rear wall, accessible from rear curbside door.

**5.4.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The suspension shall be rated for the maximum axle capacity of 12,880 lbs. and must meet Washington State Department of Transportation unpermitted road and bridge restrictions.

**5.4.3. Front Shock Absorbers**

**5.4.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The front suspension shall be furnished with two (2) heavy-duty, double acting shock absorbers, one (1) on each side.

**5.5. WHEELS**

**5.5.1. Front Wheels**

**5.5.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The front wheels shall be 19.5" hub-piloted steel wheels. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts.

**5.5.2. Rear Wheels**

**5.5.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The rear wheels shall be 19.5" hub piloted steel wheels. The hub piloted mounting system shall provide easy installation and shall include two-piece flange nuts.

## **5.6. TIRES**

### **5.6.1. Front Tires**

#### **5.6.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The front tires shall be two (2) tubeless 225-70R-19.5G all season steel belted radial tires with regional tread.

#### **5.6.1.b.**

**Bidder Complies: Yes ( ) No ( )**

Front tires are required to meet Washington State Department of Transportation unpermitted road and bridge weight requirements.

#### **5.6.1.c.**

**Bidder Complies: Yes ( ) No ( )**

The wheels and tires shall conform to the Tire and Rim Association requirements.

### **5.6.2. Rear Tires**

#### **5.6.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The rear tires shall be four (4) tubeless 225-70 R19.5G all season steel belted radial tires with regional tread.

#### **5.6.2.b.**

**Bidder Complies: Yes ( ) No ( )**

Rear tires are required to meet Washington State Department of Transportation unpermitted road and bridge weight requirements.

#### **5.6.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The wheels and tires shall conform to the Tire and Rim Association requirements.

## **5.7. BRAKE SYSTEM**

### **5.7.1. General**

#### **5.7.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The vehicle shall be equipped with hydraulic operated power assisted brakes and an anti-lock braking system (ABS). The brake system shall meet or exceed the design and performance requirements of the current Federal Motor Vehicle Safety Standard (FMVSS)-105, and the test requirements of the current NFPA 1917 Standard.

#### **5.7.1.b.**

**Bidder Complies: Yes ( ) No ( )**

Mechanically actuated emergency/parking brakes shall be installed on the rear axle.

### **5.7.2. Anti-Lock Braking System**

**5.7.2.a.**

**Bidder Complies: Yes ( ) No ( )**

A four-channel Anti-Lock Braking System (ABS) shall be provided to improve vehicle stability and control by reducing wheel lock-up during braking. This braking system shall be fitted to both front and rear axles. All electrical connections shall be environmentally-sealed for protection against water, weather, and vibration.

### **5.7.3. Front Brakes**

**5.7.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The front axle shall be equipped with power assisted 15.39 inch disk brakes.

### **5.7.4. Rear Brakes**

**5.7.4.a.**

**Bidder Complies: Yes ( ) No ( )**

The rear axle shall be equipped with power assisted 15.75 inch disk brakes.

**5.7.4.b.**

**Bidder Complies: Yes ( ) No ( )**

Parking brake systems shall satisfy the FMVSS and NFPA parking brake requirements.

### **5.7.5. Park Brake Release**

**5.7.5.a.**

**Bidder Complies: Yes ( ) No ( )**

One (1) parking brake control shall be supplied and installed within easy reach of the driver.

## **5.8. ENGINE**

**5.8.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The vehicle shall utilize a Ford 7.3L Electronic Fuel Injection V8 Premium engine as described below:

- 430 gross bhp at 5,500 RPM
- Maximum no load governed speed of 5,500 RPM
- 485 lb.-ft. peak torque at 4,000 RPM
- Eight (8)-cylinder, 4-cycle naturally aspirated gasoline engine
- 445 cubic inch displacement (7.3 liters)
- 10.5:1 compression ratio
- Combination full-flow/by-pass oil filter approved by Ford for use on the 7.3L engine
- Engine lubrication system, including filter, shall have a minimum capacity of 7 quarts
- 12-volt starting and charging system

**5.8.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The engine shall be compliant with 2024 or newer EPA Emission standards.

**5.8.2. Engine Exhaust**

**5.8.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The engine exhaust piping shall be a single discharge minimum of 2.5 inch diameter welded stainless steel tubing. The exhaust system will include a catalytic converter to meet current EPA standards. The exhaust shall be directed away from the vehicle on the right side behind the rear wheels in order to keep exhaust fumes as far away as possible from the cab and module entry points.

**5.8.2.b.**

**Bidder Complies: Yes ( ) No ( )**

Engine exhaust heat shields shall be installed between the exhaust system and the module to prevent heat transfer to the module area.

**5.8.2.c.**

**Bidder Complies: Yes ( ) No ( )**

Heat deflector shields and or exhaust wrap will be provided to isolate chassis and body components from the heat of the engine exhaust piping.

**5.8.2.d.**

**Bidder Complies: Yes ( ) No ( )**

The end of the exhaust tail pipe shall be modified to accommodate a Nederman in-house exhaust extraction system. The tailpipe will terminate at a 90-degree angle straight out below the right side of body behind the rear axle.

**5.8.2.e.**

**Bidder Complies: Yes ( ) No ( )**

The catalytic converter, muffler, and piping shall be connected with zero leak clamps through the end of the tailpipe.

**5.8.2.f.**

**Bidder Complies: Yes ( ) No ( )**

A 5-year/60,000-miles parts and labor warranty shall be provided as standard by Ford.

**5.9. TRANSMISSION**

**5.9.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The drive train shall include a TorqShift 10 speed torque converting, automatic transmission which shall include electronic controls.

**5.9.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The TorqShift transmission shall have ten (10) forward gears with two overdrive ratios, a tow/haul mode, and selectable shift capability. The transmission shall have one reverse gear.



**5.9.1.c.**

**Bidder Complies: Yes ( ) No ( )**

A transmission interface connector shall be provided in the cab.

**5.9.1.d.**

**Bidder Complies: Yes ( ) No ( )**

The transmission shall have a gross input torque rating and input power rating not less than the maximum engine output rating.

**5.9.1.e.**

**Bidder Complies: Yes ( ) No ( )**

A water-to-oil transmission oil cooler shall be provided to ensure proper cooling of the transmission when the vehicle is stationary (no air flow). The transmission cooling system shall meet all transmission manufacturer requirements.

**5.9.1.f.**

**Bidder Complies: Yes ( ) No ( )**

A 5-year/60,000 mileage parts and labor warranty shall be provided as standard by Ford.

**5.9.2. Transmission Fluid**

**5.9.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The transmission fluid shall be synthetic as recommended by Ford.

**5.10. COOLING PACKAGE**

**5.10.1. Engine Cooling Package**

**5.10.1.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be a heavy-duty cooling system designed to meet the demands of the emergency response industry. The cooling system shall have the capacity to keep the engine properly cooled under all conditions of road and stationary operations. The cooling system shall be designed and tested to meet or exceed the requirements specified by the engine and transmission manufacturer and all EPA 2024 requirements.

**5.10.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The radiator and the complete cooling system will meet or exceed NFPA and engine manufacturer cooling system standards.

**5.10.1.c.**

**Bidder Complies: Yes ( ) No ( )**

All radiator and heater hoses shall be silicone. Pressure compensating band clamps shall be used to eliminate hose pinching on all hoses over 1 inch.

**5.10.1.d.**

**Bidder Complies: Yes ( ) No ( )**

The cooling package shall include Extended Life Coolant (ELC). The use of ELC provides longer intervals between coolant changes over standard coolants providing improved performance. The coolant shall contain a mix of de-ionized water and a

concentration of engine coolant capable of keeping the coolant from freezing to a temperature of -34 degrees Fahrenheit.

### **5.10.2. Fuel System**

#### **5.10.2.a.**

**Bidder Complies: Yes ( ) No ( )**

One (1) Minimum 40-gallon fuel tank shall be provided. The tank shall conform to all applicable Federal Highway Administration (FHWA) 393.65 and 393.67 standards. The tank shall be mounted at the rear of the chassis as high possible for maximum protection. The tank shall be secured with a minimum of two (2) wrap-around steel straps. Each strap shall be fitted with protective rubber insulation and shall be designed to allow for tank removal from below the chassis.

#### **5.10.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The fuel tank shall be equipped with a fill inlet. The fill inlet shall extend to the left rear of the vehicle behind the rear tires and away from the heat of the exhaust system as required by NFPA. The open end of the filler neck shall be equipped with a twist-off filler cap with a retaining device.

#### **5.10.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The fill inlet will be located on the left hand side of the body and labeled "Gasoline Only."

#### **5.10.2.d.**

**Bidder Complies: Yes ( ) No ( )**

The tank shall have a minimum useable capacity of 40 gallons of fuel with a sufficient additional volume to allow for thermal expansion of the fuel without overflowing the vent.

### **5.11. CHASSIS OPTIONS**

#### **5.11.1.a. Drivelines**

##### **5.11.1.b.**

**Bidder Complies: Yes ( ) No ( )**

Drivelines shall have a heavy-duty metal tube and shall be equipped with universal joints to allow full-transmitted torque to the axle. Drive shafts shall be axially straight, concentric with axis and dynamically balanced.

##### **5.11.1.c. Rear Recovery Eyes**

##### **5.11.1.d.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) heavy-duty recovery eyes shall be mounted at the rear of the vehicle to allow recovery, not lifting or towing, of the apparatus without damage.

## **5.11.2. Bumpers**

### **Front Bumper**

#### **5.11.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The vehicle shall be equipped with a chrome front bumper with lower black plastic valance. It shall be mounted directly to the front frame extensions for maximum strength sufficient to provide additional protection against low-speed frontal impacts.

## **5.12. ELECTRICAL**

### **5.12.1. Alternator**

#### **5.12.1.a.**

**Bidder Complies: Yes ( ) No ( )**

A dual OEM 410-amp SAE (J56) rated alternator system with internal rectifier, and regulator shall be installed in accordance with the engine manufacturer`s recommendations.

### **5.12.2. Battery System**

#### **5.12.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The manufacturer shall supply two (2) heavy-duty Group 68AH AGM post style 12-volt maintenance-free batteries. Each battery shall be installed and positioned so as to allow easy replacement of any single battery.

#### **5.12.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The positive and negative battery stud terminals and the respective cables shall be clearly marked to ensure quick and mistake-proof identification.

#### **5.12.2.c.**

**Bidder Complies: Yes ( ) No ( )**

Batteries shall be placed on non-corrosive matting and secured with hold-down brackets to prevent movement, vibration, and road shock. The hold-down bracket shall be cut to fit and shall have all sharp edges removed.

#### **5.12.2.d.**

**Bidder Complies: Yes ( ) No ( )**

The batteries shall be positioned in well-ventilated areas.

#### **5.12.2.e.**

**Bidder Complies: Yes ( ) No ( )**

Batteries shall have a warranty of thirty-six (36) months that shall commence upon the date of delivery of the apparatus.

### **5.12.3. Auto Throttle**

#### **5.12.3.a.**

**Bidder Complies: Yes ( ) No ( )**

A combination voltage monitor, elevated idle control shall be installed to automatically adjust the engine throttle level for changes in electrical load.

#### **5.12.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The auto throttle shall automatically activate when the battery voltage drops below 12.0 volts or when air conditioning is on.

#### **5.12.3.c.**

**Bidder Complies: Yes ( ) No ( )**

The auto throttle shall be disabled anytime the transmission is placed in gear, when the parking brake is released, or the operator depresses the brake pedal.

## SECTION 6. CAB SPECIFICATIONS

### 6.1. CAB

**6.1.1.a.** **Bidder Complies: Yes ( ) No ( )**

The cab interior shall be designed to afford the maximum usable interior space and attention to ergonomics with hip and legroom while seated which exceeds industry standards.

**6.1.1.b.** **Bidder Complies: Yes ( ) No ( )**

All interior and exterior seams shall be sealed for optimum noise reduction and to provide the most favorable efficiency for heating and cooling retention.

**6.1.1.c.** **Bidder Complies: Yes ( ) No ( )**

The cab roof shall include reinforcement for a Whelen Arges spotlight. The entire reinforcement shall be integral with the roof for rigidity.

### 6.1.2. Cab Exterior

**6.1.2.a.** **Bidder Complies: Yes ( ) No ( )**

The exterior of the cab shall not exceed the width of the module and still allow sufficient room in the occupant compartment for two (2) fire fighters.

**6.1.2.b.** **Bidder Complies: Yes ( ) No ( )**

The front cooling air intake grille shall provide no less than 80 percent open area for air flow and cooling performance.

**6.1.2.c.** **Bidder Complies: Yes ( ) No ( )**

The cab windshield shall be of a replaceable design for lowered cost of repair. The windshield shall be made from three (3) layered curved, laminated safety glass with a light transmittance automotive tint. Forward visibility to the ground for the average person sitting in the driver's seat shall be no more than 12 feet from the front of the cab to ensure good visibility in congested areas.

**6.1.2.d.** **Bidder Complies: Yes ( ) No ( )**

A hood shall be provided to allow for access to the engine compartment for fluid checks and mechanical repairs. A holding device shall be installed to hold the hood open in position. The Body builder shall not install any components or modify the hood in any way that restricts or limits the opening of the hood.

**6.1.2.e.** **Bidder Complies: Yes ( ) No ( )**

A two stage mechanical latching device shall be installed to securely hold the hood in the closed position. The hood release shall be installed in the driver compartment within

easy reach of the driver. A secondary safety latch shall be installed to prevent the hood from opening in the event that the primary latch fail or the driver inadvertently activates the release while the vehicle is in motion.

### **6.1.3. Cab Interior**

**6.1.3.a.** **Bidder Complies: Yes ( ) No ( )**

The interior of the cab shall be of the open design with an ergonomically-designed driver area that provides ready access to all controls as well as a clear view of critical instrumentation.

**6.1.3.b.** **Bidder Complies: Yes ( ) No ( )**

A minimum of one (1) grab handle shall be provided on the interior of each door opening to ensure proper hand holds while entering and exiting the cab.

### **6.1.4. Mobile Data Terminal**

**6.1.4.a.** **Bidder Complies: Yes ( ) No ( )**

The Mobile Data Terminal (MDT) provision on the right hand driver console shall be provided. The MDT provision shall be easily adjustable without the use of hand tools. The MDT shall be mounted in a position so that the driver and the officer can both have access to the MDC without exiting the apparatus.

### **6.1.5. Cab Running Boards**

**6.1.5.a.** **Bidder Complies: Yes ( ) No ( )**

The front cab running boards shall be installed on both the driver and offices side entry doors. The running board shall be no more than 18 inches above the ground with standard tires. The running boards shall be constructed of 0.125 inch bright aluminum diamond plate.

**6.1.5.b.** **Bidder Complies: Yes ( ) No ( )**

The running boards shall be flared to the front corner of the module. The entire running board assembly shall be securely installed using stainless steel fasteners.

**6.1.5.c.** **Bidder Complies: Yes ( ) No ( )**

A minimum of one (1) grab handle shall be provided on the interior of each door opening to ensure proper hand holds while entering and exiting the cab.

### **6.1.6. Cab Doors**

**6.1.6.a.** **Bidder Complies: Yes ( ) No ( )**

The cab shall include two (2) entry doors designed for ease of entering and egress.

### **6.1.7. Interior Lighting**

#### **6.1.7.a.**

**Bidder Complies: Yes ( ) No ( )**

The cab dome lights shall be wired through the door switch to provide interior lighting when the battery power is on and any cab door is opened. Cab dome lights shall extinguish when the module is disconnected or after the ignition has been in the off position for fifteen (15) minutes.

## **6.2. CAB INSTRUMENTS AND CONTROLS**

#### **6.2.1.a.**

**Bidder Complies: Yes ( ) No ( )**

Driver controls shall be located on the cab instrument panel on the driver's side where they are clearly visible and easily reachable. The following gauges and/or controls shall be provided:

- Master battery switch located on the left side of the driver seat on the floor.
- Ignition switch with integral engine start switch
- Heater and defroster controls with illumination
- Marker light/headlight control switch with dimmer switch
- Self-canceling turn signal control with indicators
- Windshield wiper switch with intermittent control and washer fluid control
- Parking brake controls
- Automatic transmission shift lever with tow switch
- Horn button at center of steering wheel
- Door ajar warning light located on the cab ceiling between the driver and the officer seating positions

#### **6.2.1.b.**

**Bidder Complies: Yes ( ) No ( )**

Controls and switches shall be identified as to their function by backlit wording adjacent to each switch, or indirect panel lighting adjacent to the controls.

#### **6.2.1.c.**

**Bidder Complies: Yes ( ) No ( )**

A master battery switch shall be provided. The switch shall be mounted to the left of the driver seat on the floor.

#### **6.2.1.d.**

**Bidder Complies: Yes ( ) No ( )**

The master switch shall completely disconnect all non-OEM components without disrupting the operation of the chassis.

## **6.2.2. Fast Idle System**

### **6.2.2.a.**

**Bidder Complies: Yes ( ) No ( )**

A fast idle system shall be provided and controlled by a cab-mounted switch. The system shall increase engine idle speed to a preset mid-range RPM for increased alternator output.

### **6.2.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The fast idle system shall automatically activate when the battery voltage drops below 11.9 volts.

### **6.2.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The fast idle system shall be disabled anytime the transmission is removed from the park position or the operator depresses the brake pedal.

## **6.2.3. Electrical System**

### **6.2.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The cab and chassis system shall have a centrally located electrical distribution area. All electrical components shall be located such that standard operations shall not interfere with or disrupt vehicle operation. Automatic-reset circuit breakers shall be installed on all non OEM circuits. An access cover shall be provided for maintenance access to the electrical distribution area.

### **6.2.3.b.**

**Bidder Complies: Yes ( ) No ( )**

All wiring shall be protected from impact, abrasion, water, ice, and heat sources. The wiring shall be color-coded and functionally-labeled on the outer surface of the insulation for ease of identification and maintenance. The wiring harness shall conform to SAE 1127 with GXL temperature properties. Any wiring connections exposed to the outside environment shall be weather-resistant. All harnesses shall be covered in a loom that is rated at 280 degrees F to protect the wiring against heat and abrasion.

## **6.3. HVAC**

### **6.3.1. Heating & Air Conditioning**

#### **6.3.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The heating and air conditioning system shall be rated for use in an emergency vehicle and shall provide sufficient defrosting, heating and cooling to the entire cab and patient module.



**6.3.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The defrosting system shall be capable of clearing 90% or more of the windshield in fifteen (15) minutes or less after a three (3) hour cold soak at 0 degrees Fahrenheit (-17.78 degrees Celsius).

**6.3.1.c.**

**Bidder Complies: Yes ( ) No ( )**

The heating system shall deliver a minimum heating capacity to heat the entire cab and patient module and be able to maintain an interior temperature of 70 degrees Fahrenheit with an exterior temperature of 0 degrees Fahrenheit.

**6.3.1.d.**

**Bidder Complies: Yes ( ) No ( )**

Adjustable louvers will be provided to direct air flow to all seating positions for maximum crew comfort.

**6.3.1.e.**

**Bidder Complies: Yes ( ) No ( )**

The air conditioning system shall be capable of cooling the cab and patient module from 110 degrees Fahrenheit to 65 degrees Fahrenheit at 60% humidity in less than 20 minutes with an engine RPM of 1400 or less and maintain an interior temperature of 70 degrees Fahrenheit with an exterior temperature of 110 degrees Fahrenheit at idle.

**6.3.1.f.**

**Bidder Complies: Yes ( ) No ( )**

To meet the performance requirements of these specifications the air conditioning system shall require a supplementary compressor and condensing components in addition to the standard OEM compressor and condensing systems. The Bidder shall include these items with the submitted proposal.

**6.3.1.g.**

**Bidder Complies: Yes ( ) No ( )**

The air-conditioning compressor shall be a belt driven, engine mounted compressor. The compressor shall be compatible with R134-a refrigerant.

**6.3.1.h.**

**Bidder Complies: Yes ( ) No ( )**

A gravity condensation drain system shall be utilized to remove all condensation from the evaporator units on a slope of up to a 13% grade in any direction and direct it to the exterior of the chassis cab. Systems utilizing pumps to remove condensation are not acceptable.

**6.3.1.i.**

**Bidder Complies: Yes ( ) No ( )**

If a roof mounted condenser is utilized the visible cover (excluding the core fins) shall be painted to match the cab color.

## **6.4. MIRRORS**

### **6.4.1. Cab Mirrors**

**6.4.1.a.** **Bidder Complies: Yes ( ) No ( )**

Two (2) telescoping trailer tow mirrors with power adjustments shall be installed. The mirrors shall incorporate a full face main section with a convex mirror with housing. The adjustment of main sections shall be through dash mounted switches.

**6.4.1.b.** **Bidder Complies: Yes ( ) No ( )**

The cab mirrors shall be heated and wired to operate through a switch located within easy reach of the driver.

## **6.5. EXTERIOR CAB ACCESSORIES**

### **6.5.1. Front Mud Flaps**

**6.5.1.a.** **Bidder Complies: Yes ( ) No ( )**

Mud flaps shall be installed on the rear of the cab front wheel wells.

## **6.6. SEATS**

### **6.6.1. Seat Belts**

**6.6.1.a.** **Bidder Complies: Yes ( ) No ( )**

All cab seat positions shall have a retractable 3-point lap and shoulder harness, providing additional safety and security for personnel. Seat belts shall be installed so the male end can be easily grasped and the female end easily located while sitting in a normal position.

**6.6.1.b.** **Bidder Complies: Yes ( ) No ( )**

All cab position seat belts shall be standard orientation which extends from the outboard shoulder extending to the inboard hip.

### **6.6.2. Seat Wiring**

**6.6.2.a.** **Bidder Complies: Yes ( ) No ( )**

Any power seat or seats installed in the cab shall be wired to battery hot and capable of operating without having the ignition in the on position.

### **6.6.3. Driver Seat**

**6.6.3.a.** **Bidder Complies: Yes ( ) No ( )**

An adjustable seat with high back styling shall be supplied for the driver. The seat will include a manual control to adjust the horizontal position with a minimum 5 inches of

travel. To provide flexibility for multiple driver configurations, the seat will have an adjustable reclining back.

#### **6.6.4. Officer Seat**

**6.6.4.a.** **Bidder Complies: Yes ( ) No ( )**

An adjustable seat with high back styling shall be supplied for the officer. The seat will include a manual control to adjust the horizontal position with a minimum 5 inches of travel. To provide flexibility for multiple driver configurations, the seat will have an adjustable reclining back.

#### **6.6.5. Interior Upholstery**

**6.6.5.a.** **Bidder Complies: Yes ( ) No ( )**

Upholstery shall be cloth and easily cleaned with water and mild detergents without fading bleeding or sustaining permanent damage.

**6.6.5.b.** **Bidder Complies: Yes ( ) No ( )**

Upholstery shall be manufactured to meet or exceed the flammability requirements of FMVSS 302

**6.6.5.c. .** **Bidder Complies: Yes ( ) No ( )**

The interior color shall be grey or black in color.

### **6.7. INTERIOR CAB ACCESSORIES**

#### **6.7.1. Required Labeling**

**6.7.1.a.** **Bidder Complies: Yes ( ) No ( )**

The manufacture shall supply the final certification of GVWR and GAWR on a nameplate affixed to the vehicle.

**6.7.1.b.** **Bidder Complies: Yes ( ) No ( )**

There shall be a high-visibility label installed in a location clearly detectable to the driver while in the seated position. The label shall indicate the following specified information.

- Overall Height (feet and inches)
- Overall Length (feet and inches)
- Curb Weight (tons)

**6.7.2. Sun Visors**

**6.7.2.a.** **Bidder Complies: Yes ( ) No ( )**

Two (2) sun visors shall be provided for the driver and officer matching the interior trim of the cab and shall be located above the windshield with one (1) mounted on each side of the cab.

**6.7.3. Storage Console**

**6.7.3.a.** **Bidder Complies: Yes ( ) No ( )**

An aluminum map/storage console shall be installed in the cab. The storage console shall be constructed of smooth aluminum. The storage console shall have a minimum of six (6) removable dividers for storage of ring binders and map books.

**6.7.3.b.** **Bidder Complies: Yes ( ) No ( )**

The storage console shall contain sufficient storage volume to securely store four (4) three ring binders 3 inches in size.

**6.7.3.c.** **Bidder Complies: Yes ( ) No ( )**

The storage console shall contain the switch panels, two (2) cup holders, the voltage and ammeters, the siren control head, the 12 volt DC receptacle, USB charge receptacle, and the District supplied Motorola remote radio head.

**6.7.3.d.** **Bidder Complies: Yes ( ) No ( )**

The storage console shall be mounted in the center of the cab between the driver and officer seating positions. The storage box shall be fully secured to meet current safety requirements.

**6.7.3.e.** **Bidder Complies: Yes ( ) No ( )**

The storage console shall be finished with black powder coat.

**6.7.4. MDT Provisions**

**6.7.4.a.** **Bidder Complies: Yes ( ) No ( )**

A Havis #C-HDM-204 side mount telescoping bracket shall be installed on the officer side forward of the storage console.

**6.7.4.b.** **Bidder Complies: Yes ( ) No ( )**

A Havis #C-MD-119 locking swing arm with low profile motion device adapter shall be installed on the telescoping bracket.

**6.7.4.c.** **Bidder Complies: Yes ( ) No ( )**

A Havis #UT-1004 universal MDT cradle shall be installed on the locking swing arm.

## **6.8. CAB ELECTRICAL ACCESSORIES**

### **6.8.1. Gauge Cluster**

**6.8.1.a.** **Bidder Complies: Yes ( ) No ( )**

The cab operational instruments shall be located in the dashboard on the driver side of the cab and shall be clearly visible. The gauges in this panel shall be English dominant and shall include at minimum the following:

- Speedometer/Odometer with trip odometer
- Engine oil pressure gauge with warning light
- Engine water temperature gauge with warning light
- Fuel level gauge
- Voltmeter
- Transmission oil temperature warning light

**6.8.1.b.** **Bidder Complies: Yes ( ) No ( )**

This panel shall be backlit for increased visibility during day and night time operations.

### **6.8.2. Indicator Lamps**

**6.8.2.a.** **Bidder Complies: Yes ( ) No ( )**

To promote safety telltale indicator lamps will be located on the instrument panel in clear view of the driver. The indicator lamps will be only visible when active. The colored indicator lights will have descriptive text or symbols.

### **6.8.3. Audible Alarms**

**6.8.3.a.** **Bidder Complies: Yes ( ) No ( )**

An additional buzzer, **with different tone than the door open buzzer**, shall be installed in the console for the attendant to notify the driver. A momentary switch labeled "BUZZER" shall be installed in the attendant panel.

### **6.8.4. Cab 12 Volt Outlet**

**6.8.4.a.** **Bidder Complies: Yes ( ) No ( )**

Two (2) plug-in type receptacles for hand held spotlights, cell phones, chargers, etc. shall be installed. One (1) on driver side dash and one (1) on the officer side dash. The receptacles shall be wired hot.

## **SECTION 7. BODY SPECIFICATIONS**

### **7.1. BODY GENERAL CONSTRUCTION**

#### **7.1.1. Compartment Load Capacity**

##### **7.1.1.a.**

**Bidder Complies: Yes ( ) No ( )**

Each compartment shall be designed to carry a working load of 750 lbs. per compartment.

NOTE: These values are for design purposes only for individual compartment construction and are not meant to be used as an actual overall weight rating for equipment load per compartment for the specified apparatus. The apparatus shall be engineered such that the completed unit, when loaded to its estimated in-service weight, shall comply with the gross axle weight ratings {GAWR}, the overall gross vehicle weight rating {GVWR}, and the chassis manufacturer's load balance guidelines per NFPA.

#### **7.1.2. Dissimilar Metals**

##### **7.1.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Absolutely no dissimilar metals shall be used in the body and its supporting substructure without being separated by providing a barrier between dissimilar metals, sealing out moisture and absorbing energy created by a dissimilar metal reaction.

##### **7.1.2.b.**

**Bidder Complies: Yes ( ) No ( )**

All bolts and nuts used in the finish construction of the apparatus shall be coated stainless steel which helps prevent dissimilar metal electrolytic reaction and corrosion.

##### **7.1.2.c.**

**Bidder Complies: Yes ( ) No ( )**

Any bolt extending into a compartment or into the module area shall have an acorn nut attached or be protected in such manner where sharp edges are avoided.

#### **7.1.3. Body Structure Width**

##### **7.1.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The width of the apparatus body from the outside of the left compartments to the outside of the right compartments shall not exceed 96 inches excluding any attached peripherals such as rub rails, fenderettes, grab handles, etc.

#### **7.1.4. Module Compartments**

**7.1.4.a.** **Bidder Complies: Yes ( ) No ( )**

The module assembly shall be constructed entirely of aluminum. The aluminum modular design shall provide a high strength-to-weight ratio for increased equipment carrying capacity.

**7.1.4.b.** **Bidder Complies: Yes ( ) No ( )**

The module shall be completely sanded and deburred to assure a smooth finish and painted job color.

**7.1.4.c.** **Bidder Complies: Yes ( ) No ( )**

The compartments shall be constructed from smooth aluminum plate. The compartments shall be modular in design and shall not be a part of the chassis support structure.

**7.1.4.d.** **Bidder Complies: Yes ( ) No ( )**

Each compartment seam shall be sealed using a permanent pliable silicone caulk. The walls of each compartment shall be louvered and vented for adequate ventilation.

**7.1.4.e.** **Bidder Complies: Yes ( ) No ( )**

A baffled drain hole shall be provided in all exterior compartment bottoms that extend below the floor line.

**7.1.4.f.** **Bidder Complies: Yes ( ) No ( )**

All compartments and entrance doorframes shall have full width formed stainless steel thresholds to protect the lower edge of the frame.

#### **7.1.5. Module Compartment/Entrance Doors**

**7.1.5.a.** **Bidder Complies: Yes ( ) No ( )**

All compartment and entrance doors shall be box pan formed doors with a minimum thickness of 2 inches.

**7.1.5.b.** **Bidder Complies: Yes ( ) No ( )**

All door frames shall have a flange for the installation of an air cell hollow core, 360 degree compression door seal. The door seals shall create watertight, dust-free compartment integrity. Door seal shall be knock-on type. Door frames shall be such that no exterior flange is required.

**7.1.5.c.** **Bidder Complies: Yes ( ) No ( )**

Door hinges shall be full-length, piano-type, stainless steel hinges, a minimum 1.5 inch wide with a minimum 0.25 inch pin. The hinges shall be attached with a minimum 1/4-20 x 3/4 inch stainless steel pan head screws spaced a maximum of 4 inches apart. All

curbside and street side doors shall be hinged on the forward sides, with exception to the curbside passage door. All rear doors shall be hinged on the outboard sides.

**7.1.5.d.** **Bidder Complies: Yes ( ) No ( )**

All compartment door latches shall be semi flush chrome plated or stainless steel rotary style slam latches.

**7.1.5.e.** **Bidder Complies: Yes ( ) No ( )**

All entrance doors shall have release handles on the inside and outside of each door.

**7.1.5.f.** **Bidder Complies: Yes ( ) No ( )**

All exterior doors shall have rotary latches and striker posts that meet FMVSS 206 requirements. Striker posts shall be adjustable and shall be secured with a nut from behind the door frame.

**7.1.5.g.** **Bidder Complies: Yes ( ) No ( )**

Doors greater than 45 inches tall shall have double rotary latches activated by stainless steel rods. Once final adjustments have been made, threads shall have Loctite or equivalent applied.

**7.1.5.h.** **Bidder Complies: Yes ( ) No ( )**

All double-door compartments shall have an exterior handle and rotary latches on each door. Doors shall latch to doorframe-mounted striker posts only and not to one another.

**7.1.5.i.** **Bidder Complies: Yes ( ) No ( )**

Curbside and rear entrance doors shall have interior handles with dual-point, rod-actuated, rotary latch systems that are lockable inside and out.

**7.1.5.j.** **Bidder Complies: Yes ( ) No ( )**

All compartment door locks shall be keyed alike. Four (4) compartment keys shall be shipped loose

**7.1.5.k.** **Bidder Complies: Yes ( ) No ( )**

All entrance doors shall both have emergency release levers, one at the top and bottom of each door and accessible from the inside of the module. A label stating "EMERGENCY RELEASE" shall be added above each lever.

**7.1.5.l.** **Bidder Complies: Yes ( ) No ( )**

All compartment doors shall be equipped with a door holder capable of holding the door at approximately a 90-degree angle on any road surface.



**7.1.5.m.**

**Bidder Complies: Yes ( ) No ( )**

All passage doors shall be grabber type hold open devices with replaceable rubber catches installed on the aft of the door.

**7.1.5.n.**

**Bidder Complies: Yes ( ) No ( )**

All compartment door skins shall be a minimum 0.080 inch bright aluminum diamond plate and be able to be removed to service door hardware.

**7.1.5.o.**

**Bidder Complies: Yes ( ) No ( )**

Door skins shall NOT be installed with rivets, epoxies or any mechanical means that requires drilling, grinding, or cutting to remove door skins.

**7.1.5.p.**

**Bidder Complies: Yes ( ) No ( )**

All entrance door skins shall be minimum 0.090 inch brushed stainless steel. Door skins shall be able to be removed to service door hardware.

**7.1.5.q.**

**Bidder Complies: Yes ( ) No ( )**

Door skins shall NOT be installed with rivets, epoxies or any mechanical means that requires drilling, grinding, or cutting to remove door skins.

**7.1.5.r.**

**Bidder Complies: Yes ( ) No ( )**

Red #82/Yellow #71 chevrons shall be added to lower section of the rear passage door skins below the windows and grab handles.

**7.1.5.s.**

**Bidder Complies: Yes ( ) No ( )**

A minimum 1.5 inch red/white conspicuity tape shall be installed on the vertical edge of each door.

**7.1.5.t.**

**Bidder Complies: Yes ( ) No ( )**

All compartment, entrance doors and exterior accessed drawers shall include a door switch, either mechanical or magnetic, that controls individual compartment lighting and also connected to the door open warning system. This system notifies the driver of an ajar door anytime there is a door in the open position and the transmission is removed from the park position

**7.1.6. Module Mounting**

**7.1.6.a.**

**Bidder Complies: Yes ( ) No ( )**

Module mounting system shall be designed and installed to secure the body to the chassis for use as an automotive ambulance. The module shall be bolted to the chassis frame in no fewer than twelve locations. All module mounting fasteners shall be grade 8 bolts and secured utilizing locking nuts.

**7.1.6.b.**

**Bidder Complies: Yes ( ) No ( )**

Module shall be isolated from the chassis using rubber mounts to prevent the transfer of road noise into the module.

**7.2. MODULE EXTERIOR**

**7.2.1. Rear Step**

**7.2.1.a.**

**Bidder Complies: Yes ( ) No ( )**

The rear step shall be a welded construction of aluminum angle, formed plates and shall be covered by bright aluminum diamond plate.

**7.2.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The center section, below the doors, shall have aggressive non-slip punched open flow design to prevent accumulation of water and snow and provide a minimum 6 inch step.

**7.2.1.c.**

**Bidder Complies: Yes ( ) No ( )**

Each end of the rear step shall be angled to prevent dragging of corners in high angle of departure areas.

**7.2.1.d.**

**Bidder Complies: Yes ( ) No ( )**

Bright aluminum diamond plate shall be formed on front and rear edges for channel type strength and formed aluminum close out shall be welded to the underside of the outer portions of the rear step.

**7.2.1.e.**

**Bidder Complies: Yes ( ) No ( )**

The bumper shall be bolted directly to the chassis frame using high strength minimum grade 5 bolts.

**7.2.1.f.**

**Bidder Complies: Yes ( ) No ( )**

Bumper shall be easily removable and replaceable in the case of damage.

**7.2.1.g.**

**Bidder Complies: Yes ( ) No ( )**

Bumper step shall be designed to accommodate a one person Stryker power-load system and cot.

**7.2.1.h.**

**Bidder Complies: Yes ( ) No ( )**

Rear step shall be fixed and shall NOT utilize folding or flip-up style steps.

### **7.2.2. Rub Rails**

**7.2.2.a.** **Bidder Complies: Yes ( ) No ( )**

Rub rails shall be bright finished extruded aluminum of a double channel design for maximum strength.

**7.2.2.b.** **Bidder Complies: Yes ( ) No ( )**

Rub rails shall be a minimum of 2 inches high a minimum of 0.75 inches wide and run along the lower edge of body, interrupted only by wheel well openings.

**7.2.2.c.** **Bidder Complies: Yes ( ) No ( )**

A red/white conspicuity reflective tape shall be installed in the insert area of the rub rail.

### **7.2.3. Fender Rings**

**7.2.3.a.** **Bidder Complies: Yes ( ) No ( )**

Fender rings shall be installed on the rear wheel well opening of the module.

**7.2.3.b.** **Bidder Complies: Yes ( ) No ( )**

They shall be bright polished aluminum or stainless steel with a rounded outer edge following the full contour of the wheel well opening.

### **7.2.4. Drip Rail**

**7.2.4.a.** **Bidder Complies: Yes ( ) No ( )**

Drip rails shall be constructed of extruded anodized aluminum.

**7.2.4.b.** **Bidder Complies: Yes ( ) No ( )**

Drip rails shall be installed and run the full length of module at top of the street side, curb side and rear of the module.

**7.2.4.c.** **Bidder Complies: Yes ( ) No ( )**

Drip rails shall be installed over each exterior compartment.

**7.2.4.d.** **Bidder Complies: Yes ( ) No ( )**

Drip rails shall be installed with bonding tape and mechanical fasteners that will withstand exposure to the elements.

**7.2.4.e.** **Bidder Complies: Yes ( ) No ( )**

Drip rails shall be finished with 45 degree angled ends to avoid hooking materials which brush against the vehicle causing damage.

### **7.2.5. Rock Guards**

**7.2.5.a.** **Bidder Complies: Yes ( ) No ( )**

Rock guards shall be installed on the front forward facing lower corners of the street side and curb side module.

**7.2.5.b.** **Bidder Complies: Yes ( ) No ( )**

Rock guards shall be constructed of bright aluminum diamond plate.

**7.2.5.c.** **Bidder Complies: Yes ( ) No ( )**

Rock guards shall cover front module corners 24 inches up from bottom of the body and cover the front of the body from the cab to the side of the module where it will wrap 2.5 inches down the side of the module.

### **7.2.6. Rear Kick Panel**

**7.2.6.a.** **Bidder Complies: Yes ( ) No ( )**

A rear kick panel shall be installed from the top of the rear step to the bottom of the rear doors and extend across the full width of the module.

**7.2.6.b.** **Bidder Complies: Yes ( ) No ( )**

The outer edges of the rear kick panel shall wrap around the corners of the module 2.5 inches on each side.

**7.2.6.c.** **Bidder Complies: Yes ( ) No ( )**

The rear kick panel shall be constructed of bright aluminum diamond plate.

### **7.2.7. Fuel Fill**

**7.2.7.a.** **Bidder Complies: Yes ( ) No ( )**

A fuel fill shall be installed in accordance with Body Builder's recommendation accessing the chassis supplied fuel tank.

**7.2.7.b.** **Bidder Complies: Yes ( ) No ( )**

The fuel fill shall be located on the street side of the module aft of the rear axle.

**7.2.7.c.** **Bidder Complies: Yes ( ) No ( )**

The fuel fill shall have a polished cast aluminum fill well and be properly vented.

**7.2.7.d.** **Bidder Complies: Yes ( ) No ( )**

A label shall be installed and clearly marked "GASOLINE ONLY".

**7.2.7.e.** **Bidder Complies: Yes ( ) No ( )**

A fuel splash guard shall be constructed of brushed stainless steel and installed below the fuel fill extending to the bottom of the module.

**7.2.7.f.** **Bidder Complies: Yes ( ) No ( )**

The fuel fill cap shall be installed and equipped with a tether.

### **7.2.8. Module Windows**

**7.2.8.a.** **Bidder Complies: Yes ( ) No ( )**

Five (5) windows shall be installed in the module.

**7.2.8.b.** **Bidder Complies: Yes ( ) No ( )**

The windows shall have black anodized aluminum frames, rubber gaskets and be attached with screws for ease of replacement.

**7.2.8.c.** **Bidder Complies: Yes ( ) No ( )**

All module windows shall be tinted with double dark carbon 5% window tinting.

**7.2.8.d.** **Bidder Complies: Yes ( ) No ( )**

One (1) window shall be installed in the curbside module entry door.

**7.2.8.e.** **Bidder Complies: Yes ( ) No ( )**

The window shall be 18.75 high and 18.75 wide with sliding glass, a positive self-latching catch, and a window screen.

**7.2.8.f.** **Bidder Complies: Yes ( ) No ( )**

Two (2) windows shall be installed in the rear module entrance doors one on each side.

**7.2.8.g.** **Bidder Complies: Yes ( ) No ( )**

The rear door windows shall be 18.75 high and 18.75 wide and have fixed glass to prevent vehicle exhaust fumes from entering the module.

**7.2.8.h.** **Bidder Complies: Yes ( ) No ( )**

Two (2) module side windows shall be installed in the module.

**7.2.8.i.** **Bidder Complies: Yes ( ) No ( )**

The windows shall be 18.75 inches high and 37.5 inches wide with sliding glass, a positive self-latching catch, and a window screen.

**7.2.8.j.** **Bidder Complies: Yes ( ) No ( )**

One (1) window shall be located on the street side of the module below cabinets #2 and #3.

**7.2.8.k.**

**Bidder Complies: Yes ( ) No ( )**

One (1) window shall be located on the curbside below cabinets #11 and #12.

**7.2.9. Rear Mud Flaps**

**7.2.9.a.**

**Bidder Complies: Yes ( ) No ( )**

Mud flaps shall be installed behind the rear wheels.

**7.3. EXTERIOR COMPARTMENTS**

**7.3.1. Compartment Ventilation**

**7.3.1.a.**

**Bidder Complies: Yes ( ) No ( )**

To allow for proper air circulation & flow each compartment shall have a venting route. The venting locations shall be determined by best-fit for each body configuration. The vents shall include a louvered plates or mesh covers and installed appropriately on the compartment interior walls.

**7.3.1.b.**

**Bidder Complies: Yes ( ) No ( )**

A baffled drain hole shall be provided in all exterior compartment bottoms that extend below the floor line.

**7.3.2. Compartment Flooring**

**7.3.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Floor tiles shall be installed on the floor of all exterior compartments. The tile shall be custom fitted to the interior compartment floor construction to protect the entire floor surface from equipment damage.

**7.3.2.b.**

**Bidder Complies: Yes ( ) No ( )**

Floor tiles shall be black or light gray in color.

**7.3.2.c.**

**Bidder Complies: Yes ( ) No ( )**

All Compartment shelves shall be lined with light gray or black easy sweep mats.

**7.3.2.d.**

**Bidder Complies: Yes ( ) No ( )**

All surfaces shall be impervious to soap, disinfectants, and water to permit washing and sanitizing.

**7.3.3. Compartment #1 Street Side Forward**

**7.3.3.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be one (1) compartment located on the street side lower ahead of the rear wheels. This compartment shall be approximately 62 inches wide, 39 inches high and 20

inches deep. The door opening shall be approximately 62 inches wide and 39 inches high.

**7.3.3.b. Bidder Complies: Yes ( ) No ( )**

The compartment shall provide inside/outside access to cabinet #8, the cabinet under the action area cabinet #5.

**7.3.3.c. Bidder Complies: Yes ( ) No ( )**

The compartment shall include one (1) fixed horizontal shelf. The shelf shall be fixed at floor level and include a fluid barrier to prevent fluids from running from the interior of the module into the compartment area.

**7.3.3.d. Bidder Complies: Yes ( ) No ( )**

The compartment shall include One (1) adjustable horizontal shelf shall be located above the fixed shelf and be infinitely adjustable the complete range of the compartment from top to bottom. The upper portion of the compartment shall have four (4) vertical tracks installed from the top of the fixed shelf to the top of the compartment to allow full range of the adjustable shelf.

**7.3.3.e. Bidder Complies: Yes ( ) No ( )**

The compartment shall include two (2) vertical infinitely adjustable dividers in the area below the fixed shelf. The dividers shall be able to adjust the complete range of the compartment from left to right. There shall be two (2) full width horizontal tracks installed on the underside of the fixed shelf and one full width (1) horizontal track installed on the rear wall of the compartment to allow for full range adjustment of the vertical dividers.

**7.3.3.f. Bidder Complies: Yes ( ) No ( )**

The compartment shall include two (2) vertical LED light strips, one (1) on each doorframe. The compartment lights shall illuminate when the compartment doors is open.

**7.3.3.g. Bidder Complies: Yes ( ) No ( )**

A push button timer to control the infection control system shall be installed on the forward wall of the compartment with a warning label.

**7.3.3.h. Bidder Complies: Yes ( ) No ( )**

The 120VAC Power Box shall be installed on the forward wall of this compartment recessed so as not to protrude into the compartment area.

**7.3.3.i. Bidder Complies: Yes ( ) No ( )**

One filtered compartment vent shall be installed below floor level in the back wall of the compartment.

**7.3.3.j.**

**Bidder Complies: Yes ( ) No ( )**

Compartment #1 shall include double doors hinged on the outer vertical edges. The forward door shall open first.

**7.3.4. Compartment #2 Street Side Rear**

**7.3.4.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be one (1) compartment located on the street side behind the rear wheels. The compartment shall be approximately 32 inches wide, 74 inches high and 20 inches deep. The door opening shall be approximately 32 inches wide and 74 inches high.

**7.3.4.b.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall have a single door hinged at the front.

**7.3.4.c.**

**Bidder Complies: Yes ( ) No ( )**

One (1) full height infinitely adjustable vertical divider shall be installed in the center of the compartment. Four (4) strips of aluminum track shall be installed for the vertical divider, two (2) shall be installed on the ceiling and two (2) shall be installed on the floor of the compartment to allow the vertical divider to be adjusted.

**7.3.4.d.**

**Bidder Complies: Yes ( ) No ( )**

One (1) vertically adjustable full depth bin shelf 10.5 inches wide shall be installed in the compartment forward of the vertical divider above the oxygen bottle. Two (2) vertical aluminum tracks shall be installed on the back wall of the compartment to allow the bin shelf to be adjusted.

**7.3.4.e.**

**Bidder Complies: Yes ( ) No ( )**

One (1) horizontal adjustable bin shelf 10.5 inches wide and 2 inches deep shall be installed in the compartment aft of the vertical divider above stair chair provisions. Three (3) vertical aluminum tracks shall be installed the full height of the compartment to allow the bin shelf to be adjusted. Two (2) shall be installed on the aft wall of the compartment and One (1) shall be installed on the rear wall of the compartment.

**7.3.4.f.**

**Bidder Complies: Yes ( ) No ( )**

A seatbelt style strap and shall be installed on the lower aft section of the compartment between the vertical shelf and the rear of the compartment to secure a District supplied and installed stair chair.

**7.3.4.g.**

**Bidder Complies: Yes ( ) No ( )**

A 2 inch aluminum strap shall be installed from the forward bin shelf to the vertical divider to secure district supplied and installed backboards.



**7.3.4.h.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall have a provisions installed to secure a District supplied and installed H or M size oxygen cylinder in the forward rear area of the compartment.

**7.3.4.i.**

**Bidder Complies: Yes ( ) No ( )**

One filtered compartment vent shall be installed in the area below the floor level on the back wall of the compartment

**7.3.4.j.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall include two (2) vertical LED light strips, one (1) on each doorframe. The compartment lights shall illuminate when the compartment door is open.

**7.3.5. Compartment #3 Curb Side Rear**

**7.3.5.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be one (1) compartment located curbside behind the rear wheels. This compartment shall be approximately 33 inches wide, 74 inches high and 20 inches deep. The door opening shall be approximately 33 inches wide and 74 inches high.

**7.3.5.b.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall have a single door hinged at the front.

**7.3.5.c.**

**Bidder Complies: Yes ( ) No ( )**

There shall be two (2) infinitely adjustable horizontal shelves. Four (4) vertical tracks shall be installed from bottom to the top of the compartment and two (2) at the forward wall and two (2) at the aft wall to allow full range of adjustment for the horizontal shelves.

**7.3.5.d.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) "J" style heavy duty coat hooks shall be installed. One on the forward outboard vertical track between the horizontal shelves and one (1) on the aft outboard vertical track between the horizontal shelves.

**7.3.5.e.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) horizontal tracks shall be mounted to the back wall of the compartment for two District supplied and installed SCBA brackets. One (1) track shall be installed at 37 inches from the compartment floor and one (1) track shall be installed at 48 inches from the compartment floor.

**7.3.5.f.**

**Bidder Complies: Yes ( ) No ( )**

One filtered compartment vent shall be installed in the area below the floor level in the back wall of the compartment

**7.3.5.g.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall include two (2) vertical LED light strips, one (1) on each doorframe. The compartment lights shall illuminate when the compartment door is open.

**7.3.5.h.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall include one (1) 20-amp circuit, wired battery hot, coiled and capped in the upper, forward inside corner for customer installed equipment.

**7.3.6. Compartment #4 Curb Side Front**

**7.3.6.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be one (1) compartment located ahead of the rear wheels. The compartment shall be approximately 26 inches wide, 44 inches high and 31 inches deep. The door opening shall be approximately 26 inches wide and 44 inches high.

**7.3.6.b.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall have a single door hinged at the front.

**7.3.6.c.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall provide inside/outside access to cabinet #19.

**7.3.6.d.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall have a fixed shelf at floor level of the interior of the module and have a fluid barrier at floor level to prevent fluids from entering the compartment. Additional shelving is addressed with cabinet #19

**7.3.6.e.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall have additional storage below floor level accessed from the exterior of the module only.

**7.3.6.f.**

**Bidder Complies: Yes ( ) No ( )**

The compartment shall include two (2) vertical LED light strips, one (1) on each doorframe. The compartment lights shall illuminate when the compartment door is open.

**7.3.7. Entrance Doorways**

**7.3.7.a. Rear Entrance**

**Bidder Complies: Yes ( ) No ( )**

Two rear module entrance doors shall be provided. Doorway opening shall be approximately 50 inches wide and 68 inches tall. Rear doors shall be hinged on the outboard sides of the door opening.

### **7.3.7.b. Curbside Entrance**

**Bidder Complies: Yes ( ) No ( )**

One (1) curbside entrance doorway shall be provided. Curbside doorway dimensions shall be approximately 31 inches wide and 82 inches tall. Curbside door shall be hinged at the rear.

## **7.4. MODULE INTERIOR**

### **7.4.1.a.**

**Bidder Complies: Yes ( ) No ( )**

All interior hangers, supports, fasteners, latches, and hinges shall be of a near-flush-type design. The patient compartment shall be free of sharp projections. Exposed edges and corners shall be broken with a radius or protected with 1 inch high-density foam covered with heavy-duty seamless vinyl colored to match interior upholstery.

### **7.4.1.b.**

**Bidder Complies: Yes ( ) No ( )**

All patient compartment surfaces and finishes shall be impervious to soap, disinfectants, and water, to permit washing and sanitizing.

### **7.4.2. Wall Coverings**

#### **7.4.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The upper module interior wall coverings shall consist of light gray, heavy-grade, 0.125 inch ABS vinyl panels.

#### **7.4.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The squad bench sides and lower portion of the street side wall coverings shall be nonporous, color-coordinated material.

#### **7.4.2.c.**

**Bidder Complies: Yes ( ) No ( )**

All wall covering panels shall be attached with a permanent based pressure sensitive adhesive. Screws, rivets or any penetrating fastener shall not be utilized.

### **7.4.3. Headliner**

#### **7.4.3.a.**

**Bidder Complies: Yes ( ) No ( )**

A headliner shall be installed that completely covers the ceiling of the interior of the module.

#### **7.4.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The headliner shall be constructed aluminum and welded to the structure of the ambulance. The headliner shall be painted white with light gray splatter paint.

#### **7.4.4. Module Flooring**

**7.4.4.a.** **Bidder Complies: Yes ( ) No ( )**

An insulated floor shall be installed over the subfloor to reduce road noise and provide a thermal barrier to undercarriage temperatures.

**7.4.4.b.** **Bidder Complies: Yes ( ) No ( )**

The module flooring shall be slip-retardant sheet flooring providing durability, ease of maintenance, and stain resistance.

**7.4.4.c.** **Bidder Complies: Yes ( ) No ( )**

The module flooring shall contain a high concentration of microscopic aluminum oxide particles and colored quartz crystals suspended throughout the thickness with silicon carbide grains in the entire wear surface for slip-retardant performance.

**7.4.4.d.** **Bidder Complies: Yes ( ) No ( )**

The module floor shall be bacteriostatic incorporated to give flooring excellent anti-bacterial activity.

**7.4.4.e.** **Bidder Complies: Yes ( ) No ( )**

The module flooring shall be manufactured for wear resistance to meet ASTM C 501, indentation resistance in accordance with ASTM F 1303 and ASTM F 970, Grade 1 standards, shall meet ASTM D 2047 Slip Retardant, ASTM F 970 Static Load, ASTM E648, CMVSS, FMVSS 302, CAN ULC S102.2 Fire Data Tests.

**7.4.4.f.** **Bidder Complies: Yes ( ) No ( )**

The module flooring shall be seamless and cove up the sidewalls a minimum of 5 inches as a seal.

#### **7.4.5. Head Pads / Seatbacks**

**7.4.5.a.** **Bidder Complies: Yes ( ) No ( )**

Head pads shall be installed over all module access openings and seatbacks.

**7.4.5.b.** **Bidder Complies: Yes ( ) No ( )**

The head pads shall be constructed of minimum 0.5 inch high density foam pads covered with light gray heavy duty seamless vinyl.

**7.4.5.c.** **Bidder Complies: Yes ( ) No ( )**

Seatbacks shall be installed behind all seating positions.

**7.4.5.d.** **Bidder Complies: Yes ( ) No ( )**

The seatbacks shall be constructed of a minimum 1 inch high density foam pads covered with light gray heavy duty seamless vinyl.

#### **7.4.6. Seat Cushions**

**7.4.6.a.** **Bidder Complies: Yes ( ) No ( )**

Seat cushions shall be installed on all seating positions.

**7.4.6.b.** **Bidder Complies: Yes ( ) No ( )**

Seat cushions shall be constructed of a minimum 3 inch high density foam padding covered with light gray seamless vinyl.

#### **7.4.7. Ceiling Grab Rails**

**7.4.7.a.** **Bidder Complies: Yes ( ) No ( )**

Two (2) 90 inch long and 1.25 inch diameter stainless steel grab rails with a minimum of three (3) support brackets shall be installed to the roof structural framing on the ceiling of the module.

**7.4.7.b.** **Bidder Complies: Yes ( ) No ( )**

The grab rails shall be installed using threaded inserts and stainless steel fasteners. Self tapping or sheet metal screws shall not be utilized.

#### **7.4.8. Entrance Door Grab Rails**

**7.4.8.a.** **Bidder Complies: Yes ( ) No ( )**

The curb side and both rear module entrance doors shall have a 1.25 inch stainless steel “L” style grab rail installed on the door to assist in closing the door and entering the module.

**7.4.8.b.** **Bidder Complies: Yes ( ) No ( )**

The grab rails shall be installed using threaded inserts and stainless steel fasteners. Self tapping or sheet metal screws shall not be utilized.

**7.4.8.c.** **Bidder Complies: Yes ( ) No ( )**

A 1.25 inch “L” style stainless steel grab rail shall be installed aft of the curb side passage door to be used as an entry assist rail. The lower end of the grab rail shall be attached to the forward end of the squad bench and the upper end shall be attached to the curb side wall.

**7.4.8.d.** **Bidder Complies: Yes ( ) No ( )**

The grab rails shall be installed using threaded inserts and stainless steel fasteners. Self tapping or sheet metal screws shall not be utilized.

**7.4.8.e.** **Bidder Complies: Yes ( ) No ( )**

A 12 inch long by 1.25 inch stainless steel grab rail shall be installed on the forward side of the curb side passage door to be used as an entry assist rail.

**7.4.8.f.**

**Bidder Complies: Yes ( ) No ( )**

The grab rails shall be installed using threaded inserts and stainless steel fasteners. Self tapping or sheet metal screws shall not be utilized.

**7.4.9. IV Hangers**

**7.4.9.a.**

**Bidder Complies: Yes ( ) No ( )**

Three (3) Cast Products recessed IV hangers shall be installed in the ceiling of the module.

**7.4.9.b.**

**Bidder Complies: Yes ( ) No ( )**

The IV hangers shall be installed between the overhead grab rails. One over the head area of the cot and two over the knee area of the cot.

**7.4.9.c.**

**Bidder Complies: Yes ( ) No ( )**

The spring loaded buttons shall be removed from the IV Hangers prior to installation.

**7.4.10. Cot Mount**

**7.4.10.a.**

**Bidder Complies: Yes ( ) No ( )**

A District supplied Stryker Power Load #6390 cot fastener shall be installed in the apparatus. The Power Load system shall be installed according to Stryker specifications.

**7.4.10.b.**

**Bidder Complies: Yes ( ) No ( )**

A safety hook shall be installed in the Power Load floor plate so that the system is compatible with a non-Power Load Stryker X-frame cot.

**7.4.10.c.**

**Bidder Complies: Yes ( ) No ( )**

A rear rail floor plate shall be installed for mounting a rear rail clamp for use with Stryker non-Power Load cots.

**7.4.10.d.**

**Bidder Complies: Yes ( ) No ( )**

A rear rail lock and fastener shall be shipped loose.

**7.4.11. Oxygen System**

**7.4.11.a.**

**Bidder Complies: Yes ( ) No ( )**

An electric oxygen system shall be installed in the apparatus.

**7.4.11.b.**

**Bidder Complies: Yes ( ) No ( )**

The entire oxygen system shall be installed and assembled utilizing certified oxygen hose with a minimum burst strength of 1,000 PSI.

**7.4.11.c.** **Bidder Complies: Yes ( ) No ( )**

Upon completion of installation the entire system shall be pressure tested and certified.

**7.4.11.d.** **Bidder Complies: Yes ( ) No ( )**

Three (3) Ohio style oxygen outlets with constant flow regulators shall be installed in the module.

**7.4.11.e.** **Bidder Complies: Yes ( ) No ( )**

One (1) outlet shall be installed in the action area, cabinet #5, and two (2) shall be installed in the ceiling between the overhear grab rails.

**7.4.11.f.** **Bidder Complies: Yes ( ) No ( )**

The ceiling mounted oxygen outlets shall be installed so that the flowmeter is facing forward.

**7.4.11.g.** **Bidder Complies: Yes ( ) No ( )**

The electric oxygen system shall be controlled through an electric solenoid with manual bypass.

**7.4.11.h.** **Bidder Complies: Yes ( ) No ( )**

The system shall include an LED content display that continually monitors the pressure on the oxygen bottle.

**7.4.11.i.** **Bidder Complies: Yes ( ) No ( )**

An audible low-pressure alarm shall be installed and located on the wall aft of the street side squad bench. The audible alarm shall have the ability to be silenced.

**7.4.11.j.** **Bidder Complies: Yes ( ) No ( )**

A switch shall be installed in the attendant panel to turn on and off the electric oxygen system.

**7.4.11.k.** **Bidder Complies: Yes ( ) No ( )**

One (1) oxygen tank wrench shall be installed with a tether in compartment #2.

#### **7.4.12. Suction System**

**7.4.12.a.** **Bidder Complies: Yes ( ) No ( )**

A SSCourt portable suction collector with disposable canister shall be installed in the action area cabinet #5.

### **7.4.13. Seatbelts**

#### **7.4.13.a.**

**Bidder Complies: Yes ( ) No ( )**

Six (6) sets of DOT compliant seatbelts shall be installed in the passenger seating positions.

#### **7.4.13.b.**

**Bidder Complies: Yes ( ) No ( )**

Three (3) sets of two-point automatic locking retractor seatbelts shall be installed on the curbside squad bench. Three (3) additional lower seat belt receivers shall be installed for the use with sit-up or stretcher patients

#### **7.4.13.c.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) sets of two-point automatic locking retractor seatbelts shall be installed on the street side squad bench.

#### **7.4.13.d.**

**Bidder Complies: Yes ( ) No ( )**

The bench seat on cabinet #20 shall have one (1) two-point automatic locking retractor seatbelt.

### **7.4.14. Module Insulation**

#### **7.4.14.a.**

**Bidder Complies: Yes ( ) No ( )**

The module side, ends, roof, doors, and floor shall be insulated to enhance the interior environment and to restrict heat, cold, and external noise from entering the module.

#### **7.4.14.b.**

**Bidder Complies: Yes ( ) No ( )**

The insulation shall be a non-settling foam plank material with a minimum thickness of 0.75 inches. Insulation shall be thicker depending upon location and available space.

#### **7.4.14.c.**

**Bidder Complies: Yes ( ) No ( )**

Closed cell polyethylene foam tape shall be used as a thermal break on the inside surface of the roof and wall tubes.

### **7.4.15. Climate Control System**

#### **7.4.15.a.**

**Bidder Complies: Yes ( ) No ( )**

A heating and air conditioning system shall be installed in cabinet #15.

#### **7.4.15.b.**

**Bidder Complies: Yes ( ) No ( )**

The heating system shall deliver a minimum heating capacity to heat the entire module from 30 degrees Fahrenheit to 70 degrees Fahrenheit within 20 minutes.



**7.4.15.c.**

**Bidder Complies: Yes ( ) No ( )**

The heating system shall be able to maintain an interior module temperature of 70 degrees Fahrenheit with an exterior temperature of 0 degrees Fahrenheit.

**7.4.15.d.**

**Bidder Complies: Yes ( ) No ( )**

Adjustable louvers shall be provided to direct air flow to all positions for maximum crew and patient comfort.

**7.4.15.e.**

**Bidder Complies: Yes ( ) No ( )**

The air conditioning system shall be capable of cooling the module from 110 degrees Fahrenheit to 65 degrees Fahrenheit at 60% humidity in less than 20 minutes with an engine RPM of 1400 or less and maintain an interior temperature of 70 degrees Fahrenheit with an exterior temperature of 110 degrees Fahrenheit at idle..

**7.4.15.f.**

**Bidder Complies: Yes ( ) No ( )**

To meet the performance requirements of these specifications the air conditioning system shall require a supplementary compressor and condensing components in addition to the standard OEM compressor and condensing systems. The Bidder shall include these items with the submitted proposal.

**7.4.15.g.**

**Bidder Complies: Yes ( ) No ( )**

The air-conditioning compressor shall be a belt driven engine mounted compressor. The compressor shall be compatible with R134-a refrigerant.

**7.4.15.h.**

**Bidder Complies: Yes ( ) No ( )**

A gravity condensation drain system shall be utilized to remove all condensation from the evaporator units on a slope of up to a 13 percent grade in any direction and direct it to the exterior of the chassis cab. Systems utilizing pumps to remove condensation are not acceptable.

**7.4.15.i.**

**Bidder Complies: Yes ( ) No ( )**

If a roof mounted condenser is utilized the visible cover (excluding the core fins) shall be painted to match the module color.

**7.4.15.j.**

**Bidder Complies: Yes ( ) No ( )**

The climate control system shall include a digital thermostat with the controls located in the action area cabinet #5.

**7.4.15.k.**

**Bidder Complies: Yes ( ) No ( )**

To supplement heated or cooled air with fresh air an external air intake shall be provided on the side of the module.

**7.4.15.l.**

**Bidder Complies: Yes ( ) No ( )**

The intake shall consist of an opening protected by an aluminum vent cover and formed to prevent the collection of moisture.

**7.4.15.m.**

**Bidder Complies: Yes ( ) No ( )**

A washable filter media shall be installed in the intake chamber.

**7.4.15.n.**

**Bidder Complies: Yes ( ) No ( )**

A return air path shall be installed for the air conditioning evaporator and shall have an area equal to at least twice the blower outlet area.

**7.4.16. Exhaust Fan**

**7.4.16.a.**

**Bidder Complies: Yes ( ) No ( )**

An electric powered exhaust fan shall be installed and located in the street side rear corner of the module.

**7.4.16.b.**

**Bidder Complies: Yes ( ) No ( )**

A switch shall be installed in the attendant panel in the action area cabinet #5 to turn on and off the exhaust fan.

**7.4.16.c.**

**Bidder Complies: Yes ( ) No ( )**

The exhaust outlet shall consist of an opening protected by an aluminum vent cover and formed to prevent the collection of moisture.

**7.4.17. No Smoking Signs**

**7.4.17.a.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) combination no smoking / fasten seatbelt signs shall be installed.

**7.4.17.b.**

**Bidder Complies: Yes ( ) No ( )**

One (1) sign shall be installed in the driver area in plain view of all occupants and one (1) sign shall be installed in the module in plain view of all crew members.

**7.4.18. White Marker Board**

**7.4.18.a.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) 18 inch wide and 24 inch high framed white marker boards shall be installed.

**7.4.18.b.**

**Bidder Complies: Yes ( ) No ( )**

One (1) marker board shall be installed on each the forward facing walls aft of the street side and curb side squad benches.

#### **7.4.19. Clock**

##### **7.4.19.a.**

**Bidder Complies: Yes ( ) No ( )**

An atomic controlled clock shall be installed centered on the head pad above the rear module entrance doors.

##### **7.4.19.b.**

**Bidder Complies: Yes ( ) No ( )**

The clock shall be digital display and show hours (12/24 selectable), minutes, seconds, date, day, and temperature.

#### **7.4.20. Sharps Container**

##### **7.4.20.a.**

**Bidder Complies: Yes ( ) No ( )**

One (1) five quart mail box style sharps container shall be installed on the curbside wall forward of the seatback.

#### **7.4.21. Cool Cabinet**

##### **7.4.21.a.**

**Bidder Complies: Yes ( ) No ( )**

A 12 volt DC non-locking cool cabinet shall be installed as cabinet #18.

##### **7.4.21.b.**

**Bidder Complies: Yes ( ) No ( )**

The cool cabinet shall be properly insulated to increase efficiency and ability to maintain temperatures.

##### **7.4.21.c.**

**Bidder Complies: Yes ( ) No ( )**

There shall be vents added to provide adequate air flow to the cooling coils.

##### **7.4.21.d.**

**Bidder Complies: Yes ( ) No ( )**

The cool cabinet shall be wired to operate on either shoreline or module power.

##### **7.4.21.e.**

**Bidder Complies: Yes ( ) No ( )**

A digital thermostat shall be installed to indicate the temperature inside of the cool cabinet.

#### **7.4.22. Glove Butlers**

##### **7.4.22.a.**

**Bidder Complies: Yes ( ) No ( )**

A glove butler cabinet with a bottom hinged painted aluminum door with a twist slam style latch shall be installed above the curb side module entrance door. See cabinet #13.

### **7.4.23. Bench Restraint**

#### **7.4.23.a.**

**Bidder Complies: Yes ( ) No ( )**

A net system installed at the forward end of the curb side squad bench shall be installed to prevent a person seated on the bench seat from traveling forward off the seat and into the front cabinetry due to sudden braking.

#### **7.4.23.b.**

**Bidder Complies: Yes ( ) No ( )**

The net system shall be constructed of black 2 inch webbing and shall be easily detached for cleaning or replacement.

### **7.4.24. Oxygen Bottle Storage**

#### **7.4.24.a.**

**Bidder Complies: Yes ( ) No ( )**

One (1) Cast Products OA1205-DUAL-D-1 dual mount strapless oxygen cylinder holder for District supplied and installed "D" size oxygen cylinders shall be installed.

#### **7.4.24.b.**

**Bidder Complies: Yes ( ) No ( )**

One (1) custom built single cylinder holder for District supplied and installed "D" sized oxygen bottle with yoke to accommodate regulator shall be installed in compartment #4 on the fixed shelf against the forward wall of cabinet #20. Cylinder shall be accessible from exterior only.

### **7.4.25. Medications Safe**

#### **7.4.25.a.**

**Bidder Complies: Yes ( ) No ( )**

A Knox MedVault 2.5 WiFi enabled flange mounted safe shall be install as cabinet #19.

## **7.5. INTERIOR CABINETS**

#### **7.5.1.a.**

**Bidder Complies: Yes ( ) No ( )**

Module interior cabinets shall be formed of a minimum 0.090 aluminum plate and shall be securely mounted or welded to the structural framing.

#### **7.5.1.b.**

**Bidder Complies: Yes ( ) No ( )**

All interior adjustable shelves and dividers shall be mounted on infinitely adjustable track. Adjustable track shall run the full length/height of the cabinets to allow for the greatest available adjustment of the shelves and dividers.

#### **7.5.1.c.**

**Bidder Complies: Yes ( ) No ( )**

All cabinets at ceiling level shall have removable backs for access to wiring harnesses. Stacked cabinets shall have removable panels for wiring and hose access.

**7.5.1.d.** **Bidder Complies: Yes ( ) No ( )**

All interior upholstery shall be heavy duty seamless vinyl light gray in color.

**7.5.1.e.** **Bidder Complies: Yes ( ) No ( )**

All surfaces shall be impervious to soap, disinfectants, and water to permit washing and sanitizing.

**7.5.1.f.** **Bidder Complies: Yes ( ) No ( )**

All interior cabinets and shelves shall be lined with light gray easy sweep mats.

### **7.5.2. Side Door Step**

**7.5.2.a.** **Bidder Complies: Yes ( ) No ( )**

A recessed curbside double doorstep shall be provided which shall be a minimum of 19 inches deep and 31 inches wide.

**7.5.2.b.** **Bidder Complies: Yes ( ) No ( )**

Each door step shall include a drain hole and floor tile which is removable for cleaning purposes.

**7.5.2.c.** **Bidder Complies: Yes ( ) No ( )**

A bright aluminum diamond plate kick panel shall be installed on the sides and face of the doorsteps.

### **7.5.3. Cabinet #1**

**7.5.3.a.** **Bidder Complies: Yes ( ) No ( )**

Cabinet #1 shall be located on the street side upper forward location. The cabinet shall be approximately 36 inches wide 15 inches high and 16 inches deep.

**7.5.3.b.** **Bidder Complies: Yes ( ) No ( )**

The cabinet shall have one (1) horizontal infinitely adjustable shelf. The cabinet shall contain vertical adjustable track on the ends of the cabinet for the adjustable shelf

**7.5.3.c.** **Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a single flip up door hinged at the top. The door shall be constructed from extruded aluminum framework and transparent polycarbonate door skin.

**7.5.3.d.** **Bidder Complies: Yes ( ) No ( )**

The door shall include a twist action slam style door latch.

**7.5.3.e.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a gas shock door holder that holds the door in a minimum 90 degree angle when the door is in the open position.

**7.5.4. Cabinet #2**

**7.5.4.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #2 shall be located on the street side upper center location. The cabinet shall be approximately 36 inches wide 15 inches high and 16 inches deep.

**7.5.4.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have one (1) horizontal infinitely adjustable shelf. The cabinet shall contain vertical adjustable track on the ends of the cabinet for the adjustable shelf

**7.5.4.c.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a single flip up door hinged at the top. The door shall be constructed from extruded aluminum framework and transparent polycarbonate door skin.

**7.5.4.d.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a twist action slam style door latch.

**7.5.4.e.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a gas shock door holder that holds the door in a minimum 90 degree angle when the door is in the open position.

**7.5.4.f.**

**Bidder Complies: Yes ( ) No ( )**

A full width under cabinet LED strip light shall be installed under cabinet #2 and cabinet #3. The light shall be controlled by a switch located in the attendant panel.

**7.5.5. Cabinet #3**

**7.5.5.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #3 shall be located on the street side upper center location. The cabinet shall be approximately 36 inches wide 15 inches high and 16 inches deep.

**7.5.5.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have one (1) horizontal infinitely adjustable shelf. The cabinet shall contain vertical adjustable track on the ends of the cabinet for the adjustable shelf.

**7.5.5.c.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a single flip up door hinged at the top. The door shall be constructed from extruded aluminum framework and transparent polycarbonate door skin.

**7.5.5.d.** **Bidder Complies: Yes ( ) No ( )**

The door shall include a twist action slam style door latch.

**7.5.5.e.** **Bidder Complies: Yes ( ) No ( )**

The door shall include a gas shock door holder that holds the door in a minimum 90 degree angle when the door is in the open position.

**7.5.5.f.** **Bidder Complies: Yes ( ) No ( )**

A full width under cabinet LED strip light shall be installed under Cabinet #2 and Cabinet #3. The light shall be controlled by a switch located in the attendant panel and at the driver's console.

#### **7.5.6. Cabinet #4**

**7.5.6.a.** **Bidder Complies: Yes ( ) No ( )**

Cabinet #4 shall be located on the street side upper aft location. The cabinet shall be approximately 36 inches wide 15 inches high and 16 inches deep.

**7.5.6.b.** **Bidder Complies: Yes ( ) No ( )**

The cabinet shall have one (1) horizontal infinitely adjustable shelf. The cabinet shall contain vertical adjustable track on the ends of the cabinet for the adjustable shelf

**7.5.6.c.** **Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a single flip up door hinged at the top. The door shall be constructed from extruded aluminum framework and transparent polycarbonate door skin.

**7.5.6.d.** **Bidder Complies: Yes ( ) No ( )**

The door shall include a twist action slam style door latch.

**7.5.6.e.** **Bidder Complies: Yes ( ) No ( )**

The door shall include a gas shock door holder that holds the door in a minimum 90 degree angle when the door is in the open position.

#### **7.5.7. Action Area #5**

**7.5.7.a.** **Bidder Complies: Yes ( ) No ( )**

The action area shall be located on the street side wall beneath Cabinet #2. Dimensions for the action area shall be approximately 26 inches wide 35 inches tall and 20 inches deep.

**7.5.7.b.**

**Bidder Complies: Yes ( ) No ( )**

The action area shall contain, One (1) Oxygen outlet, One (1) suction unit, one (1) 12 volt DC receptacle, one (1) 12 volt dual USB port, one (1) 120 volt AC GFCI receptacle, the inverter remote panel, one (1) digital thermostat and the attendant switch panel.

**7.5.7.c.**

**Bidder Complies: Yes ( ) No ( )**

One (1) SSCOR #VX-2 portable suction unit with wall mount 12 Volt charging/retention bracket shall be installed on the wall above the attendant panel. The bottom of the wall mount bracket shall be a minimum of 15” above the counter top.

**7.5.7.d.**

**Bidder Complies: Yes ( ) No ( )**

The countertop for the action area shall be a one piece 16 gauge 304 stainless steel countertop with a 0.5 inch retaining lip.

**7.5.7.e.**

**Bidder Complies: Yes ( ) No ( )**

A District supplied Motorola radio head, remote speaker and hand microphone shall be installed on the forward wall of the action area.

**7.5.8. Cabinet #6 Drawers**

**7.5.8.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #6 shall be located on the street side forward center directly beneath cabinet #1. This cabinet shall be a set of four (4) drawers measuring approximately 13 inches wide 5 inches high and 19 inches deep.

**7.5.8.b.**

**Bidder Complies: Yes ( ) No ( )**

Each drawer shall operate on 18 inch slides rated at a minimum of 300 lbs. per drawer.

**7.5.8.c.**

**Bidder Complies: Yes ( ) No ( )**

Each drawer shall have a gas shock hold open/closed device installed to ensure drawers do not accidentally open or close during operation of the vehicle.

**7.5.8.d.**

**Bidder Complies: Yes ( ) No ( )**

Each drawer shall include four (4) adjustable dividers. Each drawer shall include divider supports along the sides of the drawer to allow the dividers to be adjusted easily without the use of hand tools.

**7.5.8.e.**

**Bidder Complies: Yes ( ) No ( )**

All drawers shall be finished with an automotive gray enamel finish on the formed structural support, the sides and the front of the drawer



**7.5.9. Cabinet #7 Drawers**

**7.5.9.a.** **Bidder Complies: Yes ( ) No ( )**

Cabinet #7 shall be located on the street side forward center directly beneath Cabinet #6. This cabinet shall be a set of two (2) drawers measuring approximately 13 inches wide 10 inches high and 19 inches deep.

**7.5.9.b.** **Bidder Complies: Yes ( ) No ( )**

Each drawer shall operate on 18 inch slides rated at a minimum of 300 lbs. per drawer.

**7.5.9.c.** **Bidder Complies: Yes ( ) No ( )**

Each drawer shall have a gas shock hold open/closed device installed to ensure drawers do not accidentally open or close during operation of the vehicle.

**7.5.9.d.** **Bidder Complies: Yes ( ) No ( )**

Each drawer shall include four (4) adjustable dividers. Each drawer shall include divider supports along the sides of the drawer to allow the dividers to be adjusted easily without the use of hand tools.

**7.5.9.e.** **Bidder Complies: Yes ( ) No ( )**

All drawers shall be finished with an automotive gray enamel finish on the formed structural support, the sides and the front of the drawer

**7.5.10. Cabinet #8 Drawers**

**7.5.10.a.** **Bidder Complies: Yes ( ) No ( )**

Cabinet #8 shall be located on the street side forward center directly beneath cabinet #7. This cabinet shall be a set of two (2) drawers measuring approximately 13 inches wide 5 inches high and 19 inches deep.

**7.5.10.b.** **Bidder Complies: Yes ( ) No ( )**

Each drawer shall operate on 18 inch slides rated at a minimum of 300 lbs. per drawer.

**7.5.10.c.** **Bidder Complies: Yes ( ) No ( )**

Each drawer shall have a gas shock hold open/closed device installed to ensure drawers do not accidentally open or close during operation of the vehicle.

**7.5.10.d.** **Bidder Complies: Yes ( ) No ( )**

Each drawer shall include four (4) adjustable dividers. Each drawer shall include divider supports along the sides of the drawer to allow the dividers to be adjusted easily without the use of hand tools.

**7.5.10.e.**

**Bidder Complies: Yes ( ) No ( )**

All drawers shall be finished with an automotive gray enamel finish on the formed structural support, the sides and the front of the drawer

**7.5.11. Cabinet #9**

**7.5.11.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #9 shall be located below action area cabinet #5 and drawers cabinet #8. This cabinet shall have the approximate dimensions of 45 inches wide 22 inches high and 20 inches deep.

**7.5.11.b.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall provide inside/outside access to compartment #1. Shelving requirements are addressed in compartment #1

**7.5.11.c.**

**Bidder Complies: Yes ( ) No ( )**

A fluid barrier shall be installed in the bottom of this cabinet to prevent fluids from entering the cabinet.

**7.5.12. Cabinet #10 Seat Bench with Storage Area**

**7.5.12.a.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall be the street side bench with under seat storage. It shall be approximately 63.5 inches wide 19 inches high and 20 inches deep. The storage dimensions shall be approximately 63.5 inches wide 8 inches high and 20 inches deep.

**7.5.12.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a hinged aluminum bench lid covered with high-density foam padding and finished with seamless light gray vinyl. The lid shall include an automatic hold open device.

**7.5.12.c.**

**Bidder Complies: Yes ( ) No ( )**

Bench back and head pads shall be installed. Bench back and head pads shall have high-density padding and finished with seamless light gray vinyl.

**7.5.12.d.**

**Bidder Complies: Yes ( ) No ( )**

A head pad shall be installed at the forward end of the bench aft of the action area.

**7.5.12.e.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) sets of lap style seat belts shall be installed on the bench seat. See section 7.4.13 for seat belt requirements.

**7.5.12.f.** **Bidder Complies: Yes ( ) No ( )**

The seat base to be formed from aluminum and securely anchored to sub-floor. The bottom and sides of the storage area shall be painted white with gray splatter.

**7.5.12.g.** **Bidder Complies: Yes ( ) No ( )**

An electric oxygen panel with manual bypass shall be installed on the aft wall.

**7.5.12.h.** **Bidder Complies: Yes ( ) No ( )**

An 18 inch wide by 24 inch high white marker board shall be installed on the wall aft of the squad bench.

### **7.5.13. Cabinet #11**

**7.5.13.a.** **Bidder Complies: Yes ( ) No ( )**

Cabinet #11 shall be located on the curb side upper rear location. The cabinet shall be approximately 33 inches wide 12 inches high and 11 inches deep.

**7.5.13.b.** **Bidder Complies: Yes ( ) No ( )**

The cabinet shall have one (1) horizontal infinitely adjustable shelf. The cabinet shall contain vertical adjustable track on the ends of the cabinet for the adjustable shelf

**7.5.13.c.** **Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a single flip up door hinged at the top. The door shall be constructed from extruded aluminum framework and transparent polycarbonate door skin.

**7.5.13.d.** **Bidder Complies: Yes ( ) No ( )**

The door shall include a twist action slam style door latch.

**7.5.13.e.** **Bidder Complies: Yes ( ) No ( )**

The door shall include a gas shock door holder that holds the door in a minimum 90 degree angle when the door is in the open position.

**7.5.13.f.** **Bidder Complies: Yes ( ) No ( )**

A full width under cabinet LED strip light shall be installed under cabinet #11 and cabinet #12. The light shall be controlled by a switch located in the attendant panel.

### **7.5.14. Cabinet #12**

**7.5.14.a.** **Bidder Complies: Yes ( ) No ( )**

Cabinet #12 shall be located on the curb side upper center location. The cabinet shall be approximately 33 inches wide 12 inches high and 11 inches deep.

**7.5.14.b.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall be set up as a pre-pack dispenser with nine (9) infinitely adjustable vertical dividers. The cabinet shall contain horizontal adjustable tracks on the rear wall of the cabinet for the adjustable dividers.

**7.5.14.c.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a single flip up door hinged at the top. The door shall be constructed from extruded aluminum framework and transparent polycarbonate door skin.

**7.5.14.d.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a twist action style door latch.

**7.5.14.e.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a gas shock door holder that holds the door in a minimum 90 degree angle when the door is in the open position.

**7.5.14.f.**

**Bidder Complies: Yes ( ) No ( )**

A full width under cabinet LED strip light shall be installed under cabinet #11 and cabinet #12. The light shall be controlled by a switch located in the attendant panel.

**7.5.15. Cabinet #13 Glove Storage**

**7.5.15.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #13 shall be located on the curb side upper location above the side entry door. The cabinet shall have the approximate dimensions of 27 inches wide 7 inches high and 4 inches deep.

**7.5.15.b.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall provide storage for three (3) glove boxes in the horizontal position.

**7.5.15.c.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a bottom hinged painted aluminum door with three (3) cut-outs to allow the cabinet to be used as a glove dispenser.

**7.5.15.d.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a twist style slam latch.

**7.5.15.e.**

**Bidder Complies: Yes ( ) No ( )**

The bottom of the cabinet shall include a head pad to allow protection while entering and exiting the curbside entry door. The head pad shall contain high-density foam covered with seamless light gray vinyl.

### **7.5.16. Cabinet #14 Seat Bench with Storage Area**

#### **7.5.16.a.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall be the curbside bench with under seat storage. It shall be approximately 69.5 inches wide 19 inches high and 20 inches deep. The storage dimensions shall be approximately 69.5 inches wide 8 inches high and 20 inches deep.

#### **7.5.16.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a hinged aluminum bench lid covered with high-density foam padding and finished with seamless light gray vinyl. The lid shall include an automatic hold open device.

#### **7.5.16.c.**

**Bidder Complies: Yes ( ) No ( )**

The bench back and head pads shall be installed. Bench back and head pads shall have high-density padding and finished with seamless light gray vinyl. The bench back shall be held back to allow for room of the sharps container.

#### **7.5.16.d.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) sets of two-point automatic locking retractor seatbelts shall be installed on the bench with three additional lower receivers, set up for use with sit-up or stretcher patients. See section 7.4.13 for seat belt requirements.

#### **7.5.16.e.**

**Bidder Complies: Yes ( ) No ( )**

The seat base shall be formed from aluminum and securely anchored to sub-floor. The bottom and sides of the storage area shall be painted white with gray splatter.

#### **7.5.16.f.**

**Bidder Complies: Yes ( ) No ( )**

A two (2) switch panel shall be installed on the curbside wall near the entry door. One switch will control the dome light timer and the second switch shall control the attendant light.

#### **7.5.16.g.**

**Bidder Complies: Yes ( ) No ( )**

A grab bar shall be installed on the wall at the forward end of the bench, facing forward to assist in entering and exiting through the side entry door.

#### **7.5.16.h.**

**Bidder Complies: Yes ( ) No ( )**

One (1) 5 quart sharps container with a mailbox lid and a stainless steel wall-mount bracket shall be installed above the squad bench, at the forward end.

#### **7.5.16.i.**

**Bidder Complies: Yes ( ) No ( )**

An 18 inch wide by 24inch high framed white marker board shall be installed on the wall aft of the squad bench.

### **7.5.17. Cabinet #15 HVAC**

#### **7.5.17.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #15 shall be located on the curb side front upper. This cabinet shall house the heating and air conditioning unit. This cabinet shall be approximately 35 inches wide 15 inches high and 28 inches deep.

#### **7.5.17.b.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall have panels that are easily removable to allow access for maintenance and repair and maintenance of the HVAC system and suction pump.

#### **7.5.17.c.**

**Bidder Complies: Yes ( ) No ( )**

Four vents shall be installed in a vertical plenum on the aisle side of right front stack, spaced evenly to provide air flow to the patient module.

### **7.5.18. Cabinet #16 Electrical Cabinet**

#### **7.5.18.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #16 shall be located on the front upper center. This cabinet shall house the electrical distribution module. This cabinet shall be approximately 32 inches wide 12 inches high and 10 inches deep.

#### **7.5.18.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a painted aluminum door hinged at the top. The door shall include a twist style slam latch. The door shall include a door holder that holds the door at a minimum 90 degrees while the door is in the open position.

#### **7.5.18.c.**

**Bidder Complies: Yes ( ) No ( )**

A LED cabinet light with automatic door switch shall be provided that illuminates any time the door is in the open position.

#### **7.5.18.d.**

**Bidder Complies: Yes ( ) No ( )**

The underside of the cabinet shall include a head pad to allow protection while sitting on the bench seat. The head pad shall contain high-density foam covered with seamless light gray vinyl.

### **7.5.19. Cabinet #17**

#### **7.5.19.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #17 shall be located on the curbside front upper directly below cabinet #15. This cabinet shall be approximately 27 inches wide 14 inches high and 28 inches deep.

**7.5.19.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have one (1) horizontal infinitely adjustable shelf. The cabinet shall contain vertical adjustable track on the sides of the cabinet for the adjustable shelf

**7.5.19.c.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have five (5) vertical dividers installed in the upper portion of the cabinet. The cabinet shall contain horizontal adjustable track on the top of the shelf for the vertical dividers.

**7.5.19.d.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have one (1) vertical divider installed in the lower portion of the cabinet separating the IV warmers.

**7.5.19.e.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a single flip down door hinged at the bottom. The door shall be constructed from extruded aluminum framework and transparent polycarbonate door skin.

**7.5.19.f.**

**Bidder Complies: Yes ( ) No ( )**

The door shall have an opening at the top of the polycarbonate of 3 inches that runs the full width of the door.

**7.5.19.g.**

**Bidder Complies: Yes ( ) No ( )**

The door shall have an opening at the bottom of the polycarbonate of 3 inches that runs the full width of the door.

**7.5.19.h.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a slam style door latch.

**7.5.19.i.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include two (2) gas shock door holders that hold the door at a 90 degree angle when the door is in the open position.

**7.5.19.j.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Smithworks IV fluid warmers shall be installed in the lower portion of this cabinet mounted to the left as far as possible.

**7.5.19.k.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) 120 volt AC GFCI receptacle shall be mounted on the rear wall of this cabinet.

**7.5.20. Cabinet #18 Cool Cabinet**

**7.5.20.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #18 shall be located on the curbside front middle outboard directly below cabinet #17 and to the right of cabinet #19. This cabinet shall be approximately 13 inches wide 15 inches high and 12 inches deep.

**7.5.20.b.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall be a cool cabinet for drug storage. The cool cabinet shall be able to maintain an interior maximum temperature of 45 degrees with an outside temperature of 100 degrees with 60 percent humidity.

**7.5.20.c.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall be insulated to provide optimum performance and cold retention.

**7.5.20.d.**

**Bidder Complies: Yes ( ) No ( )**

A digital thermostat shall be installed near the door of the cool cabinet.

**7.5.20.e.**

**Bidder Complies: Yes ( ) No ( )**

The door shall include a twist action slam style door latch.

**7.5.21. Cabinet #19 Med Vault**

**7.5.21.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #19 shall be located on the curbside front middle inboard directly below cabinet #17 and to the left of cabinet #18.

**7.5.21.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall be a Knox MedVault 2.5 WiFi enabled flange mounted vault.

**7.5.21.c.**

**Bidder Complies: Yes ( ) No ( )**

The MedVault shall be wired battery hot.

**7.5.22. Cabinet #20**

**7.5.22.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #20 shall be located on the curbside front lower directly below cabinets #18 and 19. This cabinet shall be approximately 30 inches wide 31 inches high and 24 inches deep.

**7.5.22.b.**

**Bidder Complies: Yes ( ) No ( )**

This cabinet shall be accessible from the outside via compartment #4.



**7.5.22.c.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have two (2) horizontal infinitely adjustable shelves. An access hole shall be installed in the back left corner of each shelf to allow wiring to pass from one shelf to another. The cabinet shall contain vertical adjustable track on the sides of the cabinet for the adjustable shelves.

**7.5.22.d.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall contain two (2) 120 volt AC GFCI duplex receptacles.

**7.5.22.e.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall contain one (1) 12 volt DC receptacle installed in the upper portion of the cabinet.

**7.5.22.f.**

**Bidder Complies: Yes ( ) No ( )**

A fluid barrier shall be installed on the bottom of the compartment to prevent fluids from entering the cabinet.

**7.5.22.g.**

**Bidder Complies: Yes ( ) No ( )**

A custom oxygen bracket for a District supplied and installed D sized oxygen cylinder shall be installed horizontally on the forward floor of the cabinet facing the compartment door. See 7.4.24.b

**7.5.23. Cabinet #21 Bench Seat/Radio Cabinet**

**7.5.23.a.**

**Bidder Complies: Yes ( ) No ( )**

Cabinet #21 shall be located on the front lower directly below the module passage and under cabinet #16. This cabinet shall be approximately 36 inches wide 18 inches high and 19 inches deep. Storage dimensions shall be a minimum of 36 inches wide 14 inches high and 19 inches deep.

**7.5.23.b.**

**Bidder Complies: Yes ( ) No ( )**

The cabinet shall have a hinged aluminum bench lid covered with high-density foam padding and finished with seamless light gray vinyl. The lid shall include an automatic hold open device. The left end of the bench lid shall be shortened to prevent interference with the handles on the adjacent drawers.

**7.5.23.c.**

**Bidder Complies: Yes ( ) No ( )**

The bench back and head pads shall be installed. Bench back and head pads shall have high-density padding and finished with seamless light gray vinyl.

**7.5.23.d.**

**Bidder Complies: Yes ( ) No ( )**

One (1) set of two-point automatic locking retractor seatbelts shall be installed on the bench.

**7.5.23.e.** **Bidder Complies: Yes ( ) No ( )**

The seat base to be formed from aluminum and securely anchored to sub-floor. The bottom and sides of the storage area shall be painted white with gray splatter.

**7.5.23.f.** **Bidder Complies: Yes ( ) No ( )**

The inverter shall be installed in this cabinet.

**7.5.23.g.** **Bidder Complies: Yes ( ) No ( )**

Punched vents shall be installed on the front of the bench and a vented close out shall be installed on the left wall venting to compartment #1.

**7.5.23.h.** **Bidder Complies: Yes ( ) No ( )**

A thermostatically controlled fan shall be installed to provide adequate ventilation to the inverter.

**7.5.23.i.** **Bidder Complies: Yes ( ) No ( )**

The District supplied Motorola dual head radio transmitter and Sierra WiFi device shall be installed in this cabinet.

## **7.6. MISCELLANEOUS BODY**

### **7.6.1. Cab to Module Passage**

**7.6.1.a.** **Bidder Complies: Yes ( ) No ( )**

A cab to module passage shall be installed below cabinet #16. The passage shall be a minimum of 16 inches wide and 15 inches high.

**7.6.1.b.** **Bidder Complies: Yes ( ) No ( )**

A custom sliding door, with a handle on the cab and module side, shall be provided. The door shall latch in the closed positions. The door shall have aluminum side frames with a polycarbonate center viewing area.

**7.6.1.c.** **Bidder Complies: Yes ( ) No ( )**

The module shall be connected to the cab with a flexible watertight boot to allow cab-body flex as designed by the chassis manufacturer.

**7.6.1.d.** **Bidder Complies: Yes ( ) No ( )**

The chassis rear window shall be replaced by an aluminum insert with a 16 inch wide by 15 inch high opening with a sliding clear 0.25 inch polycarbonate window and an extruded aluminum pull.

**7.6.1.e.**

**Bidder Complies: Yes ( ) No ( )**

A stainless steel cover shall be installed in the passage to protect the bottom of the passage boot.

**7.6.2. Wheel Well Liners**

**7.6.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Wheel well liners shall be installed in the module over the rear wheels. The liners shall be constructed of formed of aluminum.

**7.6.3. Placards**

**7.6.3.a.**

**Bidder Complies: Yes ( ) No ( )**

Three (3) red acrylic placards shall be provided.

**7.6.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The placards shall be 8 inches high 17.875 inches wide and made of 0.177 inch red acrylic.

**7.6.3.c.**

**Bidder Complies: Yes ( ) No ( )**

Three (3) side-loading placard holders with placards shall be provided.

**7.6.3.d.**

**Bidder Complies: Yes ( ) No ( )**

Placard holders shall be made of formed brushed stainless steel.

**7.6.3.e.**

**Bidder Complies: Yes ( ) No ( )**

The placard holders shall be installed in the following locations. One (1) on the street side forward door of compartment #1. One (1) on the rear left lower of the module. One (1) on the curbside front above compartment #4 door.

**7.6.4. Electric Step**

**7.6.4.a.**

**Bidder Complies: Yes ( ) No ( )**

A Zico VS-24-9 single electric step with a 7.625 inch drop shall be installed under the curbside passage door and shall be wired to extend and retract with the door.

**7.6.4.b.**

**Bidder Complies: Yes ( ) No ( )**

An override switch labeled "AUTO/OFF" shall be installed on the curbside passage door skin bezel to prevent the step from being extended.

## **SECTION 8. Paint and Lettering**

### **8.1. PAINT CAB AND BODY**

#### **8.1.1. General Painting Process**

**8.1.1.a.** **Bidder Complies: Yes ( ) No ( )**

All exposed metal surfaces on the cab and body shall be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces shall be removed and sanded to a smooth finish. Exterior seams shall be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum tread plate.

**8.1.1.b.** **Bidder Complies: Yes ( ) No ( )**

All surfaces shall be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well.

**8.1.1.c.** **Bidder Complies: Yes ( ) No ( )**

The exterior shall have no mounted components prior to painting to assure full coverage of metal treatments and paint. Any vertically or horizontally hinged smooth-plate doors shall be painted separately to assure proper paint coverage on the cab, doorjamb, and door edges.

**8.1.1.d.** **Bidder Complies: Yes ( ) No ( )**

Any location where a surface is penetrated after painting for the purpose of mounting steps, handrails, doors, lights, or other specified components shall be treated at the point of penetration with a corrosion inhibiting system.

**8.1.1.e.** **Bidder Complies: Yes ( ) No ( )**

All hardware used in mounting steps, handrails, doors, lights, or other specified components shall be individually treated with the corrosion inhibiting system.

**8.1.1.f.** **Bidder Complies: Yes ( ) No ( )**

The paint process shall meet or exceed current EPA regulations concerning paint operations. Pollution control shall include measures to protect the atmosphere, water and soil. Manufacturer shall, upon demand, provide evidence that the manufacturing facility is in compliance with EPA rules and regulations.

### **8.1.2. Cab Paint Exterior**

#### **8.1.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The cab shall be painted prior to the installation of glass, accessories, and all other cab trim to ensure complete paint coverage and the maximum in corrosion protection of all metal surfaces.

#### **8.1.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus cab shall be painted to match DuPont L6572EG Red. The builder shall provide a paint sample to the purchaser at pre construction to verify paint color and match.

#### **8.1.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The paint shall be of the highest quality finish for low maintenance, long life, and attractive appearance. The finish shall consist of a corrosion-resistant primer, urethane high build primer, and high performance durable color coat.

#### **8.1.2.d.**

**Bidder Complies: Yes ( ) No ( )**

Paint shall be a single color scheme.

### **8.1.3. Body Paint Finish**

#### **8.1.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The body shall be painted prior to the installation of doors, walkways, steps, handles, trim, overlays, accessories, and all other body components to ensure complete paint coverage and the maximum in corrosion protection of all metal surfaces.

#### **8.1.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus body shall be painted to match DuPont L6572EG Red.

#### **8.1.3.c.**

**Bidder Complies: Yes ( ) No ( )**

The paint shall be of the highest quality finish for low maintenance, long life, and attractive appearance. The finish shall consist of a corrosion-resistant primer, urethane high build primer, and high performance durable color coat.

#### **8.1.3.d.**

**Bidder Complies: Yes ( ) No ( )**

Paint shall be a single color scheme.

#### **8.1.4. Compartment Interior Paint**

**8.1.4.a.** **Bidder Complies: Yes ( ) No ( )**

All compartments shall be sanded, etched, washed, primed, coated with textured polyuria finish, and painted white with light gray splatter paint.

**8.1.4.b.** **Bidder Complies: Yes ( ) No ( )**

All shelves and trays shall be sanded, etched, washed, primed, and painted white with light gray splatter paint.

#### **8.1.5. Interior Cabinetry Finish**

**8.1.5.a.** **Bidder Complies: Yes ( ) No ( )**

All interior cabinetry shall be sanded, etched, washed, primed, and painted white with light gray splatter paint.

**8.1.5.b.** **Bidder Complies: Yes ( ) No ( )**

All shelves and trays shall be sanded, etched, washed, primed, and painted white with light gray splatter paint.

#### **8.1.6. Undercoating**

**8.1.6.a.** **Bidder Complies: Yes ( ) No ( )**

The underside of the apparatus body and cab shall be cleaned and prepared before the application of a sprayed on automotive type undercoating is installed for added corrosion resistance.

**8.1.6.b.** **Bidder Complies: Yes ( ) No ( )**

The undercoating is to be of a quick dry rubberized, solvent based coating that is black in color. The undercoating shall resist rust and abrasion as it seals out dust and moisture.

**8.1.6.c.** **Bidder Complies: Yes ( ) No ( )**

The application is NOT to include any additional underbody components including drivelines, exhaust system components, wheel chock holders, back-up alarms or any other added underbody component.

### **8.2. LETTERING AND STRIPPING**

**8.2.1.a.** **Bidder Complies: Yes ( ) No ( )**

All lettering and stripping shall be installed in accordance with manufacturers recommendations.

### **8.2.2. Reflective Striping**

#### **8.2.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Striping and lettering shall be provided as per the Purchaser's request. Striping shall meet current minimum standards.

#### **8.2.2.b.**

**Bidder Complies: Yes ( ) No ( )**

There shall be a 10-inch reflective stripe applied to the front and sides of the module. The reflective stripe shall be at an even plane with the top of the doors on compartment #1.

#### **8.2.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The reflective striping shall be white in color.

#### **8.2.2.d.**

**Bidder Complies: Yes ( ) No ( )**

A black outline edging stripe shall be applied to the side body reflective striping. The edging stripe shall be a 0.25 inches thick stripe applied to the top and bottom edge of the 10 inch reflective stripe specified.

### **8.2.3. Rear Chevron Striping**

#### **8.2.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The complete rear-facing vertical surface of the module shall be equipped with reflective striping in a chevron pattern sloping downward and away from the centerline of the vehicle at an angle of 45-degrees.

#### **8.2.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The chevron pattern shall be 6 inch wide alternating from 6 inch stripe to 6 inch exposed paint and cover the complete rear facing vertical surface including the rear entrance doors.

#### **8.2.3.c.**

**Bidder Complies: Yes ( ) No ( )**

The color of the rear chevron striping shall be Ruby Red.

### **8.2.4. Door Decals**

#### **8.2.4.a.**

**Bidder Complies: Yes ( ) No ( )**

A 13.25" High x 18.5" wide door decal shall be applied to each cab door.

**8.2.4.b.**

**Bidder Complies: Yes ( ) No ( )**

The door decal shall be the department logo that shall include a red maltese cross with “FIRE” and “DIST.” In white reflective “MARYSVILLE” in imitation gold leaf with white background and black pinstripe.



**8.2.5. Star of Life**

**8.2.5.a.**

**Bidder Complies: Yes ( ) No ( )**

A 16 inch blue with white outline Star of Life with white Rod of Asclepius decal shall be installed on the street side upper on compartment #2 door.

**8.2.5.b.**

**Bidder Complies: Yes ( ) No ( )**

A 16 inch blue with white outline Star of Life with white Rod of Asclepius decal shall be installed on the curb side upper on compartment #3 door.

**8.2.6. Lettering Street Side**

**8.2.6.a.**

**Bidder Complies: Yes ( ) No ( )**

A 5.50 inch imitation gold leaf “MARYSVILLE” lettering shall be installed on the street side forward upper of the module above compartment #1.

**8.2.6.b.**

**Bidder Complies: Yes ( ) No ( )**

The 5.50 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.6.c.**

**Bidder Complies: Yes ( ) No ( )**

An 8 inch imitation gold leaf “FIRE” lettering shall be installed on the street side forward upper of the module above compartment #1.

**8.2.6.d.**

**Bidder Complies: Yes ( ) No ( )**

The 8 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.6.e.**

**Bidder Complies: Yes ( ) No ( )**

A 5.50 inch imitation gold leaf “DISTRICT” lettering shall be installed on the street side forward upper of the module above compartment #1.



**8.2.6.f.**

**Bidder Complies: Yes ( ) No ( )**

The 5.50 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.6.g.**

**Bidder Complies: Yes ( ) No ( )**

A 5 inch red reflective “PARAMEDIC UNIT” lettering shall be installed in the street side 10 inch white reflective striping above the rear wheel.

**8.2.7. Lettering Rear**

**8.2.7.a.**

**Bidder Complies: Yes ( ) No ( )**

A 5 inch white reflective “MARYSVILLE” lettering shall be installed on the centerline rear upper of the module on the rear doors.

**8.2.7.b.**

**Bidder Complies: Yes ( ) No ( )**

The 5 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.7.c.**

**Bidder Complies: Yes ( ) No ( )**

A 5 inch white reflective “FIRE DIST.” lettering shall be installed on the centerline rear upper of the module on the rear doors just below the MARYSVILLE lettering above the rear windows.

**8.2.7.d.**

**Bidder Complies: Yes ( ) No ( )**

The 5 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.7.e.**

**Bidder Complies: Yes ( ) No ( )**

A 5 inch white reflective “PARAMEDIC” lettering shall be installed on the centerline rear lower of the module on the rear doors.

**8.2.7.f.**

**Bidder Complies: Yes ( ) No ( )**

The 5 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.7.g.**

**Bidder Complies: Yes ( ) No ( )**

A 5 inch white reflective “UNIT” lettering shall be installed on the centerline rear lower of the module on the rear doors just below the PARAMEDIC lettering.

**8.2.7.h.**

**Bidder Complies: Yes ( ) No ( )**

The 5 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

### **8.2.8. Lettering Curb Side**

**8.2.8.a.** **Bidder Complies: Yes ( ) No ( )**

A 5.50 inch imitation gold leaf “MARYSVILLE” lettering shall be installed on the curb side upper of the module above the sliding window.

**8.2.8.b.** **Bidder Complies: Yes ( ) No ( )**

The 5.50 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.8.c.** **Bidder Complies: Yes ( ) No ( )**

A 4.50 inch imitation gold leaf “FIRE DISTRICT” lettering shall be installed on the curb side center of the module below the sliding window.

**8.2.8.d.** **Bidder Complies: Yes ( ) No ( )**

The 4.50 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

**8.2.8.e.** **Bidder Complies: Yes ( ) No ( )**

A 5 inch red reflective “PARAMEDIC UNIT” lettering shall be installed in the curb side 10 inch white reflective striping above the rear wheel.

### **8.2.9. Lettering Forward Facing**

**8.2.9.a.** **Bidder Complies: Yes ( ) No ( )**

A 5 inch white reflective “MARYSVILLE” lettering shall be installed on the centerline front upper of the module above the cab roof line and below the warning lights.

**8.2.9.b.** **Bidder Complies: Yes ( ) No ( )**

The 5 inch lettering shall include a 0.25 inch black underlay to accent the lettering.

### **8.2.10. Placard Lettering**

**8.2.10.a.** **Bidder Complies: Yes ( ) No ( )**

The location of this lettering is to be on each of the three (3) custom red acrylic placards.

**8.2.10.b.** **Bidder Complies: Yes ( ) No ( )**

A 1 inch white reflective “SNOHOMISH COUNTY” lettering shall be installed on the upper of each the custom placards.

**8.2.10.c.** **Bidder Complies: Yes ( ) No ( )**

A 4.5 inch white reflective “\_\_-##” lettering shall be installed on the lower of each of the custom placards. Lettering and numbering to be determined at pre-construction.

## SECTION 9. ELECTRICAL SYSTEMS

### 9.1. GENERAL ELECTRICAL SYSTEM REQUIREMENTS

#### 9.1.1. Low-Voltage Systems

**9.1.1.a.** **Bidder Complies: Yes ( ) No ( )**

As-built electrical system drawings and an apparatus-specific reference of shall be furnished in the final delivery manuals. These drawings shall illustrate the electrical system broken down into separate functions, or small groups of related functions. Drawings shall depict circuit numbers, electrical components and connectors from beginning to end. A single drawing for all electrical circuits installed by the apparatus manufacturer shall not be accepted.

**9.1.1.b.** **Bidder Complies: Yes ( ) No ( )**

The following specifications describe the low voltage electrical system on the specified apparatus. The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The electrical equipment installed by the apparatus manufacturer shall conform to current automotive electrical system standards, the latest Federal DOT standards, and the requirements of the applicable NFPA standards.

**9.1.1.c.** **Bidder Complies: Yes ( ) No ( )**

All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops in all wiring from the power source to the using device shall not exceed 10 percent. The wiring and wiring harness and insulation shall be in conformance to applicable SAE and NFPA standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties.

**9.1.1.d.** **Bidder Complies: Yes ( ) No ( )**

All exposed wiring shall be run in a loom with a minimum 289 degree Fahrenheit rating. All wiring looms shall be properly supported and attached to body members. The electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

**9.1.1.e.** **Bidder Complies: Yes ( ) No ( )**

The wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection and shall be installed in accordance with the device manufacturer`s instructions. Electrical connections shall be with mechanical type fasteners and large rubber grommets where wiring passes through metal panels.

**9.1.1.f.****Bidder Complies: Yes ( ) No ( )**

Any wiring between the cab and body that is split shall utilize weatherproof connectors or an enclosed in a terminal junction panel area. All connections shall be crimp-type with heat shrink tubing with insulated shanks to resist moisture and foreign debris such as grease and road grime. Weather-resistant connectors shall be provided throughout to ensure the integrity of the electrical system.

**9.1.1.g.****Bidder Complies: Yes ( ) No ( )**

Any electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. In addition, the main body junction panel shall house the automatic reset breakers and relays where required.

**9.1.1.h.****Bidder Complies: Yes ( ) No ( )**

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless they are enclosed in an electrical junction box or covered with a removable electrical panel. The wiring shall be secured in place and protected against heat, liquid contaminants and damage. Wiring shall be uniquely identified at least every two feet (2') by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of applicable NFPA standards.

**9.1.1.i.****Bidder Complies: Yes ( ) No ( )**

The electrical circuits shall be provided with low voltage overcurrent protective devices. Such devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. The overcurrent protection shall be suitable for electrical equipment and shall be automatic reset type and meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected. The system shall have electro-magnetic interference suppression provided as required in applicable SAE standards.

**9.1.1.j.****Bidder Complies: Yes ( ) No ( )**

The electrical system shall utilize the following guidelines:

- Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. A corrosion preventative compound shall be applicable to all terminal plugs located outside of the cab or body.
- All electrical wiring shall be harnessed or be placed in a protective loom.
- All wire ends not placed into connectors will be sealed with an end cap. Wires without a terminating connector or end cap will not be allowed.
- Holes made in the roof shall be caulked with silicone. Large fender washers shall be used when fastening equipment to the underside of the cab roof.

- Any electrical component that is installed in an exposed area shall be mounted in a manner that will not allow moisture to accumulate in it. Exposed area is defined as any location outside of the cab or body.
- A coil of wire must be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.
- All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.
- All wiring entering or exiting the cab or body will be routed through sealed bulkhead connectors to protect against water intrusion.
- All 12-volt wiring shall conform to the requirements of NFPA 1917 – Standard for Automotive Ambulances.
- All terminals exposed to the elements will be sprayed with a protective coating to prevent corrosion.

**9.1.1.k.**

**Bidder Complies: Yes ( ) No ( )**

The warning lights shall be switched in the chassis cab with labeled switching in an accessible location. All individual electrical equipment switches shall be mounted on a switch panel mounted in the cab convenient to the operator. For easy nighttime operation, an integral indicator light shall be provided to indicate when the circuit is energized. All switches shall be appropriately identified as to their function.

**9.1.1.l.**

**Bidder Complies: Yes ( ) No ( )**

A single warning light switch shall activate all required warning lights. This switch will allow the vehicle to respond to an emergency and “call for the right of way”. When the parking brake is activated, a “blocking right of way” system shall be automatically activated per requirements of NFPA. All “clear” warning lights shall be automatically shed on actuation of parking brake or transmission placed into park.

**9.1.2. Electrical Testing**

**9.1.2.a.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall be electrical tested shall be completion of the vehicle and prior to prior to delivery. The electrical testing, certifications, and test results shall be submitted with delivery documentation.

**9.1.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus low-voltage electrical system will be tested and certified. Tests shall be performed when the air temperature is between 0°F and 110°F (–18°C and 43°C). The three tests defined in NFPA shall be performed in the order in which they appear. Before each test, the batteries shall be fully charged until the voltage stabilizes at the voltage regulator set point and the lowest charge current is maintained for 10 minutes. Failure of any of these tests shall require a repeat of the sequence.

**9.1.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The following minimum testing shall be completed by the apparatus manufacturer:

**9.1.3. Reserve capacity test:**

**9.1.3.a.**

**Bidder Complies: Yes ( ) No ( )**

The engine shall be started and kept running until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for ten (10) minutes. All electrical loads shall be turned off prior to attempting to restart the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a test fail.

**9.1.4. Alternator performance test at idle**

**9.1.4.a.**

**Bidder Complies: Yes ( ) No ( )**

The minimum continuous electrical load shall be activated with the engine running at idle speed. The engine temperature shall be stabilized at normal operating temperature. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.

**9.1.5. Alternator performance test at full load:**

**9.1.5.a.**

**Bidder Complies: Yes ( ) No ( )**

The total continuous electrical load shall be activated with the engine running up to half the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system shall be permitted during this test. However, an alarm sounded by excessive battery discharge, as detected by the system or a system voltage of less than 11.7 volts DC for a 12 volt nominal system, for more than 120 seconds, shall be considered a test failure.

**9.1.6. Low voltage alarm test:**

**9.1.6.a.**

**Bidder Complies: Yes ( ) No ( )**

Following the completion of the above tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm activates. The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts DC for a 12 volt nominal system shall be considered a test failure. The battery system shall then be able to restart the engine. Failure to restart the engine shall be considered a test failure.

### **9.1.7. Documentation**

#### **9.1.7.a.**

**Bidder Complies: Yes ( ) No ( )**

Documentation of the electrical system performance tests required above shall be provided on the delivery of the apparatus.

## **9.2. POWER CONTROL**

### **9.2.1. Ignition Control**

#### **9.2.1.a.**

**Bidder Complies: Yes ( ) No ( )**

Chassis electrical circuits shall be controlled by ignition switch as provided by the OEM chassis manufacturer.

#### **9.2.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The auxiliary chassis related functions shall be powered by one (1) continuous duty solenoid or solid state timer. An ignition override for the chassis shall be provided.

### **9.2.2. Module Power Control**

#### **9.2.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Module power shall be controlled by a switch located in the driver console "MODULE DISC." which activates a continuous duty solenoid or solid state timer.

#### **9.2.2.b.**

**Bidder Complies: Yes ( ) No ( )**

An ignition interlock shall disconnect module power fifteen minutes after vehicle's ignition is in the off position. The interlock shall also allow module power to be reactivated independently for fifteen minutes by cycling either the ignition switch or the module disconnect switch.

#### **9.2.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The continuous duty solenoid or solid state timer shall turn off module power without delay when the module disconnect switch is turned off.

### **9.2.3. Battery Grounds**

#### **9.2.3.a.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) braided grounding straps shall be installed between the chassis and the module to reduce RF interference.

#### **9.2.3.b.**

**Bidder Complies: Yes ( ) No ( )**

Additional ground cables shall be installed from the negative battery post to the chassis frame to prevent voltage drops during heavy load conditions.

### **9.2.4. Attendant Control Panel**

#### **9.2.4.a.**

**Bidder Complies: Yes ( ) No ( )**

A set of six (6) switches shall be installed and located at the attendant control panel located in the action area Cabinet #5. The panel shall include the switches as follows.

- Dome Light Hi-Off-Low
- Dome Light Hi-Off-Low
- Attendant Light
- Vent
- Electric Oxygen
- Buzzer

### **9.2.5. Curbside Control Panel**

#### **9.2.5.a.**

**Bidder Complies: Yes ( ) No ( )**

A set of two switches shall be installed and located on the curbside wall near the curbside entrance door. The switch panel shall include the switches as follows.

- Dome light timer
- Attendant light

## **9.3. EMERGENCY WARNING DEVICES**

### **9.3.1. Siren**

#### **9.3.1.a.**

**Bidder Complies: Yes ( ) No ( )**

A Whelen 295SLSA1, 200 watt siren shall be installed in the driver's console. Standard features shall include Radio Rebroadcast, Public Address, Manual, Wail, Yelp, Air horn, and Piercer tones.

#### **9.3.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The siren's hands free function shall operate through the OEM horn ring circuit when the sirens rotary selector is in the HF position and the Emergency Master switch is on.

#### **9.3.1.c.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Whelen 295SLSA1 speakers with stainless steel grilles shall be installed in the front bumper.

### **9.3.2. Warning Light Switching**

#### **9.3.2.a.**

**Bidder Complies: Yes ( ) No ( )**

A master switch shall be included which shall be labeled "Emergency Master" for identification. The switch shall feature control over all devices wired through it. Any



warning device switches left in the “ON” position when the master switch is activated shall automatically power up.

**9.3.2.b.** **Bidder Complies: Yes ( ) No ( )**

All switches shall be lighted and permanently marked by function.

**9.3.2.c.** **Bidder Complies: Yes ( ) No ( )**

Switches wired through the Master Warning switch shall include:

- Flashers
- White Lights
- Opticom
- Warning Lights
- Rear Amber Warning Lights

### **9.3.3. Forward Facing Lighting**

**9.3.3.a.** **Bidder Complies: Yes ( ) No ( )**

Six (6) Whelen M9 LED flashers with chrome flanges shall be surface mounted on the front of the module above the chassis cab.

The pattern from curb side to street side shall be as follows:

- Red lens Red Flasher
- Clear lens Clear Flasher/Scene Lighting
- Red lens Red Flasher
- GTT #794H Opticom flush mounted in a GTT #798 bezel
- Red lens Red flasher
- Clear lens Clear Flasher/Scene Lighting
- Red lens Red Flasher

The red flashers shall be controlled by the “Warning Lights” switch located on the driver console.

**9.3.3.b.** **Bidder Complies: Yes ( ) No ( )**

The clear flashers shall be controlled by the “White Lights” switch located on the driver console. The clear flashers shall automatically extinguish when the apparatus is shifted into park or the parking brake is set.

**9.3.3.c.** **Bidder Complies: Yes ( ) No ( )**

The clear flashers shall be controlled by the “Front Scene” switch located in the driver console. This switch shall override the flasher and park brake interlock to provide forward steady lighting when the scene lights are activated.

**9.3.3.d.**

**Bidder Complies: Yes ( ) No ( )**

A GTT #794H Opticom traffic preemption emitter shall be flush-mounted in a GTT #798 bezel mounting kit on the front of the module, centered between the flashers.

**9.3.3.e.**

**Bidder Complies: Yes ( ) No ( )**

The Opticom shall be controlled by the "Opticom" switch located on the driver console. The Opticom shall automatically disable when the apparatus is shifted into park or the parking brake is set.

**9.3.3.f.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Whelen M7 flashers with chrome flanges shall be installed on the OEM grille lower. The flashers shall be Whelen #M7R Red Lens Red Super-LED flashers shall be installed in the top of the grille, and be controlled by the "FLASHER" switch located on the driver's console.

**9.3.3.g.**

**Bidder Complies: Yes ( ) No ( )**

Two Whelen #M7C Clear Lens Clear Super-LED flashers shall be installed on the OEM grille upper. The flashers shall be controlled by the "WHITE LIGHTS" switch on the driver's console and the "Front Scene" switch on the driver's console. The white lights shall extinguish when transmission is placed into the park position or the parking brake is set.

**9.3.4. Intersection Lights**

**9.3.4.a.**

**Bidder Complies: Yes ( ) No ( )**

The intersection side warning lights shall be controlled through the master warning switch.

**9.3.4.b.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Whelen M4R series super LED red light heads with red lenses and chrome flanges shall be installed. The lights shall be installed on the chassis front fenders, one (1) on each side.

**9.3.4.c.**

**Bidder Complies: Yes ( ) No ( )**

The lights shall be controlled by the warning light switch located on the driver console.

**9.3.4.d.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Whelen M6R series super LED red lights with red lenses and chrome flanges shall be installed. The lights shall be installed on the module just over the rear axle, one (1) on each side.

**Bidder Complies: Yes ( ) No ( )**

The lights shall be controlled by the warning light switch located on the driver console.

### **9.3.5. Upper Side Warning Lights**

#### **9.3.5.a.**

**Bidder Complies: Yes ( ) No ( )**

Four (4) Whelen M9R series super LED red light heads with red lenses and chrome flanges shall be installed two (2) on each side of the module in the upper corners.

The lights shall be controlled by the “Flasher” switch located on the driver console.

### **9.3.6. Rear Warning Lights**

#### **9.3.6.a.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Whelen M9R series super LED red light heads with red lenses and chrome flanges shall be installed on the rear upper corners of the module.

#### **9.3.6.b.**

**Bidder Complies: Yes ( ) No ( )**

The lights shall be controlled by the “Flasher” switch located on the driver console.

#### **9.3.6.c.**

**Bidder Complies: Yes ( ) No ( )**

Two Whelen #M9A series super LED amber light heads with amber lenses and chrome flanges shall be installed on the rear of the module at window height.

#### **9.3.6.d.**

**Bidder Complies: Yes ( ) No ( )**

The lights shall be controlled by the “Rear Amber” switch located on the driver console.

## **9.4. SCENE LIGHTING**

### **9.4.1. Spot Light**

#### **9.4.1.a.**

**Bidder Complies: Yes ( ) No ( )**

A Whelen Arges 12-volt super LED remote controlled roof mounted spotlight with black housing shall be installed in the center of the cab roof.

#### **9.4.1.b.**

**Bidder Complies: Yes ( ) No ( )**

A hardwired controller shall be mounted in the cab within easy reach of the officer.

### **9.4.2. Scene Lighting**

#### **9.4.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Three (3) Whelen M9LZC LED scene lights with chrome flanges shall be installed on the street side upper side of the module. One (1) at the front, one (1) at the rear and one (1) centered as high as possible on the module.

**9.4.2.b.**

**Bidder Complies: Yes ( ) No ( )**

Three (3) Whelen M9LZC LED scene lights with chrome flanges shall be installed on the curb side upper side of the module. One (1) at the front, one (1) at the rear and one (1) centered as high as possible on the module.

**9.4.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The scene lights shall be controlled by the respective switches on the driver console.

**9.4.2.d.**

**Bidder Complies: Yes ( ) No ( )**

The curb side module entrance door shall activate the curb side scene lights.

**9.4.2.e.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Whelen M7ZC LED scene lights with chrome flanges shall be installed on the rear of the module above the rear passage doors, one (1) on each side.

**9.4.2.f.**

**Bidder Complies: Yes ( ) No ( )**

The rear scene lights shall be activated by the opening of the rear module entrance doors. The rear scene lights shall activate when placing the vehicle into reverse. The rear scene lights shall be controlled by the “rear scene” switch located on the driver console.

## **9.5. DOT LIGHTING**

**9.5.1.a.**

**Bidder Complies: Yes ( ) No ( )**

Basic lighting shall include headlights, parking lights, directional signal lights, tail and stop lights, license plate light, back-up lights, hazard lights, identification lights, clearance lights, and side marker lights and reflux reflectors as required by FMVSS 108.

### **9.5.2. Marker Lights**

**9.5.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Clearance and marker lights shall be installed as specified.

- Five (5) amber LED clearance lights on the cab roof and wired to come on with the OEM headlights.
- Five (5) amber LED marker lights mounted to the front module above the warning lights.
- Four (4) red LED clearance lights two each side on the curb side and street side of the module in the upper most outer corners of the module.
- Five (5) red LED clearance lights on the rear upper most part of the module above the warning lights, three (3) centered and one (1) on each side.
- All OEM cab lighting is to remain intact and operational on the front of the chassis.

- Rear and side reflex reflectors shall be installed in accordance with FMVSS 108 requirements.

### **9.5.3. License Plate Light**

**9.5.3.a.** **Bidder Complies: Yes ( ) No ( )**

One (1) white LED license plate light mounted in a chrome plated housing shall be mounted at the rear of the body.

### **9.5.4. Tail Stop Turn Back-Up**

**9.5.4.a.** **Bidder Complies: Yes ( ) No ( )**

Three (3) Whelen model M6 series super LED lights shall be installed in chrome flanges, in a vertical position each side at rear of the module and wired with weatherproof connectors.

**9.5.4.b.** **Bidder Complies: Yes ( ) No ( )**

Light functions shall be as follows:

- One (1) Whelen #M62T LED amber turn signal in the upper position.
- One (1) Whelen #M62BU LED clear backup light in the middle position.
- One (1) Whelen #M62BTT LED red tail light with red brake light in the lower position.

**9.5.4.c.** **Bidder Complies: Yes ( ) No ( )**

The backup lights shall illuminate when the apparatus is placed in reverse.

## **9.6. LIGHTS - COMPARTMENT, STEP AND GROUND**

### **9.6.1. Compartment Light Package**

**9.6.1.a.** **Bidder Complies: Yes ( ) No ( )**

Additional compartment lights shall be provided as needed above or below adjustable shelving to illuminate all areas of the compartment.

**9.6.1.b.** **Bidder Complies: Yes ( ) No ( )**

The lights in each compartment shall be on a separate circuit, turning on only those lights that have open compartment doors.

**9.6.1.c.** **Bidder Complies: Yes ( ) No ( )**

LED strip lighting shall be used and shall include two (2) lights installed in each body compartment. The lights shall be installed vertically along each side of the door framing at the maximum length available to the opening.

**9.6.1.d.**

**Bidder Complies: Yes ( ) No ( )**

The wiring connection for the compartment lights shall be made with a weather-resistant plug in style connector. A single water- and corrosion-resistant switch sealed contacts shall control each compartment light. The switch shall allow the light to illuminate when the compartment door is open.

**9.7. LIGHTS MODULE INTERIOR**

**9.7.1. Under Cabinet Lighting**

**9.7.1.a.**

**Bidder Complies: Yes ( ) No ( )**

LED under cabinet strip lighting shall be installed under cabinets #2 and #3 on the street side of the module.

**9.7.1.b.**

**Bidder Complies: Yes ( ) No ( )**

Lighting shall be controlled on the street side of the module by a switch on the attendant panel labeled "Attendant Light". Lighting shall be controlled on the curb side by a switch labeled "Attendant Light".

**9.7.1.c.**

**Bidder Complies: Yes ( ) No ( )**

LED under cabinet strip lighting shall be installed under cabinets #11 and #12 on the curb side of the module.

**9.7.1.d.**

**Bidder Complies: Yes ( ) No ( )**

- Lighting shall be controlled on the street side of the module by a switch on the attendant panel labeled "Attendant Light". Lighting shall be controlled on the curb side by a switch labeled "Attendant Light". Lighting shall be controlled on the driver's console by a switch labeled "Attendant Light".

**9.7.2. Dome Lighting**

**9.7.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Module interior lighting shall consist of eight (8) dual intensity Whelen #80C0EHCR LED recessed lights.

**9.7.2.b.**

**Bidder Complies: Yes ( ) No ( )**

One bank of four (4) lights shall be positioned toward center of the module. The dome lights shall be controlled by a switch located on the attendant panel located in the action area cabinet #5.

**9.7.2.c.**

**Bidder Complies: Yes ( ) No ( )**

One bank of four (4) lights shall be positioned two (2) toward forward area of the module and two (2) toward the rearward area of the module. The dome lights shall be controlled

by a switch located on the attendant panel located in the action area cabinet #5 and a switch in the driver's console.

**9.7.2.d.**

**Bidder Complies: Yes ( ) No ( )**

The forward/rearward bank of lights shall be automatically activated when the rear or side doors are opened.

**9.7.2.e.**

**Bidder Complies: Yes ( ) No ( )**

The forward/rearward bank of lights shall be activated by a switch located near the curbside entrance door labeled "Dome Timer". Activating the switch once shall initiate 15-minute timed operation of the lights. Reactivating the switch a second time shall cancel the timed operation.

## **9.8. CAB ELECTRICAL ACCESSORIES**

### **9.8.1. Cab Dome Lights**

**9.8.1.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be one (1) Whelen #3SRCCDCR red/clear dual LED dome light installed over the officer seating position, with a Red-Off-White switch labeled "MAP LIGHT" on the driver console.

**9.8.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The color of the LED's will be red and white. The white LED's will be controlled by the cab door switches and the console switch. The red LED's will be controlled by the console switch.

### **9.8.2. Cab Step Area Lighting**

**9.8.2.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be a minimum of two (2) clear LED lights provided to illuminate the cab step well area one for each seating position. Each light shall be located in such a position that all stepping surfaces are illuminated providing safe entrance and egress of the cab.

**9.8.2.b.**

**Bidder Complies: Yes ( ) No ( )**

Each light shall activate by the cab door ajar circuit.

### **9.8.3. Exit/ Ground Lighting**

**9.8.3.a.**

**Bidder Complies: Yes ( ) No ( )**

Ground lighting areas under the driver and crew area exits shall be activated automatically when the cab doors are opened.

**9.8.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall be equipped with a minimum of six (6) lights to properly illuminate the ground areas around the apparatus. One shall be located under each (1) under cab door, one (1) under the module side entrance door, two (2) under the rear tailboard and one (1) under compartment #1.

**9.8.3.c.**

**Bidder Complies: Yes ( ) No ( )**

The lights shall be LED with clear lenses mounted in a resilient shock absorbent mount for improved life. The wiring connections shall be made with a weather resistant plug in style connector.

**9.8.3.d.**

**Bidder Complies: Yes ( ) No ( )**

Ground area lights shall be switched from the cab dash with the ground light switch and automatically extinguish when the parking brake is released or the transmission is removed from the park position.

**9.8.4. Step Lights**

**9.8.4.a.**

**Bidder Complies: Yes ( ) No ( )**

The apparatus shall be equipped with a sufficient quantity of light to properly illuminate the steps around the apparatus in accordance with current NFPA requirements. The wiring connections shall be made with a weather resistant plug in style connector.

**9.8.5. Voltmeter/Ammeter**

**9.8.5.a.**

**Bidder Complies: Yes ( ) No ( )**

A voltmeter shall be installed on the driver console that displays system voltage when the ignition is in the on position.

**9.8.5.b.**

**Bidder Complies: Yes ( ) No ( )**

An ammeter shall be installed on the driver console that displays alternator current anytime the ignition is in the on position.

**9.9. LIGHTING NON-WARNING**

**9.9.1. Engine Compartment Light**

**9.9.1.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be LED lighting provided to illuminate the engine compartment area.



**9.9.1.b.**

**Bidder Complies: Yes ( ) No ( )**

Engine Compartment lighting shall illuminate when the hood is in the raised position.

**9.10. COMMUNICATIONS EQUIPMENT**

**9.10.1. Firecom Intercom System**

**9.10.1.a.**

**Bidder Complies: Yes ( ) No ( )**

A two (2) person FireCom #210 intercom system shall be provided.

**9.10.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The Model #210 intercom base shall be installed in cabinet #21 and shall be interfaced with the Motorola radio.

**9.10.1.c.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) Model UH-51 under the helmet slotted radio transmit head set shall be provided for the driver and officer positions.

**9.10.1.d.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) HM-10 interior headset plug-in modules and hanger hooks shall be provided for each of the headset locations.

**9.10.2. Dispatch Radio**

**9.10.2.a.**

**Bidder Complies: Yes ( ) No ( )**

One (1) District supplied Motorola model APX-8500 radio transceiver with two (2) remote heads, two (2) handheld microphones and two (2) auxiliary speakers shall be installed by the Vendor.

**9.10.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The radio transceiver shall be located in cabinet #21.

**9.10.2.c.**

**Bidder Complies: Yes ( ) No ( )**

One (1) remote head and auxiliary speaker shall be located in the driver console.

**9.10.2.d.**

**Bidder Complies: Yes ( ) No ( )**

One (1) remote head and auxiliary speaker shall be located in the action area cabinet #5.

**9.10.2.e.**

**Bidder Complies: Yes ( ) No ( )**

All antennas, coax cables, electrical feeds and related items for proper operation of the dispatch radio shall be installed.

### **9.10.3. Mobile Router**

#### **9.10.3.a.**

**Bidder Complies: Yes ( ) No ( )**

One (1) District supplied Sierra Wireless MP70 Air Link mobile gateway router shall be installed.

#### **9.10.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The router shall be installed in cabinet #21.

#### **9.10.3.c.**

**Bidder Complies: Yes ( ) No ( )**

A Cat6e communications cable shall be installed from the router and terminate at the MDT mount located at the driver console.

#### **9.10.3.d.**

**Bidder Complies: Yes ( ) No ( )**

One (1) District supplied GPS antenna for the router shall be installed.

### **9.10.4. Prewire**

#### **9.10.4.a.**

**Bidder Complies: Yes ( ) No ( )**

One (1) 10 gauge 30 amp power wire shall be installed and terminate in the driver console for the future installation of a District supplied accessories.

#### **9.10.4.b.**

**Bidder Complies: Yes ( ) No ( )**

One (1) 10 gauge 30 amp ignition switched wire shall be installed and terminate in the driver console for the future installation of District supplied accessories.

#### **9.10.4.c.**

**Bidder Complies: Yes ( ) No ( )**

One (1) 10 gauge 30 amp ground wire shall be installed and terminate in the driver console for the future installation of District supplied accessories.

#### **9.10.4.d.**

**Bidder Complies: Yes ( ) No ( )**

One (1) 14 gauge 20 amp power wire shall be installed and terminate in the upper forward area compartment #3 for the future installation of District supplied accessories.

## **9.11. MISCELLANEOUS ELECTRICAL**

### **9.11.1. Cameras**

#### **9.11.1.a.**

**Bidder Complies: Yes ( ) No ( )**

A back-up camera system shall be installed, including two (2) surface-mounted cameras.

**9.11.1.b.**

**Bidder Complies: Yes ( ) No ( )**

One (1) exterior camera shall be mounted above the rear passage doors providing a clear field of vision of the rear of the apparatus.

**9.11.1.c.**

**Bidder Complies: Yes ( ) No ( )**

One (1) interior camera shall be mounted above the rear passage doors providing a clear view of the patient and crew members located inside of the apparatus.

**9.11.1.d.**

**Bidder Complies: Yes ( ) No ( )**

One (1) dual input rear-view mirror monitor with a 4.3 inch screen shall be installed in place of the OEM rear view mirror.

**9.11.1.e.**

**Bidder Complies: Yes ( ) No ( )**

Rear back-up camera shall automatically display on monitor when the vehicle is placed in reverse, and cameras shall be selectable from the mirror.

**9.11.2. Back-up Alarm**

**9.11.2.a.**

**Bidder Complies: Yes ( ) No ( )**

An electronic back-up alarm with a minimum output level of 97 dB shall be supplied.

**9.11.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The alarm shall be wired into the chassis back-up circuit to signal when the transmission is placed into reverse. There shall be no disable switch.

**9.11.3. Door Ajar Warning Light**

**9.11.3.a.**

**Bidder Complies: Yes ( ) No ( )**

There shall be a Whelen #3SR00FRC red flasher light installed for warning the driver and officer of an open compartment, cab or module passage door.

**9.11.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The light shall be located in the cab centered overhead between the driver and officer seating position.

**9.11.3.c.**

**Bidder Complies: Yes ( ) No ( )**

An audible alarm shall be mounted in the cab interior and wired into the door ajar or indicator.

**9.11.3.d.**

**Bidder Complies: Yes ( ) No ( )**

The audible alarm and hazard warning light shall activate when a cab door is open, a compartment door is open and the transmission is removed from the park position.

**9.11.3.e.**

**Bidder Complies: Yes ( ) No ( )**

The audible alarm and hazard warning light shall activate when the transmission is placed into gear and the parking brake is set.

**9.11.4. Fluid Warmer**

**9.11.4.a.**

**Bidder Complies: Yes ( ) No ( )**

Two 120 volt AC Smithworks fluid warmer with acrylic surrounds and a 120 volt AC GFCI receptacle shall be installed in cabinet #17.

**9.11.4.b.**

**Bidder Complies: Yes ( ) No ( )**

The warmers shall be thermostatically controlled at 95 to 105 degrees Fahrenheit. Space for ten (10) one liter bags shall be provided in each warmer with four inch surrounds to contain the fluid bags.

**9.11.5. Electric Door Locks**

**9.11.5.a.**

**Bidder Complies: Yes ( ) No ( )**

Electric door locks shall be installed on all compartment and module entrance doors.

**9.11.5.b.**

**Bidder Complies: Yes ( ) No ( )**

Two (2) lock/unlock switches shall be installed in the module. One (1) switch shall be installed on the rear curbside entrance door and one (1) shall be installed on the curbside entrance door.

**9.11.5.c.**

**Bidder Complies: Yes ( ) No ( )**

The door locks for the cab and module shall be interconnected to allow the doors to be locked/unlocked from either the cab or the module.

**9.11.5.d.**

**Bidder Complies: Yes ( ) No ( )**

A hidden unlock switch shall be installed behind the license plate holder on the rear of the apparatus.

**9.11.5.e.**

**Bidder Complies: Yes ( ) No ( )**

The license plate shall include an aluminum plate and stop to prevent damage to either the license plate or the switch.

**9.11.5.f.**

**Bidder Complies: Yes ( ) No ( )**

The aft-hinged side passage door shall automatically lock when the vehicle is taken out of park and shall automatically unlock when the vehicle is placed into park.

**9.11.5.g.**

**Bidder Complies: Yes ( ) No ( )**

The locks shall be controlled remotely with the chassis key fob.

**9.12. LINE VOLTAGE SYSTEMS**

**9.12.1. 120 Volt AC Inlet**

**9.12.1.a.**

**Bidder Complies: Yes ( ) No ( )**

A 120 volt AC inlet receptacle shall be installed with a 30 amp NEMA configuration L5-30 twist lock plug.

**9.12.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The inlet receptacle shall have a weather proof cover that automatically closes when the plug is removed.

**9.12.1.c.**

**Bidder Complies: Yes ( ) No ( )**

The inlet receptacle shall be located on the left front side of the module near the driver door.

**9.12.1.d.**

**Bidder Complies: Yes ( ) No ( )**

A green indicator light shall be installed adjacent to the inlet receptacle to indicate a positive connection to shore power.

**9.12.1.e.**

**Bidder Complies: Yes ( ) No ( )**

The inlet receptacle shall be mounted so that it is easily removable from the outside of the module for ease of maintenance and replacement.

**9.12.1.f.**

**Bidder Complies: Yes ( ) No ( )**

The inlet receptacle shall be wired to a power distribution box located in the street side front compartment. The power distribution box shall contain two (2) 120 Volt AC duplex receptacles and one (1) 120 Volt AC GFCI duplex receptacle for power distribution.

**9.12.1.g.**

**Bidder Complies: Yes ( ) No ( )**

Toggle style manual reset circuit breakers shall be installed for overcurrent protection and circuit isolation.

### **9.12.2. 120 Volt AC Outlets**

#### **9.12.2.a.**

**Bidder Complies: Yes ( ) No ( )**

Five (5) 120 volt AC duplex receptacles shall be provided and installed on the interior of the module. One (1) in cabinet #5, two (2) in cabinet #17, and two (2) in cabinet #20.

#### **9.12.2.b.**

**Bidder Complies: Yes ( ) No ( )**

The receptacles shall be type NEMA 5-15 120V/15A duplex receptacle with a cover.

#### **9.12.2.c.**

**Bidder Complies: Yes ( ) No ( )**

The outlets shall be powered by the shoreline connection and the inverter so that the receptacles are live anytime the shoreline power is provided or when the vehicles ignition is in the run position.

### **9.12.3. Battery Charger/Inverter**

#### **9.12.3.a.**

**Bidder Complies: Yes ( ) No ( )**

A combination inverter/battery charger shall be installed. The installed inverter charger shall be a 1200-watt inverter with integral 60-amp battery charger.

#### **9.12.3.b.**

**Bidder Complies: Yes ( ) No ( )**

The inverter/battery charger shall be installed in cabinet #21. Proper ventilation including a 120VAC thermostatically controlled fan to keep the compartment from overheating shall be provided.

#### **9.12.3.c.**

**Bidder Complies: Yes ( ) No ( )**

The inverter control panel shall be installed in the action area cabinet #5. The inverter shall be ignition controlled.

#### **9.12.3.d.**

**Bidder Complies: Yes ( ) No ( )**

A 60-amp battery charger shall be provided as part of the 1200 watt inverter system.

#### **9.12.3.e.**

**Bidder Complies: Yes ( ) No ( )**

The inverter/battery charger shall be connected to the 120 volt AC inlet.

### **9.12.4. Air and Surface Disinfection**

#### **9.12.4.a.**

**Bidder Complies: Yes ( ) No ( )**

A 36-watt UV-C infection control system shall be installed in the ceiling of the patient module. The light shall be powered only with the shoreline and shall have a push-button timer with a warning label installed on the forward wall of Compartment #1.

**9.12.4.b.**

**Bidder Complies: Yes ( ) No ( )**

Module entrance door switches shall deactivate the timer circuit until those doors are closed. All other compartment door switches shall not deactivate the timer circuit.

**9.12.4.c.**

**Bidder Complies: Yes ( ) No ( )**

A UV warning/information label shall be located over the push-button timer switch. The label shall include warnings regarding skin and eye exposure to Ultra Violet light and operating instructions to activate the system.

## **SECTION 10. Supporting Documentation**

### **10.1. OWNERS MANUALS**

#### **10.1.1.a.**

**Bidder Complies: Yes ( ) No ( )**

An owner's manual shall be provided and include the following items.

- Manufacturer's Contact Information
- Warranties
- Service and Operations Manual
- Electrical Drawings
- Parts list
- Specifications and Drawings
- Certifications
  - AMD 005 Low Voltage Electrical System Test
  - AMD 015 Ambulance Main Medical Gas System Test
  - AMD 021 Aspirator System Test
- Product Manuals
- Second OEM chassis key
- Manufacturer's record of:
  - Owner name and address
  - Apparatus manufacturer, model, and serial number
  - Chassis make, model, and serial number
  - OEM GVWR
  - GAWR of front and rear axles
  - Front tire size and total rated capacity in pounds
  - Rear tire size and total rated capacity in pounds
  - Chassis weight distribution in pounds with water (if applicable) and manufacturer mounted equipment (front and rear)
  - Engine make, model, serial number, rated horsepower, related speed and no-load governed speed
  - Type of fuel and fuel tank capacity
  - Electrical system voltage and alternator output in amps
  - Battery make and model, capacity in CCA
  - Paint numbers
  - Weight documents from a certified scale showing actual loading on the front axle, rear axle(s), and overall vehicle (but without personnel, and equipment)
  - Written load analysis and results of the electrical system performance tests

#### **10.1.1.b.**

**Bidder Complies: Yes ( ) No ( )**

The owners, manual shall be provided in electronic format in such a manner as to allow printing of the entire manual, but to also allow cutting, pasting and copying of individual documents to other electronic media. Shall include "Find" feature and be accessible from any computer operating system capable of supporting portable document format (PDF).



## **SECTION 11. Miscellaneous Equipment**

### **11.1. LOOSE EQUIPMENT**

#### **11.1.1. Builder Supplied Equipment**

**11.1.1.a.** **Bidder Complies: Yes ( ) No ( )**

A minimum of 1 ounce bottle of touch up paint for each type of paint used in the production of the apparatus shall be provided.

**11.1.1.b.** **Bidder Complies: Yes ( ) No ( )**

Two (2) spare keys for the compartment door locks shall be provided.

#### **11.1.2. District Supplied Equipment**

**11.1.2.a.** **Bidder Complies: Yes ( ) No ( )**

The following equipment shall be provided by the purchaser and delivered to the builder.

1. Stryker Power Load System
2. GPS Antenna
3. Motorola AXP-8500 dual head radio and associated equipment
4. Sierra Wireless MP70 mobile router

#### **11.1.3. Equipment Returned to Purchaser**

**11.1.3.a.** **Bidder Complies: Yes ( ) No ( )**

The spare tire and wheel shipped with the chassis shall be provided.