

# LEGAL NOTICE

## INVITATION to BID

The **Town of Ridgefield** invites all interested parties to submit sealed bids on the following:

**BID DUE DATE:** December 1, 2020  
**BID DUE TIME:** 11:00 AM  
**BID ITEM:** Fire Department – New Ambulance  
**BID NUMBER:** 21-09

Terms and conditions as well as the description of items being bid are stated in the specifications. **Specifications may be obtained at the following address:**

**Town of Ridgefield  
Jacob Muller  
400 Main Street  
Ridgefield, CT 06877  
203 - 431 – 2720**

The return bid must be emailed or faxed to the following contact below:

**TOWN OF RIDGEFIELD  
DIRECTOR OF PURCHASING  
BID NUMBER: 21-09  
400 MAIN STREET  
RIDGEFIELD, CT. 06877**

Bids must be received no later than the date and time stated above at the Purchasing Director's office via email or fax. **For further information**, please call **Jacob Muller** at (203) 431-2720 or E-Mail at [purchasing@ridgefieldct.org](mailto:purchasing@ridgefieldct.org), Fax Number (203) 431-2723.

**Bid Documents available at [www.ridgefieldct.org](http://www.ridgefieldct.org) in the Purchasing section under Departments**

**Results may be viewed at [www.ridgefieldct.org](http://www.ridgefieldct.org) in the Purchasing Section under Departments after the bid opening.**

# TOWN OF RIDGEFIELD CONNECTICUT

## BOARD OF SELECTMEN

### INSTRUCTIONS TO BIDDERS

1. Please note; due to The Town of Ridgefield COVID-19 protocols all bids will be submitted electronically or by fax, email [purchasing@ridgefieldct.org](mailto:purchasing@ridgefieldct.org) or fax 203-431-2723.
2. Withdrawals of or amendments to bids received later than the time and date specified for bid opening will not be considered.
3. The Board of Selectmen of the Town of Ridgefield reserves the right to accept or reject any or all options, bids or proposals; to waive any technicality in any bid or part thereof, and to accept any bid deemed to be in the best interest of the Town of Ridgefield, Connecticut.
4. Bids may be held by the Town of Ridgefield for a period not to exceed forty-five (45) days from the opening of bids for the purpose of reviewing bids and investigating the qualifications of bidders prior to the awarding of the contract.
5. Insurance requirements, if any, must be submitted with the bid. This includes any Hold Harmless requirements as well as Certificates of Insurance for the full amounts specified. **Unauthorized changes** to these forms, i.e. adding, striking out and/or changing any words, language or limits **will cause the bidder to be disqualified**.

**Please Note:** Certificates of Insurance, if required, MUST name the Town of Ridgefield as **Additional Insured**. Failure to do so will mean disqualification from the Bid. There will no exceptions.

6. **Sales Tax:** In accordance with the provisions of Special Act No. 77-98, as amended, and Section 12-412(a) of the Connecticut General Statutes, sales of tangible personal property and services to the Town are not subject to the Connecticut Sales and Use Tax, and such tax shall not be included as part of the bid.

7. **Bidding Schedule:**
  - Bid Close; Tuesday, December 1, 2020 at 11:00 AM, complete instructions listed in the Invitation to Bid.
8. **Contractor's Qualification Statement:** The Contractor's Qualification Statement must be filled out as part of the bid package and the experience and references listed therein will be one to the determining factors in the awarding of the bid.
9. **Hold Harmless Agreement:** In order for the bid to be considered valid, the Contractor **must** sign the enclosed hold harmless agreement. Bids submitted without the signed hold harmless agreement will be rejected.
10. **Time of Completion:** All work must be completed within **150 days** from receipt of the notice to proceed.
11. **Questions:** regarding bid procedures and technical questions should be directed via email to Jacob Muller, Director of Purchasing, [purchasing@ridgefieldct.org](mailto:purchasing@ridgefieldct.org). Technical questions for the Ambulance requirements should be directed to Chief Jerry Myers, Ridgefield Fire Department, [rfdchief@ridgefieldct.org](mailto:rfdchief@ridgefieldct.org).
12. **Bid Submissions:** The following items shall be submitted for a bid to be considered complete:
  - (a) Executed proposal on company letterhead
  - (b) Executed Hold Harmless Agreement
  - (c) Certificates of Insurance in conformance to Item 5 above
  - (d) Contractor's Qualification Statement

**HOLD HARMLESS AGREEMENT**

The undersigned covenants and agrees to and shall at all times indemnify, protect and save harmless the Town of Ridgefield from and against all costs or expenses resulting from any and all losses, damages, detriments, claims, demands, cost and charges including attorneys fees the Town of Ridgefield may directly or indirectly suffer, sustain or be subjected to by reason or on account of the work to be performed pursuant to this Contract or any activities in connection with said Contract whether such losses and damages be suffered or sustained by the Town of Ridgefield directly or by its employees, licenses or invitees or be suffered or sustained by other persons or corporations who may seek to hold the Town of Ridgefield liable therefore.

The Contractor shall comply with the Provisions of the Immigration Reform and Control Act of 1986 effective and enforceable as of June 6, 1987 which Act makes unlawful the hiring for employment or subcontracting individuals failing to provide documentation of legal eligibility to work in the United States. The Contractor shall hold the Town of Ridgefield harmless for the failure of the Contractor to comply with the provisions of said Act.

IN WITNESS WHEREOF, the parties hereto have set their hand and seal this on the \_\_\_\_\_ day of \_\_\_\_\_

Signed, Sealed and Delivered in the  
Presence of:

Signed:

\_\_\_\_\_  
Notary Public

Purchasing Department, Town of Ridgefield, 400 Main Street, Ridgefield, CT 06877  
203-431-2720 & purchasing@ridgefieldct.org

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## APPENDIX - INSURANCE REQUIREMENTS

Each bidder shall carry and maintain the following insurance coverage during the period of the contract: The Certificate of Insurance for the Limits of Liability stated below should be submitted with your bid to the Purchasing Department at Town Hall. **Bidders may not perform any work until all insurance requirements are met.**

1. **Comprehensive General Liability Insurance** as will protect him, the Town, and any subcontractor performing work covered by this Contract, from claims for damages for personal injury, including accidental or wrongful death, as well as claims for property damages, which may arise from operations under this Contract whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by either of them. Liability insurance shall include premises and operations, products, contractual, owners, and contractors protective. The minimum amounts of such insurance shall be as follows:
  - Bodily Injury Liability and Property Damage Liability:  
**\$1,000,000 each occurrence.**
  - **The Town shall be named as an Additional Insured**  
This **MUST** be stated explicitly on the Certificate or you will be **disqualified**
2. **Worker's Compensation Insurance and Employer's Liability** for all of his employees, employed at the site and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all employees of the later unless such employees are covered by the protection afforded by the Contractor.
  - Worker's Compensation and Employer Liability:  
Statutory Limits
3. **Comprehensive Auto Liability Insurance:**
  - **Bodily Injury Insurance and Property Damage Insurance** covering the operation of all Motor Vehicles owned, hired and/or non-owned by the Contractor, or used by the Contractor in the Prosecution of the work under the Contract, shall be in the minimum of **\$1,000,000 each occurrence.**

All policies relating to this Contract shall be so written so that the Town shall be notified of cancellation or change at least thirty (30) days prior to the effective date for each policy and type of coverage except for nonpayment which shall be ten (10) days prior to the cancellation. Renewal certificate covering the renewal of all policies expiring during the life of the Contract shall be filed with the Town not less than ten (10) days before the expiration of such policies. Failure to do so will result in work stoppage and possible contract cancellation.

**CONTRACTOR'S QUALIFICATION STATEMENT**

List below references for similar projects, including all information requested. This page must be completed and submitted with the bid.

1. Client: \_\_\_\_\_

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

Approximate Value: \_\_\_\_\_ Date: Started \_\_\_\_\_ Completed \_\_\_\_\_

Contact: Name \_\_\_\_\_ Telephone \_\_\_\_\_

2. Client: \_\_\_\_\_

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

Approximate Value: \_\_\_\_\_ Date: Started \_\_\_\_\_ Completed \_\_\_\_\_

Contact: Name \_\_\_\_\_ Telephone \_\_\_\_\_

3. Client: \_\_\_\_\_

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

Approximate Value: \_\_\_\_\_ Date: Started \_\_\_\_\_ Completed \_\_\_\_\_

Contact: Name \_\_\_\_\_ Telephone \_\_\_\_\_

4. Client: \_\_\_\_\_

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

Approximate Value: \_\_\_\_\_ Date: Started \_\_\_\_\_ Completed \_\_\_\_\_

Contact: Name \_\_\_\_\_ Telephone \_\_\_\_\_

*Company:* \_\_\_\_\_ *Bid Title:* \_\_\_\_\_

*Street:* \_\_\_\_\_ *Bid No.:* \_\_\_\_\_

*City, State:* \_\_\_\_\_ *Telephone No.:* \_\_\_\_\_

CONTRACTOR'S QUALIFICATION STATEMENT

Town of Ridgefield, November 2020

Ridgefield Fire Department

Purchase of a New Ambulance

**Appendix A**  
**Ambulance Specifications**



# **TECHNICAL BID SPECIFICATIONS FOR A TYPE III-AD AMBULANCE**



***RIDGEFIELD FIRE DEPARTMENT  
6 Catoonah Street  
Ridgefield CT 06877***

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **TECHNICAL BID SPECIFICATIONS FOR THE PURCHASE OF ONE (1) NEW CUSTOM BUILT EMERGENCY MEDICAL VEHICLE AS PER THESE DETAILED BID SPECIFICATIONS**

#### **INTENT OF THE BID SPECIFICATIONS**

The purpose / intent of these specifications are to cover the furnishing and delivery to the Town of Ridgefield Fire Department (herein referred to as "Town" or "Agency") a new complete **Type III-AD Ambulance** equipped as hereinafter specified.

**BIDDERS ARE ADVISED THAT THIS SECTION OF THE SPECIFICATIONS WILL BE EVALUATED PRIOR TO THE TECHNICAL PORTION. BIDS THAT DO NOT COMPLY WITH THE INTENT OF THE BID SPECIFICATIONS, GENERAL INFORMATION, BONDING, INSURANCE, DELIVERY, BIDDER QUALIFICATIONS, SERVICE AND WARRANTY REQUIREMENTS WILL BE IMMEDIATELY DEEMED NON-RESPONSIVE AND SHALL BE IMMEDIATELY REJECTED WITHOUT FURTHER REVIEW OF THE TECHNICAL SPECIFICATIONS.**

These specifications are based upon compliance to minimum standards as outlined in the Federal Ambulance Specifications, KKK-A-1822-F, in addition to latest applicable AMD Change Notices. Further the ambulance will meet all rules, regulations, and licensing requirements as per State of Connecticut Emergency Medical Services, unless otherwise directed by this agency.

Certifications of Federal Testing Requirements KKK-A-1822-F shall be provided upon written request of this agency. A registered professional engineer or a recognized independent testing facility shall certify all testing criteria. In no case shall in-house testing be acceptable. Submission of falsified or altered documentation of any description will immediately disqualify the bidder from further evaluations and consideration and any future business with the Purchaser.

It is expected that the bid will be awarded within 30 calendar days after opening. The selected party shall execute the documents required to complete the transaction within seven (7) days of notification of selection.

The Town reserves the right to accept or reject any, and/or all bids, wholly or in part, and/or to waive formalities if it is in the best interest of this agency.

Purchases made by the Town are exempt from the payment of all State and Federal Taxes and such taxes must not be included in the quoted price. A Tax Exempt Form shall be furnished upon written request.

All prices and delivery times quoted must be firm F.O.B. for delivery to the Ridgefield Fire Department, 6 Catoonah Street, Ridgefield CT 06877.

Before submitting a sealed bid, each bidder must make a careful study of these specifications and bid, and fully assure themselves of the quality of the materials and the character of the workmanship required.

It shall be noted that this agency is seeking a vehicle that closely matches the attached specifications. Extensive time has been put into preparing the attached specifications as they relate to the needs and services of the agency.

Proposals and / or bids will be evaluated based on projected longevity of the modular body and conversion. Due to the fact that remounting the modular body onto a new chassis at the end of the original chassis life will extend the longevity of the ambulance conversion. The remount process will ultimately result in a savings to the Town, and will be of utmost importance that the vehicles purchased are of the

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

highest quality. This is especially true of the modular body structure. Likewise it is important that the manufacturer chosen for this contract offer direct remounting of the vehicle in the same facility where the vehicles are originally manufacturer. In order to assure this is the situation all vendors must meet the following requirements.

The manufacturer for the vehicle being proposed must have an established and functioning in-house (factory) remount program and submit evidence of this requirement.

The remount / refurbishment program must have been in continuous operation for a minimum of twenty years. Remount / refurbishment programs that are done by the dealer or any outside subcontractor are not considered equal and therefore are not acceptable. The remount/refurbishment must be completed at the same facility that the new vehicle was manufactured. The manufacturer may be required to submit documents and references in order to demonstrate the durability of the module and the remount/refurbishment process.

Should the ambulance ever be involved in extensive damage caused by a motor vehicle accident, the manufacturer's remount / refurbishment program shall allow the vehicle to be repaired professionally and in a timely manner.

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

The YES/NO space below each item in this bid specification must be fully and accurately completed in order for the bid to be considered responsive. The bidder must indicate compliance by marking and (X / ✓) in the appropriate place provided. **General statements taking total exception to these specifications shall result in an interpretation of being non-responsive and ineligible for consideration, and will be automatically rejected.**

Any exceptions, variations, deviations and clarifications to these specifications must be set forth on an attached sheet entitled **"EXCEPTIONS TO THE SPECIFICATIONS"** and made part of the bidders proposal. They should include page number and description as they are referred to in the bid specifications. This agency will evaluate each exception taken. The agency reserves the right to accept or reject each exception taken as it applies to the specified item(s). If no exceptions are indicated and the agency accepts the bid, the vehicle must be delivered exactly as specified.

Bidders must submit a copy of a current "Certificate of Good Standing" from the Secretary of State in which the bidder is based. Said document shall not be older than six months.

By submitting the bid, the Bidder certifies that he fully understands all the requirements included in the bid terms and specifications, and he is fully informed as to the nature, scope, and time frame of the type of equipment to be supplied.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **SERVICE REQUIREMENTS**

It is the intent of this agency to assure that parts and service are readily available for the emergency vehicle herein specified in accordance with these bid specifications. To insure proper service, the bidder shall include a list of authorized service centers within the New England region. In no case shall mobile service be considered equal, due to the potential for larger issues to develop that cannot be repaired with bidder's offering only mobile type service and "mobile" service is of "limited" service. Technicians **MUST** be factory trained and EVT certified in the operation and repair of all the equipment supplied with full authorization from the manufacturer.

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

## **GENERAL INFORMATION**

The specification details the needs of this department relevant to the chassis requirements, exterior modular body design, interior cabinet design and vehicle options as specified. Extensive time has been put into preparing the attached specifications as they relate to these specific and detailed needs. Manufacturers, who utilize prototype equipment or manufacturing processes that do not meet manufacturing criteria, will not be considered.

The purpose of these specifications is to provide a set of minimum general requirements and test parameters for the manufacture of an emergency medical care ambulance. The bidder is responsible for understanding that this specification establishes the essential criteria for design, performance, equipment and appearance of the ambulance. While it is not the intent of this specification to preclude any qualified bidder, it must be clear that any bidder deviating in any substantial manner from these specifications will be rejected as non-compliant.

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

It is the intent of these specifications that the manufacturer of this vehicle has the ability to manufacture a completed vehicle with the exception of the chassis, within their own manufacturing facility. The basic modular body must be built in the manufacturer's facility and shall not be the product of a subcontractor or any company other than the manufacturer. Accessories such as light bars, sirens and other add on components are not considered as basic components of the modular body. The ambulance manufacturer must have significant experience in the construction of modular ambulance bodies and shall have manufactured a minimum of 4,000 module body style Ambulance under the same ownership.

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

The manufacturer of the ambulance conversion shall be a 100% American owned company. American owned defines the manufacturer as well as the majority equity owners of the manufacturer as US companies, individuals and/or stockholders. The company must also have a portion owned by its employees / Employee Stock Option Plan (ESOP). This method of ownership gives each employee the incentive to perform his or her best work ethic and ensures the highest quality of workmanship is invested into each and every ambulance manufactured.

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

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

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

This is an engineer, design, construct and delivery type specification and it is not the intention of this agency to write out vendors or manufacturers of similar or equal equipment of the types specified. It should be noted, however, that this specification is written around specific needs of this agency. With the intent to standardize certain components, in numerous places specific brand names of components are listed and are recommended to be included within the bidder's proposal. This has been done to establish a certain standard of quality. Other brands may be accepted providing the vendor provides documentation in the bid that the particular brand offered meets or exceeds the quality of the actual brand called for in the specification.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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Bidder must furnish, at minimum, all information as requested as part of the bidder's proposal package. The bidder shall supply one (1) complete set of custom engineer approved detailed drawings on the vehicle as proposed, a work order on the vehicle as proposed, a complete list of any / all deviations from the bid specifications, and descriptive literature specifications covering the products offered. All drawings shall include measurements of the compartments and cabinets. Bids not meeting this requirement will result in immediate rejection. Bidders are cautioned that the bidder's proposal package will be closely evaluated and may be based off decision of bid award.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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For ease of comparison, all bid proposals must be submitted in the same order as these specifications.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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These bid specifications shall serve as the part of the contract between the bidder and this agency. Final inspection of the vehicle will be accomplished using these specifications along with any listed accepted deviations to determine compliance.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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All bid prices shall be complete and include warranty and delivery of the completed vehicle to this agency. Payment will be made upon delivery and acceptance of the vehicle and equipment specified herein.

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

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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By submission of this signed bid response, the bidder certifies under penalty of perjury, that to the best of his/her knowledge that the pricing in this bid response has been prepared independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such pricing with any other bidder or competitor. The bidder also acknowledges that the pricing quoted has not been discussed with or disclosed by the bidder prior to the opening of the bid, either directly or indirectly.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

The bidder's proposal packet shall include a copy of the ambulance manufacturer's current insurance certificate. The manufacturer shall provide proof of \$2 Million dollars of product liability insurance coverage.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

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

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

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

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

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

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

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

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

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

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

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

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

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

prevent freeze-up and free the road's surface from ice and / or snow. Therefore any / all bidders with paint warranty with explicate exclusions of such substances shall be deemed non-responsive and will not be acceptable. No exceptions to this requirement will be allowed.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

## **WARRANTY SURETY**

To simplify warranty coverage and to assure a consistent level of quality throughout the manufactured vehicle, the manufacturer shall design and manufacture the major components for the ambulance (excluding chassis). Major components are defined as: the module body, exterior compartment doors, exterior compartments and the interior cabinets. The highest degree of quality, both in materials and in the building processes is required for the emergency medical vehicle being proposed. Any company that sub-contracts or allows another company to do any of these minimum requirements will be deemed non responsive and may be cause for immediate rejection.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

## **DELIVERY**

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

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

## **CHASSIS AND EQUIPMENT**

### **Chassis Manufacturer:**

2021 Ford E-450 Superduty cut-a-way van cab / chassis.

7.3L Premium V-8 electronic fuel injected gasoline engine. Rated at 350 horsepower and 468 lb.-ft of torque at 3,900 RPM.

"XL" trim level.

Ambulance Prep Package (47A).

158" wheelbase / 100" (CA) cab to axle.

14,500 Lb. G.V.W.R.

Front Axle: 5,000 LB capacity.

Rear axle: 9,500 LB capacity.

Gear ratio: 4:56 to 1 with limited slip differential.

Heavy-Duty 240-amp alternator.

Engine block heater.

Electronic 6-speed automatic "TorqueShift" transmission.

Heavy-duty shock absorbers front and rear.

Front suspension shall be coil springs.

Rear suspension shall be leaf springs.

Front OEM anti-sway bar.

Four wheel disc brakes. (Cryogenic brakes as specified later within these specifications).

Four wheel anti lock brake system (ABS).

Foot actuated parking brake.

Power steering.

Tilt wheel and five-inch stroke collapsible steering column.

High back captain's chairs with gray cloth upholstery and inside armrests.

OEM heavy-duty rubber / vinyl floor covering.

OEM cloth headliner with sun visors, and padded dash.

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

Gauges and meters: speedometer, tachometer, odometer, engine coolant temperature, battery voltage, engine oil pressure, fuel gauge.

Convenience Features: intermittent windshield wipers, day/night windshield mounted rear view mirror, headlight warning chime, interior light door switches, inside hood release, and cigarette lighter.

AM/FM/CD cab stereo radio with digital clock. Includes 4-speakers.

16" White painted steel wheels.

LT 225/75R X 16E radial tires. Seven (7) wheels and tires to include spare tire and rim. Spare tire / wheel (balanced and road ready) to be shipped loose.

Cruise control.

Chrome front bumper and grille.

Front license plate bracket.

Dual electric horns.

Auxiliary heater – A/C converter package.

Heavy-duty radiator.

Engine oil cooler.

Driver / passenger airbags.

Power cab door locks.

Power cab door windows.

Aerodynamic halogen headlamps.

Daytime running lights.

55-gallon fuel tank.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Chassis Warranty Information:**

The Ford commercial chassis shall have a bumper-to-bumper limited warranty of 3-years / 36,000 miles and a Powertrain limited warranty of 5-years / 60,000 miles, whichever occurs first.

All parts of the vehicle manufactured and covered by Ford Motor Company shall be listed in the warranty information booklet that shall be shipped with the vehicle.

The Ford commercial chassis shall have corrosion protection. All sheet metal manufactured and installed by Ford Motor Company is protected against rust through (perforation) for 5-years / unlimited mileage.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Anti Sway Bar, Front:**

The standard OEM front axle sway bar shall be removed and replaced with a RoadMaster / IPD sway bar made of powder coated 4140 chromoly steel bars with heavy-duty polyurethane bushings.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Anti Sway Bar, Rear:**

The standard OEM rear axle sway bar shall be removed and replaced with an RoadMaster / IPD sway bar made of powder coated 4140 chromoly steel bars with heavy-duty polyurethane bushings.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Seat Restriction:**

The OEM cab seats front to rear travel shall not be restricted by the bulkhead wall or equipment mounted behind the seats.



# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Heater Hoses:**

Heater hoses are to be Nomex, with highest quality, and highest temperature rating available. All hoses must be of equal or greater quality than required by the chassis manufacturer to comply with Ford QVM.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Heat Shields:**

Steel heat shields shall be installed between the chassis muffler and the modular body. Steel shields shall also be installed at any location where the exhaust system is less than three inches from the modular body.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Spare Tire:**

A Ford OEM supplied steel wheel and tire, mounted and balanced shall be shipped loose with the vehicle. The steel wheel shall be painted by Ford to match the chassis wheels.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Wheel Covers:**

All four (4) outside wheels shall be covered with Real Wheels Corporation high-quality; non-magnetic 304L stainless steel wheel simulators; part #RW-1600-2AK. These simulators shall be engineered in such a way that they are removable without removing any of the OEM lug nuts. In addition, the rear wheel simulators shall incorporate stainless steel braided valve stem extensions with stabilizers for both the inside and outside tires in a convenient location at the wheel hub covers.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Exterior Mirrors:**

VelVac model #2020 "deluxe" heated and motorized side view mirrors shall be installed. Mirrors shall be Black in color and have a built in turn signal on each arm.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Hi-Idle / Throttle:**

An InPower high idle system shall be preset to the proper RPM per the manufacturer's specifications. The throttle shall increase automatically when the OEM chassis park brake / emergency park brake is applied.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Cab Spot Light:**

There shall be a Streamlight "Waypoint" rechargeable "LED" hand held spotlight located in the cab. A Streamlight dedicated light holder and 12-volt power cord shall be supplied. Streamlight part #44900. The cup holder location to be determined at time of bid award.

A dedicated 12-volt outlet shall be installed behind the cab driver seat secured to the front bulkhead wall that will allow the power cord to be plugged in to retain its charged capacity.

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Cab Switch Panel / Console:**

A custom designed angled cab switch panel / console shall be provided.

From front (at engine cover) to rear as follows:

3" wide flattop area with OnSpot tire chains guarded switch to be mounted within rear to driver seated position.

Angled section to allow for a manufacturers switch panel(s), dual USB charger, air horn activation switch, three (3) 1-place switch panels and adequate space for two-way mobile radios.

Rearward flat base section to extend toward the rear wall of the cab with blank space at front edge, two (2) large drink holders.

The console shall be designed to allow easy access from either cab seat. The console shall be constructed out of wood and a color coordinated laminate to match the cab. The radius corners shall be aluminum extrusion for superior strength and to prevent injury caused from sharp corners. The overall length of the console shall be approximately 33" long x 15" wide x 21" tall at the forward end (towards the engine compartment). The console shall be angled down at the rear to approximately 10".

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Map Light, Federal Littlite LED:**

A Federal LED "littlite" flexible shaft map light shall be installed on the passenger side of the cab console for use by the seated passenger. Federal part #LF12ES-LED.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **OnSpot Automatic Tire Chains:**

The vehicle shall be equipped with OnSpot Automatic Tire Chains. The tire chains shall be plumbed to the air horn compressor as later identified within these specifications.

The tire chains shall be activated thru a Red guarded switch located on the cab front console for use by the driver.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Batteries:**

The vehicle shall be equipped with a total of two (2) Optima yellow top batteries with a minimum of 750 CCA each battery. Both batteries shall be located in a dedicated exterior bottom hinged compartment located on the curbside of the module that shall be distinct from any storage of equipment. In no case shall the batteries be stored within a separate section within the exterior single hinged compartment door for storage.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Slide-Out Batteries:**

The OEM batteries shall be installed in heavy-duty slide-out smooth aluminum tray with "DA" finish and with locking mechanism to retain the batteries in a secured closed position and reduce rattling. The tray shall include four return lips to prevent additional movement. The tray shall be mounted on heavy-duty 18" slides, Austin Hardware #501 slides. The entire tray and slide assembly shall be bolted to .250" thick 4" high by 3" wide aluminum angle. All batteries shall be mounted on heavy-duty ribbed rubber matting.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **Owner's Manual:**

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

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Audible Alarm:**

An audible alarm shall be provided in the cab. The alarm to sound then the vehicle is placed into a drive gear and the park brake is applied.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Anti-Theft Protection:**

An Tremco Police Products ignition override theft protection device shall be supplied and installed. The anti-theft system shall lock the shift lever in the park position every time the vehicle is put in park. To unlock the shift lever, the officer has to depress the hidden foot actuator. The system shall include an "on-off" switch on the control box. This features allows the system to override the anti-theft portion.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Cab Dome Light:**

A Sound-Off White / Red LED ceiling dome light shall be supplied and installed, Sound Off part #ECVDMLTAL00. The dome light shall be installed directly above the passenger seated position. The light shall be controlled thru an integral switch on the fixture; white / off / red.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Cab Ventshades:**

Each cab window shall include a "smoke" / "dark tint" ventshade. The vent shades shall be installed with 3M adhesive foam tape.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Cyrogenic Brake System:**

Prior to final delivery, the OEM brake pads and rotors shall be removed and replaced with cryogenic brake pads and rotors. All parts shall meet the specifications of the chassis and shall not void any chassis warranty. All bidders are required to submit any sales literature and warranty information on the proposed components that are being included within the bidders proposal.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Plymovent Tailpipe:**

The OEM tailpipe shall include a stainless steel ring to allow a Plymovent pneumatic grabber exhaust system.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **MODULE BODY**

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Body Style:**

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

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

The ambulance manufacturer shall design and construct its own bodies, and maintain a design staff at its manufacturing facility. Vehicle manufacturers who design and build their own bodies and who have the expertise within their facility will possess a greater capacity to handle a custom project of this type and insure a finished product of the highest standards and quality.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Type III-AD Module Body Dimensions:**

Body exterior shall be a minimum of 171.75" long x 96" wide x 90" high. The patient compartment aisle shall be a minimum of 48" wide. The exterior body compartments shall be a minimum of 19" inches deep. Overall vehicle length, including bumpers, shall be 23'. Overall vehicle height, ground to top of module, shall not exceed 110".

All body panels, structures, and extrusions shall be fabricated of ALL aluminum construction using alloys consistent with the load requirements of the vehicle.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Module Body Design:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Computer Design Standards:**

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

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

vehicle and to provide an accurate cut list for programming a computerized band saw used to cut the necessary sized tubing needed to assemble the modular body.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Computer Controlled Metal Cutting:**

Because of the complexity of this vehicle and the tight tolerances required to produce it, computer controlled cutting machines will be used to the greatest extent possible. This ensures that all door openings, door latches, body windows, warning light locations, etc. are correctly placed, square to the body and properly sized. A microprocessor controlled, CNC machine shall be used to cut the aluminum sheet for the exterior side, front wall and rear wall panels, the roof panel, the exterior door panels and the exterior compartment enclosures. Any other optional equipment needing aluminum sheet shall be cut by this machine to ensure accuracy and reproducibility in the finished product. A computerized band saw shall be used to cut aluminum tubing needed for wall tubing, floor tubing, roof tubing and any other optional equipment needing tubing for assembly. Information from the computerized design process shall be used in programming these cutting machines. Finally, a computerized sheet metal bending brake shall be used to bend the sheet metal into its final shape. This is to ensure that the final product has the exact shape needed with the correct angles.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Module Body Construction:**

All body panels, structures, and extrusions shall be fabricated of aluminum materials using alloys and thicknesses consistent with the load requirements of the vehicle. Exterior panels shall be fabricated from 5052-H32 sheet aluminum, a highly corrosion resistant marine grade alloy, with minimum 2.2% magnesium and having an ultimate tensile strength of 33,000 PSI. Exterior body extruded framing members shall be fabricated from 6063-T6 grade aluminum with minimum 0.8% magnesium and minimum 0.4% silicon, having an ultimate tensile strength of 35,000 PSI. The aluminum sheets and extrusions will have a varying thickness, depending on the use, as described later in the specification.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Module Body Floor Construction:**

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

Two custom 6063-T6 alloy aluminum angles shall run lengthwise the entire length of the floor assembly. This custom angle shall be "L" shaped. The bottom of the "L" shall be 4.75" L x 0.75" in thickness. The vertical part of the "L" shall be 2.375" L x 0.375" in thickness. At each juncture where this aluminum angle

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

crosses a 2" x 2" framing member of the interlocking extrusion, it shall be welded to that framing member along both edges of the aluminum angle. These high strength aluminum angles shall provide a continuous mounting surface to attach the body to the chassis at the chassis mounting locations. In addition, these aluminum angles shall provide additional strength to the floor system making it a solid, crashworthy foundation upon which the rest of the module shall be built.

As the floor assembly is constructed, provisions shall be made for the installation of the exterior compartment enclosures, the step well and any other options that will extend below the floor structure. At the edges of these intrusions, an additional 2" x 2" x 0.125 aluminum framing member shall be installed at the front and rear edges of the intrusion to provide additional support for the option. These additional 2" x 2" x 0.125" framing members shall extend beyond the custom aluminum angle. This will allow the additional tubes to be welded to the raw floor edge of the intrusion, the interlocking floor extrusions in addition to the aluminum angle.

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

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

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Module Body Side Wall Construction:**

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

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

Vertical aluminum radius-type corner extrusions, of a hollow core design, utilizing 6063 T6 alloy, which interlock with the body side sheets and vertical framing shall be utilized. These corner post extrusions must include an integral X-frame web, running full length of the extrusion for added impact resistance.

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

2" x 2" x 0.125" and 2" x 3" x 0.125" (where applicable) extruded tubes shall be welded to the outside of the X-frame on either side of the corner post extrusion to complete a 7.5" radius corner post design. All exterior aluminum body panels shall be attached to the underlying structural supports via 3M VHB high performance, double sided tape. The tape shall provide an adhesion strength of 350 N/100 MM. The tape shall consist of acrylic foam with a thickness of 0.062 inches, which is viscoelastic in nature. Viscoelastic means the foam absorbs energy and relaxes stress, as compared with other types of foam core tape. The tape shall also provide for an environmental resistance creating a strong durable bond. The tape shall be used as an insulating agent to hold the panels tightly against the structural supports, thus eliminating vibration and oil-canning. In addition to the tape attachment system, all panels shall be welded to structural members at the perimeter. Hydro-Thermo absorption pads shall be used during the welding process to quickly dissipate the heat of the welding procedure. The use of the pads as described will eliminate heat distortion without damaging the structural integrity of the module body. Methods of panel attachment that utilize rivets will not be acceptable. The voids between the 2" x 2" x 0.125 framing members shall be filled with 2" Certifoam extruded polystyrene insulator foam, non-settling plank insulation. The insulation shall be hand cut to fill the space and shall be glued in place using high strength, low odor adhesive. Spray foam type of insulation is not permitted due to the uneven application characteristics of this material. In addition, the inside of the wall shall be covered by a 4-mil vapor barrier.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Module Body Front And Rear Wall Construction:**

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

The rear wall shall be constructed of 6063-T6 aluminum alloy 2" x 2" x 0.125 tubing. There shall be a minimum of five horizontal framing members to provide additional strength on the walls. There shall be additional framing as required to support any optional equipment being installed on the wall. There shall be a framed opening to allow for the rear entry doors. Due to the severe duty cycle of the rear doors, there shall be additional bracing installed to ensure a strong mounting area for the rear doors as well as ensuring reliable operation. The hinge side for both rear doors shall include (2) 6063-T6 aluminum alloy 2" x 2" x 0.125 framing members, welded to each other. The bottom threshold shall be a 2" x 2" x 0.250 framing member, milled to interlock with the longitudinal floor angles. The top header of the doors shall be a 6063-T6 aluminum alloy 2" x 2" x 0.25" framing member. The top tube of the wall, where it meets the roof structure, shall be a 6063-T6 aluminum alloy 1.5" x 2" x 0.188 framing member. A minimum of (10) aluminum box style gussets shall be installed above the rear doors, along the width of the rear wall. Each gusset shall be fabricated from 6063-T6 alloy, 1" x 2" x 0.125" aluminum box members with 45 degree, angled ends. (2) shall be installed, one to each side of the double door frame vertical framing members, at the upper door edge on both sides of the door opening. Next, (2) shall be installed at the top edge of the rear wall on both sides of the double door frame vertical framing members where they meet the roof. Finally, (1) additional gusset shall be installed at the roof level at each outside corner of the rear wall where the rear corner framing member meets the roof. All (10) gussets shall be used except in the rare case where there is interference with a required option on the rear wall in this area. A single sheet, 5052-H32 flat sheet shall cover the rear wall. It shall be cut using a microprocessor controlled milling machine which will cut the circumference of the sheet as well as any openings for lights and other

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

optional equipment to be installed. This panel shall be attached to the underlying structural supports via 3M VHB high performance, double sided tape as well as fully welded to the structural members around the perimeter of the wall. Hydro-Thermo absorption pads shall be used during the welding process to quickly dissipate the heat of the welding procedure. The use of the pads as described will eliminate heat distortion without damaging the structural integrity of the module body. The voids between the 2" x 2" frame members shall be filled with 2" Certifoam extruded polystyrene insulator foam plank insulation. The insulation shall be cut to fill the space and shall be glued in place using high strength, low odor adhesive.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Module Body Roof Construction:**

The roof shall be one piece .090" sheet, 5052-H32 alloy, which is supported by a grid consisting of a minimum 6" x 2" x 0.150" channel with .230" flanges running longitudinally and 4" x 2" x 0.125 "hat channels" extending transversely from the longitudinal channel to the roof frame extrusions. These hat channels shall be spaced no more than 18" apart. The minimum 6" x 2" x 0.150" center spine channel shall also function as a wiring raceway. Aluminum plates shall be welded between each "hat channel" to provide support for all ceiling mounted hardware. The roof frame extrusions and corner extrusions shall be the reinforced "X" type, hollow core design. All roof rail extrusions shall be 6063-T6 alloy.

The horizontal roof extrusions shall incorporate an extruded drip rail on all four sides of the body. The roof shall be crowned 1/2" to facilitate water runoff. The roof sheet shall interlock with the roof frame extrusions. The voids between the 2" x 2" x 0.125 framing members shall be filled with 2" Certifoam extruded polystyrene insulator foam plank insulation. The insulation shall be hand cut to fill the space and shall be glued in place using high strength, low odor adhesive and shall include a 4mm vapor barrier. A single sheet of 0.090 5052-H32 aluminum alloy shall be attached to the roof grid using 3M VHB high performance, double sided tape. The edges of the sheet shall be fully perimeter welded to the top roof corner extrusions to ensure a strong and waterproof seal.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Module Body Mounting:**

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

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Fire Extinguishers:**

Two (2) five-pound ABC fire extinguishers with mounting bracket shall be supplied. Both extinguishers shall be shipped loose with the delivered vehicle.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Interior Headroom:**

The interior of the patient compartment will provide no less than 72" of finished headroom from floor to ceiling.



# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Bulkhead Wall:**

The cab to module bulkhead wall shall be recessed a minimum of 6" for both the driver side and passenger side. The recess shall be made of five-ply marine-grade plywood. It shall then be covered with a .050" aluminum panel wrapped in heavy-duty vinyl.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Cab To Module Access:**

A chassis cab to modular body pass-thru configuration to the patient compartment shall be provided. It shall have a sliding Polycarbonate window that latches open and closed only from the cab side. A track for the window shall provide rattle free operation. The sliding window shall be latched from the cab side only.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Module Vents:**

There shall be a minimum of three Perko style mounted high on the ambulance body as follows: (1) for powered exhaust fan, (1) to vent the oxygen compartment and (1) as a passive intake for the climate control system.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Rear Fender Rings:**

There shall be one-piece stainless steel fender rings installed around the rear body cutout above the rear wheels. The fender rings, when installed shall not contain any exposed fasteners. These fender rings shall provide an aesthetically pleasing rounded opening as well as provide impact and paint protection. Housings shall attach to the modular body utilizing stainless steel bolts. Fastener inserts shall be applied between the fender and the module body to isolate between dissimilar metals.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **Fuel Fill Housing:**

A Cast Products, Inc. round style aluminum filler housing shall be installed on the street side of the vehicle for ease of fueling. Cast Products, Inc. part #FG5703. Eck brand spray shall be used prior to installation at all fastening points.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **MODULE DOORS AND WINDOWS**

### **Module Entry Door Reflectors:**

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

***Bidder Understands And Will Supply Exactly As Written? YES NO***

### **Module Entry Door Jamb:**

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

All patient door jambs must be separate from the body skin and must be fully welded to a minimum 2" x 2" x 0.125" 6063-T6 extrusion. At the rear of the body a minimum 2" x 3" x .125" 6063-T6 extrusion shall be used. The exterior lip will be flush with the exterior wall skin when installed. The custom, labyrinth style door frame extrusion will be continuously welded to the wall skin and to the 2" inch square framing extrusion around the exterior perimeter. The door jamb trim shall also be welded on the interior side where each door pin is located. The fully welded door frames shall provide additional protection in the event of an impact. All seams shall be sealed and caulked.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Module Entry Doors:**

The doors shall be framed using custom 3" thick 6063-T6 aluminum labyrinth style extrusions designed to mate with the door jamb extrusions. There shall be 6063-T6 aluminum alloy gussets installed at each interior corner of the door for additional strength. These gussets shall be .250" thickness 5052-H32 aluminum alloy sheet for each module entry door.

The outer sheet of the doors shall be cut from a .125" thickness single piece of 5052-H32 aluminum alloy sheet, using a microprocessor controlled milling machine. The edges of this sheet shall bend around the door framing members to form a pan style door. The corners shall then be welded and finished smooth. Interior panels shall be recessed into the extruded frame and screwed into place using stainless steel flat head machine screws and locking cage nuts. All areas that will not accommodate a locking cage nut will have screw holes tapped into a minimum .125" aluminum gusset in each corner. The result shall be a fully insulated, pan formed, labyrinth style door system.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Door Seals:**

In order to seal the doors from exterior environmental conditions, there shall be a hollow core, adhesive backed weather-strip installed as follows:

On the side entry door, the weather-strip is to be installed on entire circumference of the outer labyrinth surface of the door. This is to ensure the rotary latch in the door is on the protected side of the weather-strip. An additional piece of weather-strip shall run the entire height of the hinge side of the door opening for additional protection.

On the rear entry door, the weather-strip shall be installed on entire circumference the door opening where it meets the outer labyrinth of the door. This is to ensure the rotary latches in the door are on the protected side of the weather-strip. An additional piece of weather-strip shall run the entire height of the hinge sides of both doors as well as the flange on the secondary door where the primary door mates with it, for additional protection.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Protective Padding:**

There shall be protective pads directly above the side and rear doors. These pads shall be a minimum of 2" thick and shall be constructed of high-density foam and heavy-duty vinyl. No piping shall be used and all seams shall be sealed to repel contaminants. The cushions shall be installed with industrial grade plastic hook and loop Velcro allowing easy removal for cleaning. The Velcro when attached to the separate surfaces shall ensure that it will not come apart from the individual areas. Pads over entry doors shall extend below Nader pins to prevent serious head injury. These pads shall be trimmed on the exterior side with stainless steel.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Insulation:**

The void on the interior of the entry doors shall be filled with 2" Certifoam extruded polystyrene insulator foam plank insulation. The insulation shall be hand cut to fill the space and shall be glued in place using high strength, low odor adhesive

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Vapor Barrier:**

A 4-mil vapor barrier shall be installed over top of the plank insulation on the side, rear and inside / outside compartment doors. The vapor barrier shall be installed as one-piece to allow the necessary effectiveness. The vapor barrier shall be secured in place to prevent movement.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Door Hardware:**

Each modular body entrance door shall be equipped with two heavy-duty rotary latches to meet FMVSS 206 standards.

Each rotary latch shall close on a post (Nader pin) mounted to the doorframe extrusion. A minimum 2" x 2" x .125" frame member shall be placed behind the extrusion for positive two point latching. All door latches Nader pins shall be adjustable.

Both rear doors must latch onto the doorframe.

All door latch posts shall be adjustable.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Entry Door Sill Plates:**

Inner and outer sills of the module entry doors shall be trimmed with formed brushed stainless steel plates to protect painted surfaces. All plates shall be installed with industrial grade adhesive. No mechanical fasteners may be used.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Entry Door Hinges:**

Each module entry door shall be mounted with a 3" wide, stainless steel piano style hinge with a minimum pin diameter of 1/4". Hinge pin diameter of less than .250" is unacceptable to ensure the long-term performance of the hinge in this extreme use application and also to ensure the hinge will not hang causing door closing problems. The hinge shall be slotted for adjustment and attached to the door with stainless steel truss head machine screws threaded into nutserts that are installed into the door and door frame.

All door hinges shall be installed prior to painting and then removed and reinstalled after the module body has been properly painted. Two methods of preventing paint corrosion shall be installed. Step one shall include an adhesive backed clear tape between the painted surface and the stainless steel hinge. Step two shall include a dielectric barrier, "ECK", of which shall be shall be generously installed between the module body and the door hinge. Both methods shall be applied along the entire length of the hinge prior to installation.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Side Entry Door:**

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

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Module Side Entry Door Threshold:**

The side patient entry door shall have a threshold with Black / Yellow anti-slip tape installed.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Side Entry Door Window:**

Side entry door shall be equipped with a manufactured sized 16" x 20", sliding, tinted safety plate window in an aluminum frame. A removable screen shall be installed within the window frame. The window shall include a "Bronze" tint within the glass.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Rear Entry Doors:**

The ambulance module shall have double hinged rear entry doors on the rear of the module. The doors shall provide a minimum of 58" of pass thru height at rear doors and shall be full width, 48", of the rear floor space.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Rear Entry Door Hold Opens:**

The rear entry doors shall have Cast Products, Inc. "Grabber" hold-open devices with high-density rubber replaceable inserts mounted on each door above the rear door windows. The socket of the "Grabber" shall be installed on the rear body wall attached to a 2" x 2" aluminum support tube to prevent body damage. These devices shall hold the doors in a fully opened 160-degree position.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Rear Entry Door Windows:**

Rear entry doors shall be equipped with a manufacturer sized 16" x 20" non-opening, tinted safety plate window in an aluminum frame. Windows shall include a "Bronze" tint within the glass.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Entry Door Paddle Handles:**

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

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

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Rear Door Exterior Door Handles:**

Both rear doors shall be equipped with both interior and exterior paddle handles for ease of operation, four (4) handles total.

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Door Handle Anti-Slip Material:**

A nonskid easy-grip surface shall be applied to the backside of the module compartment and entry door handles to permit a gloved or wet hand to easily grip the handle without slipping.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Secondary Door Release:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Latch Activation:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Door Panels:**

All module door interior panels shall be installed using stainless steel, fine thread, flathead machine screws and cage nuts. All machine screws shall be dipped in ECK anti-corrosive coating prior to assembly. All areas where a locking cage nut cannot be applied, a stainless steel machine screw will be taped into a minimum .250" thick aluminum. The use of self tapping screws will not be allowed.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Entry Door Trim Panels:**

Each modular entrance door shall have removable .100" aluminum inside access panel to facilitate latch adjustment or repair. The lower interior panel shall be .100" smooth aluminum plate. The upper interior door panels shall be .100" aluminum covered with laminate. They shall be recessed into the door extrusion and attached using stainless flathead machine screws and locking cage nuts. All machine screws shall be dipped in ECK anti-corrosion coating prior to assembly. All areas where a locking cage nut cannot be applied, a stainless steel machine screw will be taped into a minimum .250" thick aluminum. Interior door panels that are not recessed could have sharp edges and increase the probability of contamination by blood borne pathogens

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Door Edge Stainless Steel Protective Trim:**

There shall be stainless steel formed angle trim installed on the inside of all exterior compartment and entry doors, hinge side of all exterior vertically hinged compartment doors and both rear entry doors (hinged and no-hinged sides) to prevent paint damage to the door edge when removing and / or loading equipment. The stainless steel angle trim shall be secured with countersunk screws for ease of replacement.

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Side Entry Door Stepwell:**

The side entry door stepwell shall have Black Dri-Dek installed and include a drain plug located beneath.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Gerber Vision Rear Windows:**

The two (2) rear entry door windows shall include White Gerber vision on the exterior. Within the center of the Gerber Vision material shall be a Blue printed Star-of-Life decal.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **EXTERIOR MODULE COMPARTMENTS**

### **Exterior Compartments:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Door Jamb:**

All compartment door jambs must be separate from the body skin and must be fully welded to a minimum 2" x 2" x 0.125" 6063-T6 extrusion. The exterior lip will be flush with the exterior wall skin when installed. The custom, labyrinth style door frame extrusion will be continuously welded to the wall skin and to the 2" square framing extrusion around the exterior perimeter. The door jamb trim shall also be welded on the interior side where each door pin is located. The fully welded door frames shall provide additional protection in the event of an impact. All seams shall be sealed and caulked.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Doors:**

The doors shall be framed using custom 3" thick 6063-T6 aluminum labyrinth style extrusions designed to mate with the door jamb extrusions. There shall be 6063-T6 aluminum alloy gussets installed at each interior corner of the door for additional strength. These gussets shall be .125" thickness 5052-H32 aluminum alloy sheet for all compartment doors.

The outer sheet of the doors shall be cut from a .125" thickness single piece of 5052-H32 aluminum alloy sheet, using a microprocessor controlled milling machine. The edges of this sheet shall bend around the door framing members to form a pan style door. The corners shall then be welded and finished smooth. Interior panels shall be recessed into the extruded frame and screwed into place using stainless steel flat head machine screws and locking cage nuts. All areas that will not accommodate a locking cage nut will have screw holes tapped into a minimum .125" aluminum gusset in each corner. The result shall be a fully insulated, pan formed, labyrinth style door system.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Entry Door Hinges:**

Each module entry door shall be mounted with a 3" wide, stainless steel piano style hinge with a minimum pin diameter of .250". Hinge pin diameter of less than .250" is unacceptable to ensure the long-term

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

performance of the hinge in this extreme use application and also to ensure the hinge will not hang causing door closing problems. The hinge shall be slotted for adjustment and attached to the door with stainless steel truss head machine screws threaded into nutserts that are installed into the door and door frame.

All door hinges shall be installed prior to painting and then removed and reinstalled after the module body has been properly painted. Two methods of preventing paint corrosion shall be installed. Step one shall include an adhesive backed clear tape between the painted surface and the stainless steel hinge. Step two shall include a dielectric barrier, "ECK", of which shall be generously installed between the module body and the door hinge. Both methods shall be applied along the entire length of the hinge prior to installation.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Door Seals:**

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

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Insulation:**

The void on the interior of the compartment doors shall be filled with 2" Certifoam extruded polystyrene insulator foam plank insulation. The insulation shall be hand cut to fill the space and shall be glued in place using high strength, low odor adhesive.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Door Hardware:**

All compartment doors over 36" high shall contain dual point rotary latches. Single point latching is not acceptable due to the potential of allowing fluids and dust to enter the compartments from the exterior. Each rotary latch shall close on a post (Nader pin) mounted to the doorframe extrusion. A minimum 2" x 2" x .125" frame member shall be placed behind the extrusion for positive two point latching. All door latches Nader pins shall be adjustable. Double door compartments must latch onto the doorframe.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Entry Door Sill Plates:**

Inner and outer sills of the module entry doors shall be trimmed with formed brushed stainless steel plates to protect painted surfaces. All plates shall be installed with industrial grade adhesive. No mechanical fasteners may be used.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Compartment Door Paddle Handles:**

The exterior compartments shall be equipped with Tri-Mark free float handles with chrome exterior and Black pocket. A nonskid easy-grip surface shall be applied to the backside of the handle to permit a gloved or wet hand from easily gripping the handle.

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

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

Compartment doors shall be lockable for all single hinged doors and locking for primary door where double doors are required. All exterior compartment doors and module entry doors shall be keyed alike.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Entry Door Hinges:**

Each compartment door shall be mounted with a 3" wide, stainless steel piano style hinge with a minimum pin diameter of 1/4". Hinge pin diameter of less than .250" is unacceptable to ensure the long-term performance of the hinge in this extreme use application and also to ensure the hinge will not hang causing door closing problems. The hinge shall be slotted for adjustment and attached to the door with stainless steel truss head machine screws threaded into nutserts that are installed into the door and door frame.

All door hinges shall be installed prior to painting and then removed and reinstalled after the module body has been properly painted. Two methods of preventing paint corrosion shall be installed. Step one shall include an adhesive backed clear tape between the painted surface and the stainless steel hinge. Step two shall include a dielectric barrier, "ECK", of which shall be shall be generously installed between the module body and the door hinge. Both methods shall be applied along the entire length of the hinge prior to installation.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Door Seals:**

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

Seals shall be mounted in a way to protect them from abuse.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Exterior Compartment Inner Door Panels:**

All compartment door interior panels shall be polished diamond plate aluminum. They shall be recessed into the door extrusion and attached using stainless flathead machine screws and locking cage nuts. All areas where a locking cage nut cannot be applied, a stainless steel machine screw will be tapped into a minimum .125 aluminum. The machine screws shall be dipped in ECK anti-corrosion coating prior to installation. Where a tapped screw is used, it will be coated with LocTite before installation.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Door Sill Plates:**

Inner and outer sills of all vertically hinged compartment doors shall be trimmed with formed brushed stainless steel plates to protect painted surfaces. All plates shall be installed with industrial grade adhesive. No mechanical fasteners may be used.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Exterior Compartment Door Reflectors:**

There shall be (1) 3M, 2" x 7" self-adhesive style red reflector mounted on each compartment door that is half height or lower. Doors over half height shall have (2) reflectors; (1) in the upper half of the door and (1) in the lower half of the door. The reflectors shall be installed vertically, to wrap around the outer labrynth of the door extrusion.



# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Vent:**

In order to prevent airlock inside compartments when closing, all exterior equipment storage compartments shall be vented using a 9" x 12" or 6" x 15" black texture coated .125" aluminum vent cover cover. All vents shall be above the floor line. The only exception shall be the oxygen compartment, which may have a vent in the door and below the floor line. All vents below the floor line shall have a scotch-brite style filter installed to help prevent moisture and dust from entering the compartment. All compartments shall have at least one vent with additional vents as necessary, depending on the compartment size, to allow for easy closure of the compartment door.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Door Panels:**

All exterior compartment inner door panels shall be polished diamond tread plate aluminum. They shall be recessed into the door extrusion and attached with stainless flathead screws and cage nuts.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Door Switches:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Interior Lining:**

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

The minimum performance specifications for this coating material are:

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

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

This agency does not recognize diamond plate interiors as equal due to potential damage of equipment by the rough surfaces of the diamond plate material.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Lighting:**

All exterior module compartments, except the battery compartment, shall include TecNiq brand LED strip lighting, model #E41-W010-1. Each compartment shall include (1) strip light to be installed vertically inside the door frame edge with maximum height allowed within the compartment.

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Storage Compartments:**

This agency seeks a manufacturer that matches the following exterior compartment layout and designed as stated. There shall be a total of three (3) compartments installed on the streetside for storage accommodations. There shall be three (3) storage compartments on the curbside of the vehicle, excluding a dedicated battery compartment.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Curb Side Front Compartment (P-1):**

There shall be a curbside front inside / outside compartment installed. Compartment interior dimensions shall be approximately 56" high x 22.75" wide x 25" depth.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Adjustable Inside / Outside Compartment Shelves (P-1):**

The inside / outside right front cabinet shall have a three (3) adjustable smooth aluminum shelves with "DA" finish. Each shelf shall contain a 1" return lip on all four sides. Each shelf shall include heavy-duty ribbed removable rubber matting sized to fit each shelf.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Compartment Wall Finish (P-1):**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Curb Side Front Battery Compartment (P-2):**

There shall be a curbside front exterior dedicated battery storage compartment located below the curb side P-1 compartment. The compartment shall contain a slide out tray capable of holding the specified type and quantity of batteries as specified. The heavy-duty slides shall lock in the extended and retracted positions to prevent excessive rattle when the vehicle is in motion and to allow the batteries to extended for access without the potential of having the batteries slide into the compartment during normal maintenance. The vertical hinge side of the door shall have a stainless steel guard attached.

A strap shall be installed on the hinge side to prevent from overswing and the door coming in contact with the module body or cab door.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Slide-Out Battery Tray (P-2):**

The batteries shall be installed in heavy-duty slide-out smooth aluminum tray with "DA" finish and with locking mechanism to retain the batteries in a secured closed position and reduce rattling. The tray shall include four return lips to prevent additional movement. The tray shall be mounted on heavy-duty 18" slides, Austin Hardware #501 slides. The entire tray and slide assembly shall be bolted to .250" thick, 4" high x 3" wide aluminum angle. All batteries shall be mounted on heavy-duty ribbed rubber matting. No Exceptions to this requirement. This agency does not desire to be narrowed down by the size of the batteries when batteries need to be replaced.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **Curb Side Entry Door (P-3):**

There shall be a curbside entry door installed. The door clear pass thru measurements shall be approximately 72" high x 30" wide.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Curb Side Rear Compartment (P-4):**

There shall be a curbside rear compartment located just aft of the rear axle. The compartment shall accommodate an air horn compressor and miscellaneous equipment. Compartment interior measurements shall be approximately 19" high x 16.50" wide x 16" depth.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Curb Side Rear Compartment (P-5):**

There shall be a curbside rear compartment located at the rearward area of the vehicle. The compartment, at minimum, shall accommodate backboards, scoop stretcher, one (1) Stryker #6252 stair chair and other miscellaneous equipment. Compartment interior measurements shall be approximately 80.50" high x 23.50" wide x 19" depth.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Street Side Front Compartment (D-1):**

There shall be a full height street side front storage compartment. The compartment shall accommodate a Zico "OTS" hydraulic oxygen bottle cylinder lift system and other miscellaneous equipment. Compartment interior measurements shall be approximately 80.50" high x 19.50" wide x 19" depth.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Street Side Intermediate Compartment (D-2):**

There shall be a double door street side front intermediate storage compartment. The compartment shall accommodate miscellaneous equipment. Compartment interior measurements shall be approximately 30" high x 47.50" wide x 18" depth.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Street Side Rear Compartment (D-3):**

There shall be a street side double door rear compartment. The compartment shall accommodate miscellaneous equipment. Compartment interior measurements shall be approximately 62.50" high x 36.50" wide x 19" depth.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Compartment Adjustable Shelves:**

Where specified, there shall be .125" thick aluminum diamond tread plate adjustable shelves installed, excluding the Right Front Stack / ALS / P-1 compartment. All shelves shall include a 2" return flange on all four sides and welded for superior strength, creating a "pan" style heavy-duty shelf. All shelves shall be installed on dual unistrut wall channels to allow for maximum adjustability.

Installed as follows:

- (1) D-3 compartment. The shelf shall be installed above the SCBA brackets.
- (3) P-5 compartment. The bottom shelf shall start above the stair chair and extend upward toward the

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

ceiling.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Aluminum Vertical Divider, Fixed, Compartment Liner:**

Where specified, there shall be a .188" thick aluminum vertical divider installed. The divider shall be covered with the same finish and color as the exterior compartment lining material. The divider shall be securely attached to the compartment to prevent rattle.

Installed as follows:

(1) D-2 compartment. The full depth x full height divider shall be mounted to allow isolate the slide-out trash container and compartment storage area.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Aluminum Horizontal Divider, Fixed, Compartment Liner:**

Where specified, there shall be a .125" thick aluminum horizontal divider installed. The divider shall be covered with the same finish and color as the exterior compartment lining material. The divider shall be securely attached to the compartment to prevent rattle.

Installed as follows:

(1) D-1 compartment. The divider shall be installed above the main oxygen cylinder. There shall not be a lip on the front edge of the shelf.

(1) D-2 compartment. The divider shall be 11" high. Install the divider from left wall to full height divider on right side as close to the door sill as possible.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Inside / Outside Access:**

There shall inside / outside access thru the exterior P-5 compartment above the stair chair area. There shall be dual hinged solid surface doors with vented Polycarbonate inserts. Each door shall include a SouthgCo C5 push button style trigger latch.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Ferno "J" Hooks For Equipment Storage:**

There shall be two (2) Ferno Washington "J" hooks secured to the compartment walls of the exterior compartment. The hooks shall allow hanging of equipment. The wall shall be reinforced as needed to prevent the hooks from becoming loose and falling out over time.

Locations:

(1) D-3 compartment. Located on left wall to hang turn-out gear. Located up high below compartment shelf.

(2) D-3 compartment. Located on right wall to hang turn-out gear. Located up high below compartment shelf.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Equipment Straps:**

There shall be six (6) 2" wide seat belt style straps installed to retain equipment within the specified stored location(s). Unless otherwise specified, all seat belt connection points shall include metal ends. All straps shall be adjusted for length and include up to 6" of slack for adjustment.

Locations:

(1) D-1 compartment. Installed across opening from wall #1 to wall #3. Install at mid-height near door

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

frame. This strap to include Velcro male and female connections – no buckle.

(2) P-5 compartment. These straps shall be installed on the compartment door to allow backboards to be secured. Both straps shall be different color and shall be offset when installed. The straps shall be installed in the center of the backboards.

(1) P-5 compartment. Installed across the back wall of the compartment (wall #2) to secure the department supplied and installed Stryker #6252 stair chair.

(1) D-2 compartment. Installed across the compartment opening (wall #1) to fixed vertical divider. Exact location to be determined at time of bid award.

(1) Interior lower bulkhead cabinet. Exact location to be determined at time of bid award.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Backboard Storage System:**

The exterior P-5 compartment full height door shall include a custom inner door panel with backboard brackets. The door panel brackets shall have the ability to store two (2) backboards. It shall include two (2) brackets to secure the boards, with approximate inside dimensions of 6" deep x 5" high x 18" wide. The upper bracket shall be mounted on tracking to allow for adjustability. It shall be open at the top to allow the boards to extend through the bracket. The lower bracket shall be a fixed, open box style construction with the leading edge open. The bottom bracket shall be sprayed with polyurethane/polyurea coating that matches the interior compartment wall finish. The upper bracket shall be sprayed with polyurethane/polyurea coating that matches the interior compartment wall finish with the exception of the front visible edge. The front edge of the top box shall allow for 3M Scotchlite striping to be applied directly to the aluminum surface.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Reinforced D-3 Compartment Walls:**

The street side rear D-3 exterior compartment walls shall be reinforced with welded .125" aluminum to allow customer to install equipment. This shall include the entire rear wall (wall #2) of the compartment, reinforced in the location where the specified "J" hook at to be installed (hang firefighter gear).

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Fire Extinguisher Bracket:**

There street side rear D-3 compartment shall contain a 6" wide x 6" high fixed shelf to secure a fire extinguisher with bracket. The bracket shall be welded to the compartment wall prior to the sprayed on compartment lining being applied. When installed the bracket shall be spaced approximately 6" from the floor to allow firefighters boots to be installed under the bracket. The shelf shall be able to withstand a 50-pound extinguisher without deflection. The location and design shall match the current Ambulance fleet.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Stair Chair Wheel Bracket:**

To prevent the Stryker stair chair wheels from kicking out, a custom bracket shall be installed on the compartment floor.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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## **REAR STEP & BUMPER ASSEMBLY**

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **Rear Bumper With Tow Hooks:**

There shall be a heavy-duty bumper extending to each side of the step. The under carriage shall be constructed of 4" aluminum channel and tubing, bolted to the body and the chassis frame rails with a minimum of eight (8) bolts. The bumper framing shall be reinforced with an additional 4" aluminum support coming out from the chassis frame rails at a 45-degree angle to the outside corners of the bumper. The entire assembly shall be spaced out from the rear kick plate a minimum of 1".

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

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

Two (2) tow hooks shall be installed under each bumper pod and attached to the bumper frame.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Rear Diamond Plate Wrapper:**

The vertical surface at the rear of the modular body between the rear step and the floor of the patient compartment shall be faced with full width aluminum diamond tread plate. The entire diamond plate panel shall be installed with stainless steel fasteners. The top edge shall be sealed prior to paint.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Reflective Tape On Flip Bumper:**

The center flip section of the rear bumper shall include alternating Red / White DOT approved tape on the face.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **IMPACT RAILS, STONE SHIELDS & RUNNING BOARDS**

## **Lower Impact Rails:**

There shall be rigid, two piece 6063-T5 extruded, tubular, anodized aluminum 3" by 1.5" impact rails with cast aluminum end caps installed at the lower edge of each side of the body.

The impact rails are to be mounted to and reinforced by 3" x 2" x .125" rectangular aluminum tubes which shall be the lower structural members of the body framing. Rails shall be designed to absorb impact, minimize body damage, and to be easily replaceable.

For this reason, the lower body tube described above must continuously back all impact rails. Rub rails must be aluminum two-piece extrusions. Rub rails attached only to the skin or vertical supports will not be acceptable.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Cab Running Boards:**

Bright finished .125" aluminum diamond tread plate running boards shall be installed on both the curb and street side of the cab doors. Each cab running board shall include front splash shields as well as a center grip strut surface for additional traction. The center grip strut surface shall be welded into the running board with open bottom to allow debris from shoes to fall directly to the ground without entering into the cab.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Running Board Lights:**

Each cab running board shall be illuminated by Whelen 4" round level three intensity (six diode) LED lights, part #20COCDRCR. The lights shall include Whelen rubber grommets, part #2GROMMET. All connection points shall include Whelen Deutsch waterproof connectors, part #W441DIN. The lights shall be installed on the front of the module body and activated when either cab door is open.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Rear Mud Flaps:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Compartment Sill Plates:**

The double thresholds / inner and outer sills of all exterior compartments and module entry doors shall include formed brushed stainless steel plates to protect painted surfaces. All plates shall be installed with double-sided heavy-duty adhesive tape. No mechanical fasteners may be used.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Drip Rails:**

Polished aluminum drip rails shall be installed over all exterior compartment and modular entry doors. Drip rails shall be installed with double-sided heavy-duty tape to prevent corrosion.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Front Stone Guards:**

Bright finished aluminum diamond tread plate stone shields shall be installed on the front wall of the body and extending to just inside the cab width. The stone guard shall include a formed section to cover the corner extrusion. The height of the stone guard shall be 24". Prior to installation the entire back of the shields shall be coated with ECK anti-corrosion coating prior to installation. The top edge shall be sealed to prevent water and debris from entering between the two surfaces.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Rear Corner Guards:**

Bright finished aluminum diamond tread plate stone shields shall be installed on the rear corner extrusions. The stone guard shall be formed to the contour of the corner extrusion. The corner guards shall be the same height as the rear wall diamond plate kick panel. Prior to installation the entire back of the shields shall be coated with ECK anti-corrosion coating prior to installation. The top edge shall be sealed to prevent water and debris from entering between the two surfaces.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Diamond Plate Protection Panels Around Rear Wheel Wells:**

Bright finished aluminum diamond tread plate protection panels shall be installed around the rear wheel well openings. Prior to installation the entire back of the shields shall be coated with ECK anti-corrosion coating prior to installation. The top edge shall be sealed to prevent water and debris from entering between the two surfaces.

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

The street side shall be installed from the D-2 compartment and extend rearward to the D-3 compartment. The stone guard shall be installed from the lower crash rail to just above the fuel fill area. The curb side shall be installed from the approximately 6" from the side entry door and extend rearward to the P-4 compartment. The diamond plate shall be installed from the lower crash rail to the height of the P-4 compartment.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **ELECTRICAL SYSTEM**

#### **Electrical Control Systems Requirements:**

A microcomputer and Microprocessor based electrical system, with driver's and attendant's control panels, shall be supplied and installed by the ambulance manufacturer. The system architecture shall be of the master – slave style. This is important so that the slave modules can be replaced without the need to be reprogrammed. This will reduce time needed for replacement as well as reduce inventory requirements. The system shall be located in a main electrical compartment containing all main electrical components for ease of troubleshooting and repair.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

All electrical and electronic components shall be selected to minimize electrical loads, thereby allowing the vehicle's generating system to not only meet the vehicle's electrical load requirements but to maintain an adequate reserve generating capacity. The electrical system shall be a "Touch Pad" System or an equivalent. The technology used is to preserve the life of the system by removing current loads before it disconnects. The electrical system must have a quick start of twenty seconds.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

#### **System Testing Standards:**

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

Thermal stability testing to include; non powered resistance to cold testing, low temperature operating testing and high temperature operating testing.

Highly accelerated life testing to meet standards; MIL-STD-810G and SAE J1455.

Highly accelerated stress screening to meet standards; MIL-STD-810G and SAE J1455.

Thermal shock testing meeting standards; MIL-STD-810G method 503.5 and IEC 60068- 2-14.

Vibration resting meeting standards; MIL-STD-810G method 514.6, SAE J1455, and ISO 16750-3.

Mechanical shock testing meeting standards; MIL-STD-202G method 213B, and ISO 16750-3.

Immersion testing meeting standard; ISO 20653.

Controls Durability testing including; set duration, actuation force, cycle rate, temperature, operational status and monitoring.

Fluid contamination testing meeting standards; SAE J1455 and MIL SPEC 461F.

Salt spray testing meeting standards; MIL-STD-810F and method 509.4 ASTM B117.

Dust testing meeting standard; MIL-STD-810F.

Power/temperature/humidity testing to meet standard; MIL-STD-810F.

Solar radiation testing meeting standards; SAE J1960 and ASTM G 155.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

#### **Front Control Panel:**



## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

The front control panel shall consist of a color LCD screen with instant-on technology and five hard coded "hot" buttons. These five "hot" buttons shall be located at the bottom of the screen to guarantee control of critical functions in the rare event of touch pad failure. The main functions shall be activated by a series of separate control pads utilizing eight sealed touch pad style switches. More than one pad can be used depending on the number of functions desired. In an effort to give the driver the ability to assist with rear patient control, selected rear panel controls must be able to be shown as a page on the front screen with the five hot buttons programmed to control the selected functions. All alarms, both visual and audible, must be present in the front screen. Alarms must include compartment and patient doors, oxygen, medical air low pressure warning.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Rear Control Panel:**

The rear control panel shall consist of a color LCD screen with instant-on technology and five hard coded "hot" buttons. These five "hot" buttons shall be located at the bottom of the screen to guarantee control of critical functions in the rare event of touch pad failure. The main functions shall be activated by a separate control pad utilizing twelve sealed touch pad style switches. The system must allow for additional rear screen / control pads to be installed and be able to function independently. The rear control pad must have complete heating and air conditioning (HVAC) controls. There must be automatic operation of the HVAC system, regulated by a "set" temperature. The system shall select heat or cool based on set and actual temperature. The rear screen must have provisions for oxygen tank display. There must be a low pressure warning for oxygen with an alarm override function.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **System Master Control Module:**

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

The system shall be scalable and allow for the ability to expand the number of outputs. The expansion of the system will be accomplished through the addition of output modules.

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

Full reverse voltage protection.

Full RFI protection.

Full over voltage protection.

Full transient protection.

Full under voltage protection.

Protection during a brown out voltage scenario.

Protection during slow rise or recovery mode.

Protection against voltage stutter Protect from failure of relay boards.

The system must survive the initial crank voltages down to seven volts without experiencing a computer reboot. There must be multi-leveled brightness and audio controls. Operating temperature range must be from -40 F to 158 F. Screens must connect to system network via a two conductor cable using "J 1939 CAN" protocol. The system shall also incorporate easy to read diagnostic LEDs allowing the user to determine if the system is functioning properly. These will include input status, module status and output status LED's.

The system shall also include:

Programmable emergency master sequencing for pursuit and on-scene modes.

Primary battery disconnect.

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

Programmable load management.

Automatic Climate Control, with Pulse Width Modulated (PWM) fan control and 1-temperature sensors. Climate Control must have intelligent automatic control, via the monitoring of temperature differentials between actual temperature and set points.

Robust communications.

Twisted pair cabling.

Cancels out electromagnetic interference.

Differential signaling.

Easy to read LED diagnostics.

High Speed "J 1939 Compliant CAN Bus".

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

### **System Power module:**

The power modules shall have solid-state current limiting protection. Each power module shall be equipped with its own diagnostic LED's including communication status, module status and output status LED's. These LED's are useful in quickly determining the status of each output. The power modules shall be easily exchanged, with minimal work for the service personnel, without the need for reprogramming. This shall aid in ease of repair and reduction in parts inventory.

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

### **System WI-FI Module:**

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

Power door locks.

Climate control.

Perimeter flood lights.

"Real time" access to the status of each input and output in the system.

Maintenance and instructional videos.

Scheduled maintenance reminders.

System event log.

***Bidder Understands and Will Supply Exactly As Written?***

**YES**

**NO**

### **System Wire Harnesses:**

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

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

**Front Touch Pad(s):**

There shall be (2) touch pads located in the front cab console. The touch pads shall be installed side-by-side and directly below the LCD color screen. All control panels shall be mounted on a single Black ABS panel for ease of service.

The touch pads shall include the necessary functions to control the following functions (when specified):

Emergency Master.

Primary / Secondary.

Front Lights.

Rear Lights.

Clear Lights.

Opticom. (note: Opticom is not required within this bid specification).

Horn / Siren.

Module Disconnect.

Left Flood.

Right Flood.

Rear Flood.

Back-Up Alarm Cancel.

Cot Light (Hi/Low).

Rear Heat / AC.

Compartment Open (Indicator Only).

Entry Door Open (Indicator Only).

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

**Rear Touch Pad – Street Side Action Area:**

There shall be a touch pad located within the street side action area. The touch pad and LCD screen shall be installed side-by-side. The control panels shall be mounted on a single Black ABS panel for ease of service.

The touch pad shall include the necessary functions to control the following functions:

Left Cot (High / Off / Low).

Right Cot (High / Off / Low).

Center Lights.

Suction.

Electric Oxygen.

Oxygen Light.

Exhaust Fan.

125 Volt Outlets.

Fan Speed.

Temperature (Increase).

Temperature (Decrease).

Auxiliary.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

**Rear Touch Pad – Curb Side:**

There shall be a touch pad located within the head end of the curb side squad bench directly below the bandage cabinet. The touch pad and LCD screen shall be installed side-by-side. The control panels shall be mounted on a single Black ABS panel for ease of service.

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

The touch pad shall include the necessary functions to control the following functions:

Left Cot (High / Off / Low).  
Right Cot (High / Off / Low).  
Center Lights.  
Suction.  
Electric Oxygen.  
Oxygen Light.  
Exhaust Fan.  
125 Volt Outlets.  
Fan Speed.  
Temperature (Increase).  
Temperature (Decrease).  
Auxiliary.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Check-Out Lights System:**

There shall be two (2) Carling momentary rocker switches located to control the required center ceiling lights. There shall be one (1) switch located on the right front stack and one (1) switch located on the secondary (left) rear module entry door.

This system shall function as a 15-minute timed switch to allow the personnel to illuminate the patient compartment area without turning the OEM keyed ignition to the "on" position. The switches shall include an automatic off mode to prevent the lights from staying on longer than needed. The switches shall include stainless steel guards to protect from damage.

In addition to the timer switched feature, the switch shall also serve as a on/off switch when the vehicles ignition is turned "on".

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Right Side Scene Light Disable:**

There shall be a Carling momentary rocker switch located on the right front stack to disable the curb side scene lights when needed. The system shall automatically return to the normal operation when the side entry door is closed and re-opened. The switch shall include a stainless steel guard to protect from damage.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Brigade Backeye 360 Degree Camera Monitor System:**

The vehicle shall be equipped with a Brigade Backeye 360 select system with four (4) exterior cameras. There shall be (1) camera on each side above the upper drip rail / roof extrusion, (1) front grille area and (1) on the rear above the upper drip rail / roof extrusion. The camera(s) shall be displayed thru a 7" monitor mounted in the cab ceiling between the fold down sun visors. The system shall be wired "on" with ignition.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Ground Straps:**

A single ground connection shall exist between the system and the vehicle chassis.

Two (2), copper-strand, plated, woven type ground straps with crimped and soldered lugs shall be installed between modular body and chassis frame.

Two (2), copper-strand, plated, woven type ground straps with crimped and soldered lugs shall be

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installed between cab and chassis frame.

One (1) , copper-strand, plated, woven ground strap with crimped and soldered lugs shall be installed between the engine and the chassis frame.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Auto Light Feature:**

The electrical system shall allow a built in feature to allow the interior dome lights on low power to automatically activate whenever the vehicle is timed off and the side entry door or the primary rear door is opened. This feature will allow the personnel to safely move about the interior with illumination. The lights shall automatically time out within 5 minutes.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Reverse Activated Alarm:**

The vehicle shall be equipped with an Ecco #575 backup alarm located under the rear of the module. The backup alarm switch shall be a cut off for the backup alarm and shall automatically reset when the vehicle is taken out of the reverse gear. This switch shall be capable of being set prior to going in reverse, allowing the backup alarm to not activate.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Carling Rocker Switches:**

The vehicle shall be equipped with the following Carling on / off rocker switches:  
Three (3) located in the front cab console to the right of the siren. From left to right as follows: Front scene / fog lights / DVR.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Carling Momentary Rocker Switch:**

The vehicle shall be equipped with the following Carling momentary rocker switch:  
One (1) located on the primary (right) rear module entry door. This switch shall be a momentary switch and wired to allow the rear scene lights to disable. The system shall automatically return to the normal operation when the rear entry doors are closed and re-opened. The switch shall include a stainless steel guard to protect from damage.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Breaker Panel:**

The vehicles breaker box / panel shall be located behind the cab driver seat secured to the front wall of the module.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Shoreline:**

The ambulance shall be equipped with a 2-wire plus ground 125 volt AC wiring system that is separate and distinct from the vehicle's 12-volt DC system. There shall be a 20-amp Kussmaul super auto-eject shoreline inlet with heavy-duty spring loaded cover installed. The cover color shall be Yellow. The inlet shall be located on the street side of the ambulance body above the street side exterior D-2 compartment. To allow ease of removal, the entire auto eject and specified indicator light shall be mounted to a stainless steel removable access panel. The inlet shall be properly marked 125 volt AC 20 Amps below the

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

shoreline inlet. A separate mating plug as supplied by Kussmaul shall be shipped loose with the delivered vehicle. The 125-volt system shall incorporate two (2) separate circuit breakers that can be used as master disconnect switch. One (1) breaker shall be rated at no less than 20 amps and utilized to power the onboard battery charger and protect the shore inlet system. A separate breaker, rated at no less than 15 amps shall be wired to the vehicles interior hospital grade duplex outlets.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Shoreline Indicator Lights:**

There shall be one (1) Whelen Engineering #OSROOMCR Red LED lights mounted to the stainless steel shoreline access panel directly above the shoreline inlet. The light shall illuminate to indicate the circuit breakers within the panel behind the driver seat are not tripped and are receiving power from the building. The lights shall contain chrome housing.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Inverter / Charger:**

The vehicle shall be equipped with a Ultimate Power combination 1500-watt inverter with 60 amp battery charger and LCD display, part #UP12 / 1500LP-CG with UPRM-LCD display. The inverter shall be equipped with an automatic transfer relay that disconnects the inverter when the shore power is applied. A remote on/off switch shall be provided in the patient compartment switch panels. The inverter/charger unit shall be secured to the floor of the electrical cabinet within the patient compartment. The remote display panel shall be mounted on the door of the electrical cabinet near the ceiling.

NOTE: The inverter shall *not* be installed in an exterior compartment do to potential damage from caused by equipment along with environmental issues that may enter the compartment throughout the time the vehicle will remain in service.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Action Area Combination 12-Volt / USB Outlet:**

The patient compartment street side action area shall be furnished with one (1) combination dual 2.1 amp port with integral 20-amp cigarette style outlet. This outlet shall be wired direct to the vehicles 12-volt battery system. The outlet shall contain separate rubber caps attached to the outlet to prevent liquids or any other debris from entering the outlet when not in use.

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Right Front Stack Combination 12-Volt / USB Outlet:**

The right front stack / inside-outside access area of the vehicle shall be furnished with a combination dual 2.1 amp port with integral 20-amp cigarette style outlet. This outlet shall be located near the ceiling of the compartment unless otherwise specified. This outlet shall be wired direct to the vehicles 12-volt battery system. The outlet shall contain separate rubber caps attached to the outlet to prevent liquids or any other debris from entering the outlet when not in use.

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Additional 12-Volt Outlets:**

The vehicle shall be equipped with three (3) additional 12-volt cigarette style outlets. All outlets shall be wired direct to the vehicles 12-volt battery system. All outlets shall contain rubber caps attached to the individual outlet to prevent liquids or any other debris from entering the outlet when not in use.

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

The outlets shall be installed as follows:

- \*One (1) street side action area near side CPR seat.
- \*One (1) right front stack near the existing outlet.
- \*One (1) exterior D-3 compartment above shelf on the left wall (wall #1).

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Action Area 125-Volt Outlet:**

The patient compartment street side action area shall be furnished with a hospital grade interior duplex outlet. The outlet shall be illuminated to indicate when 125V AC power has been applied. The outlet shall be labeled "125V AC". This 125V AC system, including wiring and associated equipment, shall comply with AMD Standard 009.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Right Front Stack Cabinet 125-Volt Outlet:**

The right front stack / inside-outside access area of the vehicle shall be furnished with hospital grade interior duplex outlet. This outlet shall be located near the ceiling of the compartment unless otherwise specified. The outlet shall be illuminated to indicate when 125V AC power has been applied. The outlet shall be labeled "125V AC". This 125V AC system, including wiring and associated equipment, shall comply with AMD Standard 009.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Additional 125-Volt Outlet(s):**

The vehicle shall be equipped with five (5) additional hospital grade interior duplex outlets. Each outlet shall be illuminated to indicate when 125V AC power has been applied. Each outlet shall be labeled "125V AC". The 125V AC system, including wiring and associated equipment, shall comply with AMD Standard 009.

Installed:

- \*One (1) left rear overhead cabinet in lower right corner on rear facing wall (wall #2.).
- \*One (1) street side action area near side CPR seat.
- \*One (1) right front stack near the existing outlet.
- \*One (1) top right front stack cabinet at ceiling height on the left wall (wall #1).
- \*One (1) aisle side of the right front stack cabinet (cabinet behind the electrical closet) / above the lower pass thru cabinet counter top.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **USB Outlet:**

There shall be one (1) 2.1 amp dual USB charging port located in the cab front console. The outlet shall be located on the right side of the manufacturers electrical system switch panel.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **Power Door Locks:**

All module entry doors and all exterior compartment doors (excluding the dedicated battery compartment) shall have power locks installed, seven (7) total. These power locks shall be activated from the OEM cab area and be thermally protected with a pulsed signal.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Exterior Remote Unlock Switch:**

A weatherproof hidden, power door unlock switch shall be installed in the OEM grille area. The switch shall be in the same location as the current Ambulance fleet.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Interior Power Door Lock Switches:**

The patient compartment of the vehicle shall include two (2) interior module body power door lock switches. Each switch shall use a pulsed signal and provide both lock and unlock for all module entry doors, all exterior compartment doors and cab doors.

Each switch shall include a stainless steel guard to protect from damage.

Installed:

\*One (1) low on the curb side wall above the head end of the curb side squad bench.

\*One (1) on the primary (right) rear module entry door on the inner door panel.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Pre-Wire Circuits, 12-Volt:**

The vehicle shall be equipped with three (3) separate pre-wiring locations from the manufacturer to allow simple installation of existing equipment. Each pre-wire location shall be rated at 20-amp and include both battery direct and ground wiring. Prior to final delivery, this agency will supply the selling dealer to install the department supplied equipment prior to final delivery.

Installed:

\*One (1) in the street side action area on the left side of the storage cabinet at the top. This will allow a Knox Drug Vault #4439 to be installed.

\*One (1) in the street side action area on the left side of the storage directly below the Knox Drug Vault. This will allow a Knox Box KeySecure 3B to be installed.

\*One (1) in the cab behind the driver cab seat. This will allow a Knox Box Sentra Lock to be installed.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **Flashlight, Pre-Wire:**

The vehicle shall be pre-wired for six (6) 12-volt department supplied handlight / flashlight. Each pre-wire shall contain a 12-volt relay controlled power and ground circuit, direct to battery. Each termination pointn shall include a 4' service loop.

Installed:

\*Two (2) behind the cab passenger seat at floor height.

\*One (1) upper right front stack cabinet at ceiling height.

\*Two (2) exterior D-3 compartment on front facing wall between the two (2) SCBA bottle brackets.

\*One (1) front bulkhead area directly below the HVAC evaporator unit on the right front stack side.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO



# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Super Circuits Mobile DVR:**

The vehicle shall be equipped with a Super Circuits advanced solid-state mobile DVR system, part #MDVR21SD. The system shall be required to record the patient compartment camera only. The DVR shall be installed within the top right front stack cabinet at ceiling height.

The manufacturer's electrical switching system shall allow a dedicated switch to be programmed to record when required. The recording capabilities shall be within both rear patient compartment switch panels (street side and curb side). A separate rocker switch (on / off) shall be installed in the front console to record when needed.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **DVR Indicator Light:**

There shall be a Whelen "OS" series RED LED steady burn light installed within the patient compartment to be illuminated when the DVR is in the recording mode. The light shall be located above the rear patient camera.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Patient Compartment Camera:**

The vehicle shall be equipped with one (1) forward facing Brigade patient compartment camera. The camera shall be recessed above the rear module entry door. Included shall be a 7" screen located between the cab sun visors. There shall be a swivel bracket installed to secure the monitor from the ceiling and provide maximum adjustment for visibility from either cab seat.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

## **INTERIOR LIGHTING:**

### **Oxygen Compartment Light:**

A Whelen 3" round compartment light, part #3SC0CDCR, shall be installed and controlled from the action area control panel, second control panel over the curbside squad bench or from the "Patient Panel" tab on the front screen.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Stepwell Illumination:**

The side entry stepwell shall be illuminated with a Whelen 3" round super-LED light, part #3SC0CDCR. The light shall illuminate when the side entry door is open.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Patient Compartment Ceiling Lights:**

The patient compartment shall be illuminated by eight (8) TecNiq 8" diameter LED patient compartment ceiling lights, part #E08 LC00-1. These lights shall be mounted to .125" thick aluminum ceiling support plates.

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

When eight the side or rear entry doors are "opened", both banks of lights shall be activated in "low" power to provide sufficient illumination to move within the patient compartment.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Action Area Light:**

The main action area shall include a 12" Grote #60591 Clear LED lights. The lights shall be controlled from a switch integral of each light fixture.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Center Strip Ceiling Lights:**

There shall be six (6) Whelen 3" round super-LED ceiling lights spaced along the length of the center strip, Whelen part #3SC0CDCR.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **"Center" Light Activation, 12V Circuit:**

The center ceiling lights within the patient compartment shall be operational thru either patient compartment control panels. These lights shall operate thru the 12-volt electrical system.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **"Center" Light Activation, Timer Switch:**

The center ceiling lights within the patient compartment shall wire thru two (2) separate 15-minute timed momentary rocker switches within the patient compartment. There shall be one (1) switch located on the right front stack cabinet and one (1) switch located on the secondary (right) patient entry door. Both switches shall include stainless steel guards to protect from damage. Once the switch has been activated, the lights shall remain on for the 15-minute duration. Upon reaching the duration of time, the lights will automatically shut off. In addition to the timed circuit, the momentary switch shall also serve as a momentary on/off when the vehicles key ignition is turned on.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **"Center" Light Activation, Spring Wound Timer:**

The center ceiling lights within the patient compartment shall wire thru a 15-minute spring wound timer with chrome trim ring. The timer shall be located at the head end of the curbside squad bench near the side entry door.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Electrical Closet Lighting:**

The vehicles electrical closet shall include a full height TecNiq LED strip light wired to allow the entire electrical system to illuminate when the electrical closet door is open. The strip light shall be wired direct to battery power.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

### **Patient Compartment Brake / Tail And Turn Signal Indicators:**

There shall be three (3) Whelen "OS" series super-LED lights with chrome housing centered above the rear entry door head pad. Two (2) shall be wired to the turn signals and spaced apart to allow the attendants to visually see what direction the vehicle is turning, part #OSA00FCR and (1) shall be wired to the brake light circuit to allow the attendants to acknowledge the vehicle is stopping, part #OSOOSCR. Each turn signal shall be installed on each side of the center mounted brake light indicator.

***Bidder Understands And Will Supply Exactly As Written?*** YES NO

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **EXTERIOR LIGHTING:**

### **Exterior Automotive Lighting:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Stop/Tail Lights:**

There shall be two (2) Whelen 600 series Super-LED stop / tail lights, part #60BTT installed on the rear of the module body directly above the lower diamond plate kick panel. These lights shall contain a colored exterior lens. Each light shall contain a chrome-plated flange kit, part #6EFLANGE. Each light shall be programmed to "stutter-flash" pattern.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Turn Signal Lights, Rear:**

There shall be two (2) Whelen 600 series Super-LED amber turn signal lights with populated arrow shape installed on the rear of the module body directly above the brake/tail lights, part #60A00TAR. These lights shall contain a colored exterior lens. Each light shall contain a chrome-plated flange kit, part #6EFLANGE. They shall be wired to flash sequentially in the direction of the arrow.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Back-Up / Scene Lights:**

There shall be two (2) Whelen 600 series Super-LED gradient surface mount opti-scenelights installed on the rear of the module body above each outboard bumper pod within the lower diamond tread plate kick panel, part #6SC0ENZR. Each light shall contain a chrome-plated flange kit, part #6EFLANGE. These lights shall be wired to illuminate during the following functions; transmission is placed into reverse, primary rear entry door is open or switch in the front console.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen "LED" Turn Lights, Front:**

There shall be two (2) Whelen 600 series Super-LED amber turn signal lights with populated arrow shape installed on the front of the module directly below the outboard Red Whelen Super-LED flashing warning lights, part #60A00TAR. These lights shall contain a colored exterior lens. Each light shall contain a chrome-plated flange kit, part #6EFLANGE. They shall be wired to flash sequentially in the direction of the arrow.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **License Plate Bracket:**

The vehicle shall be equipped with a Cast Products, Inc. cast aluminum polished license plate bracket located in the center portion of the rear diamond plate kick panel. Cast Products, Inc. part #LP0002-1-A. The bracket shall contain dual recessed LED lights.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Whelen Super-LED Rear Load / Scene Lights:**

There shall be two (2) Whelen 900 series Super-LED gradient surface mounted opti-scenelights installed above the rear module entry doors, part #9SC0ENZR. These lights shall contain Whelen chrome-plated flange kit, part #90FLANGC. The lights shall be spaced out to provide a wide spread illumination on the rear of the module. These lights shall be wired to illuminate during any of the following functions; transmission is placed into reverse, primary rear entry door is open or switch in the front console.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Pioneer Super-LED Street Side Scene Light:**

There shall be one (1) Whelen Pioneer Plus Super-LED surface mounted single panel, combination flood / spot light installed on the street side of the module, part #PCPSM1C. This light shall contain Whelen chrome flange. The lights shall be installed in the center of the body panel to provide a wide spread illumination within the side of vehicle. The shall be located near the top of the module in-line with the remaining Red flashers. The light shall be wired to a switch in the front console.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Pioneer Super-LED Curb Side Scene Light:**

There shall be one (1) Whelen Pioneer Plus Super-LED surface mounted single panel, combination flood / spot light installed on the curb side of the module, part #PCPSM1C. This light shall contain Whelen chrome flange. The lights shall be installed in the center of the body panel to provide a wide spread illumination within the side of vehicle. The shall be located near the top of the module in-line with the remaining Red flashers. The light shall be wired to illuminate when the side entry door is open along with a switch in the front console.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Pioneer Super-LED Front Scene Light:**

There shall be one (1) Whelen Pioneer Plus Super-LED surface mounted single panel, combination flood / spot light installed on the front of the module, part #PCPSM1C. This light shall contain Whelen chrome flange. The lights shall be installed in the center of the body panel below the forward facing Whelen emergency lights. The light shall be wired to a separate on/off rocker switch in the front console.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Curb Side Scene Light "On" With Open Side Entry Door:**

The curb side scene light shall illuminate when the side entry door is "open". A momentary disable switch shall be installed within the right front stack area of the patient compartment area as previously described to disable the side scene lights if desired.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Rear Warning / Brake Override:**

The two (2) Whelen Red LED flashers at rear window level area shall be wired to the OEM brake light circuit.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Interior Door Panel Super-LED Warning Lights:**

There shall be twelve (12) Whelen 3" round Super-LED flashing warning lights installed, part

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

#3SCR00FRR. Each lights shall contain a colored exterior lens. Each exterior compartment light to flash when the any compartment door is open and any specified light installed on the module entry door shall be wired to the magnetic entry door switch. All lights shall be wired to single on/off flash pattern, unless otherwise specified.

Installed:

- \*One (1) D-1 compartment door. Lower interior door panel within the outermost edge.
- \*One (1) D-1 compartment door. Upper interior door panel within the outermost edge.
- \*One (1) D-2 compartment door. Lower interior left hinged door panel within the outermost edge.
- \*One (1) D-3 compartment. Lower interior left hinged door panel within the outermost edge.
- \*One (1) D-3 compartment. Lower interior right hinged door panel within the outermost edge.
- \*One (1) P-1 compartment. Lower interior door panel within the outermost edge.
- \*One (1) P-1 compartment. Upper interior door panel within the outermost edge.
- \*One (1) P-3 side entry door. Lower interior door panel within the outermost edge.
- \*One (1) P-3 side entry door. Upper interior door panel within the outermost edge.
- \*One (1) P-5 compartment. Lower interior door panel within the outermost edge. Mounted above the lower backboard bracket.
- \*One (1) primary (right) rear entry door panel. Lower interior door panel within the outermost edge.
- \*One (1) secondary (left) rear entry door panel. Lower interior door panel within the outermost edge.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Underbody Lighting:**

There shall be six (6) Whelen 4" round, 2G series Super-LED under body / ground lights installed, part #20COCDRCR, installed under the module and chassis. Each light shall include a grommet mounting kit, part #2GROMMET. There shall be three (3) street side; (2) forward of the axle and (1) aft of the axle and three (3) curb side; (2) forward of the axle and (1) aft of the axle. All lights shall be place apart to allow maximum illumination of the ground. Each light shall installed within a flat aluminum bracket installed near the side wall / edge of the module body. These lights shall automatically activate when the vehicle is placed into "Park" and the park brake / emergency brake is applied.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Marker Lights:**

The exterior ambulance body ICC lights shall be Whelen "OS" Series 4-LED marker/clearance lights with chrome housing and clear lens, part #OSROOMCR (Red) / #OSAOOMCR (Amber). There shall be two (2) Amber mounted on the front outboard ends of module roof extrusion, two (2) Red mounted at the rearward end of each side module roof extrusion and two (2) Red mounted on the rear outboard ends of module roof extrusion. In addition, there shall be two (2) Red marker lights on each side of the midline of the body at the rear to flash in conjunction with the respective turn signal.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Rear DOT / Third Brake Light:**

There shall be a 15" wide Slimline LED identification light bar combination DOT / ICC marker light and brake light mounted above the rear doors on the roof extrusion. The light shall be rated at 100,000 hours of service life. A sealed polycarbonate colored lens shall be provided. The ICC / DOT lights shall be wired to three (3) lights and the brake light circuit shall be wired to all LED lights.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Front DOT / ICC Light:**

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

There shall be a 15" wide Slimline LED identification bar ICC marker light mounted above the front module roof extrusion. The light shall contain three (3) LED's and rated at 100,000 hours of service life. A sealed polycarbonate colored lens shall be provided.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Fog And Driving Lights:**

There shall be a two (2) pairs (four (4) lights total) Rigid Industries lights installed within the front bumper area. One (1) pair shall be fog lights, part #905113 and one (1) pair shall be driving lights, part #91531. Both sets of lights shall be controlled by a single on / off rocker switch in the front console. With the switch in the "on" position and the headlights in the "low beam" position the fog lights shall be illuminated. With the switch in the "on" position and the headlights in the "high beam" position both, the fog lights and driving lights shall be illuminated.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **AIR HORNS**

### **Buell Air Horns:**

The vehicle shall be equipped with dual buell air horns, one (1) 10" trumpet and one (1) 12" trumpet. Both air horns shall be installed within the front bumper lower valance. The air horns shall be plumbed to a heavy-duty fast recovery 12-volt air compressor securely bolted to the floor of the exterior P-4 compartment. Any connections shall include Teflon tape to prevent air leaks. There shall be two (2) air tanks installed under the module body. For ease of access to personnel, each air tank manual drain pull cords shall be extended to the side of the body. The air horns shall be activated from a plunger style switch located on the front cab console t the left of the siren. The switch shall be labled above the plunger switch.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **RADIO SYSTEM PROVISIONS**

### **Antenna Coax:**

There shall be four (4) KE-794 antenna base with coaxial cables shall be installed. All module roof antenna bases shall be spaced apart by a minimum of 18". All cables shall have a minimum, 36" service loop at the termination point. All module roof antenna mounts shall contain rain caps to protect from weathering.

Installed as follows, unless otherwise directed by this agency:

- \*One (1) front module roof to behind the driver's cab seat. Label #1.
- \*One (1) mid-module roof to behind the driver's cab seat. Label #2.
- \*One (1) mid/rear module roof to behind the driver's cab seat. Label #3.
- \*One (1) rear module roof to behind the driver's cab seat. Label #4.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Radio Pre-Wire Power and Ground Circuits:**

There shall be six (6) radio power and ground wires installed. All termination points shall include butt splice ends and marked. Each termination point shall include 14-gauge wiring including (1) ground, (1) direct to battery and (1) "on" with module power source. All circuits shall be wired to 20-amp circuit breakers.

Installed as follows, unless otherwise directed by this agency:

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

- \*Three (3) behind the driver cab seat base.
- \*One (1) under the cab front console.
- \*One (1) behind the street side action area switch panel.
- \*One (1) behind the curb side head end of squad bench switch panel.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Installation Of RFD Supplied Radio Cables:**

During construction process, this agency will supply the manufacturer up to three (3) radio cables and associated wiring to provide a simpler and easier final installation of the mobile radio system.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Mobile Radio 2-Conductor Radio Cable:**

There shall be one (1) 16-gauge 2-conductor wire installed from behind the driver cab seat to the street side action area switch panel. Both ends shall be labeled. This cable will be allow the radio installer to bring power from the mobile radio chassis to the radio head.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **SIREN AND EMERGENCY LIGHTING**

### **Whelen Siren:**

There shall be a Whelen Model number WS295HFSA7 six-function dual remote siren plus radio repeat and PA. The siren head shall be mounted in the front cab console within easy reach of the driver. Included shall be a removable PA microphone. The siren shall incorporate hands free feature allowing switching of different siren modes and siren off from the horn ring. The remote amplifier shall be installed in the electrical overflow cabinet with access to all dip-switches to change the siren tones.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Siren Speaker Assembly:**

The vehicle shall be equipped with Cast Products, Inc. through-the-bumper siren speakers located in the outboard bumper ends. CPI part #SAD3801 and #SAP3801.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Vehicle Emergency Lighting System:**

The emergency lighting system must provide the vehicle with 360 degrees of visual warning conspicuity as required in Federal specification KKK-A-1822F. The system must display highly perceptible and attention getting signals that function in a model system and convey the message in the PRIMARY MODE - "Clear the Right-of-Way" and in the SECONDARY MODE - "Hazard, Vehicle Stopped on Right of Way".

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Primary / Secondary Warning Light System, Whelen LED:**

The basic warning light system shall contain twelve (12) fixed Red LED lights, one (1) fixed Clear / White LED light, and one (1) fixed Amber LED light. These lights shall function in a dual mode system as shown in Federal specifications KKK-A-1822F and meet the physical and photometric requirements as described in that paragraph. The upper body warning lights shall be mounted at the extreme upper corner areas of the ambulance body below the horizontal roof line, with the single Clear / White light mounted

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

midway between the two front facing Red upper corner lights. The single Amber light shall be mounted midway between the two Rear facing Red upper corner lights. Doors or other ancillary equipment shall not obstruct these warning lights. The Red "grille" lights shall be located at least 30" above the ground and below the bottom edge of the windshield and be laterally separated by at least 18", measured from centerline to centerline of each lamp. All warning lights furnished shall be mounted to project their highest effective intensity beams on the horizontal axis.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Street Side Module Warning Lights:**

There shall be two (2) Whelen model 900 Super-LED Red lights installed on the side of the module body at the top upper outside corners of the module, part #90RR5FCR. These lights shall contain Clear exterior lens. Each lights shall contain a chrome-plated flange, part #90FLANGC. These lights shall be wired to the vehicles "primary / secondary" lighting system. The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Curb Side Module Warning Lights:**

There shall be two (2) Whelen model 900 Super-LED Red lights installed on the side of the module body at the top upper outside corners of the module, part #90RR5FCR. These lights shall contain Clear exterior lens. Each lights shall contain a chrome-plated flange, part #90FLANGC. These lights shall be wired to the vehicles "primary / secondary" lighting system. The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Front Module Warning Lights:**

There shall be two (2) Whelen model 900 Super-LED Red lights installed on the front of the module body at the top upper outside corners of the module, part #90RR5FCR. These lights shall contain Clear exterior lens. Each lights shall contain a chrome-plated flange, part #90FLANGC. These lights shall be wired to the vehicles "primary / secondary" lighting system. The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Front Center Module Warning Light:**

There shall be one (1) Whelen model 900 Super-LED Clear / White light installed on the front center of the module body, part #90CC5FCR. This light shall contain Clear exterior lens. This light shall contain a chrome-plated flange, part #90FLANGC. This light shall be wired to the vehicles "primary / secondary" lighting system. The light shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Whelen Super-LED Rear Module Warning Lights:**

There shall be two (2) Whelen model 900 Super-LED Red lights installed on the rear of the module body at the top upper outside corners of the module, part #90RR5FCR. These lights shall contain Clear exterior lens. Each lights shall contain a chrome-plated flange, part #90FLANGC. These lights shall be wired to the vehicles "primary / secondary" lighting system. The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.



# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written?*** **YES** **NO**

### **Whelen Super-LED Rear Center Module Warning Light:**

There shall be one (1) Whelen model 900 Super-LED Amber light installed on the rear center of the module body, part #90AA5FCR. This light shall contain Clear exterior lens. This light shall contain a chrome-plated flange, part #90FLANGC. This light shall be wired to the vehicles "primary / secondary" lighting system. The light shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?*** **YES** **NO**

### **Whelen Super-LED Grille Warning Lights:**

There shall be four (4) Whelen model 500 Super-LED lights, for horizontal mounting, installed within the upper and lower sections of the chassis grille. Two (2) upper shall be Red, part #50R02ZCR and two (2) lower shall be Clear, part #50C02ZCR. All four (4) lights shall contain Clear exterior lens. All four (4) lights shall be mounted with Cast Products, Inc. polished housing, part #LH52605 and LH52606. All four (4) lights shall be wired to the vehicles "primary / secondary" lighting system. The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?*** **YES** **NO**

### **Whelen Super-LED Intersection Warning Lights:**

There shall be two (2) Whelen model 700 Super-LED RED lights installed within the chassis cab fenders to serve as cab intersection lights, part #70R02FCR. These lights shall contain Clear exterior lens. These lights shall contain a chrome-plated flange, part #7EFLANGE. This light shall be wired to the vehicles "primary / secondary" lighting system. The light shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?*** **YES** **NO**

### **Wig Wag Headlights:**

There shall be a Whelen solid-state headlight flasher with 7-flash patterns installed, part #SSFPOS. The headlight flasher shall disable the daytime running lights.

***Bidder Understands And Will Supply Exactly As Written?*** **YES** **NO**

### **Whelen Super-LED Rear Wheel Well Warning Lights:**

There shall be two (2) Whelen model M6 Red V-series Super-LED combination 180-degree warning and perimeter lights on the sides of the vehicle directly above the rear wheel well area, part #M6V2R. These lights shall contain colored exterior lens over the warning light. These lights shall contain a chrome-plated flange, part #M6FC. These lights shall be wired to the vehicles "primary / secondary" lighting system. The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?*** **YES** **NO**

### **Whelen Super-LED Rear Window Level Warning Light:**

There shall be two (2) Whelen model 900 Super-LED Red lights installed on the rear of the module body at the center section of the rear door windows, part #90RR5FCR. These lights shall contain Clear exterior lens. Each lights shall contain a chrome-plated flange, part #90FLANGC. These lights shall be wired to the vehicles "primary / secondary" lighting system. The lights shall be wired thru the specified Whelen

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flasher as outlined within these specifications.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Whelen Super-LED Front Wall Warning Lights:**

There shall be four (4) additional Whelen model 900 Super-LED lights installed on the front wall of the module. Two (2) shall be Red, part #90RR5FCR and two (2) shall be Clear, part #90CC5FCR. All four (4) lights shall contain Clear exterior lens. All four (4) lights shall contain a chrome-plated flange, part #90FLANGC. These lights shall be wired to a separate switch within the front switch panel labeled "Front Lights". When flashing the two (2) lights on the left side of the center Clear light shall flash opposite the two (2) flashers on the right side of the center Clear flasher. The Clear lights shall be wired to shut off in park mode. The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.

Front wall lighting (left to right):

Red/White/Red/White/Red/White/Red.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Whelen Super-LED Upper Rear Wall Warning Lights:**

There shall be two (2) additional Whelen model 900 Amber Super-LED lights installed on the rear wall of the module above the rear module entry doors, part #90AA5FCR. These lights shall contain Clear exterior lens. Each lights shall contain a chrome-plated flange, part #90FLANGC. These lights shall be wired to a separate switch within the front switch panel labeled "Rear Lights". The lights shall be wired thru the specified Whelen flasher as outlined within these specifications.

Rear wall upper lighting (left to right):

Red/Amber/Load-Scene/Amber/Load-Scene/Amber/Red.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Whelen AFM560 Certified Flasher:**

There shall be one (1) Whelen AFM560 certified LED Ambulance flasher installed in the rear electrical closet. This flasher shall be wired to the specified "Primary / Secondary" warning lights. Located near the flasher shall be a momentary push button to allow changing of the flash patterns remotely. The flasher shall be fully accessible when installed within the manufacturers provided electrical closet. This agency desires external Whelen flashers in conjunction to the specified Whelen lights as part of a complete and tested package.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

### **Whelen ULF44 LED Flashers:**

There shall be two (2) Whelen ULF44 four outlet, four channel LED flashers installed in the rear electrical closet. There shall be one (1) flasher wired to the specified "Front Lights" and one (1) Whelen ULF44 wired to the specified "Rear Lights". Located near each flasher shall be a momentary push button to allow changing of the flash patterns remotely. Both flashers shall be easily accessible when installed within the manufacturers provided electrical closet.

***Bidder Understands And Will Supply Exactly As Written?***

**YES**

**NO**

## **PATIENT COMPARTMENT**

### **Cabinet Construction:**

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

The use of staples in the assembly of cabinets are not desired.

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

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Cabinet Doors:**

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

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Impact Protection:**

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

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Cabinet Shelves:**

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

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Cabinet Attachment:**

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

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Fit And Finish:**

Mitered joints throughout the interior conversion shall have a gapless, hairline fit. Sliding polycarbonate door assemblies shall be scratch free and all edges shall be smooth and free of saw marks and sharp

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edges. Cabinet to cabinet joints shall not require more than a 7/32" diameter welting to create a finished and well-fit look. Cabinets shall fit tightly against the ceiling as well.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Sub-Floor:**

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

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Patient Compartment Testing:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Cabinet Door Color:**

There shall be Clear Polycarbonate sliding cabinet doors on all specified interior cabinets, unless otherwise specified.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Headliner / Headroom:**

The patient compartment headliner shall be high gloss, two-piece, smooth thermoplastic sheets. One sheet on each side of the center strip in the ceiling. This material shall be fire retardant with significantly higher impact resistance and be resistant to corrosive chemicals and cleaning solutions. It shall meet Fungus resistance testing in accordance with ASTM G-21 and bacteria resistance testing in accordance with ASTM G-22, Procedure B. The ceiling shall not be attached with any visual attachments nor allow for any visible seams. The ceiling headliner shall be secured utilizing the added options of the patient compartment ceiling such as interior dome lights, IV hangers and grab rails. Interior headroom shall be no less than 72".

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Stryker Cot Retention Provisions:**

There shall be a Stryker center mounted universal track system installed. This includes floor structure with tapping blocks, all necessary wiring with 10-gauge power and ground with a 15-amp circuit breaker that will be powered by shoreline or battery "on" power. The power and ground wiring is to terminate inside the floor track to allow ease of final connection of the Stryker Power-LOAD trolley system (RFD supplied trolley). The floor track will also include the floor track cover plate.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Stryker Power-LOAD Trolley:**

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Prior to final delivery, Richfield Fire Department will supply the necessary Stryker Power-LOAD trolley that will be removed from an existing in-service Ambulance. The Power-LOAD will be fully functioning upon delivery to this agency.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

**Left Rear Overhead Cabinet, Cabinet:**

There shall be a left rear overhead cabinet with combination sliding / speed load Polycarbonate doors installed. The bottom of the cabinet is to be sweep-out style. The cabinet doorframe shall be secured at the top by a full-length piano hinge. The entire frame shall hinge upward and be held in place by gas piston hold-open devices. The cabinet frame shall be held in the down position by two spring-loaded dead bolt style slide catches. The vertical ends of the speed load framed cabinet will have EPDM rubber foam to protect the handles from damage. All speed load cabinets that are taller than 23" and wider than 32" shall have an 1/8" x 1-1/2" anodized aluminum support. The interior cabinet dimensions shall be 18.75" high x 37" wide x 18.25" deep. This cabinet shall contain one (1) adjustable shelf each side of the center support / vertical divider.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

**Street Side CPR Seat Cabinet:**

There shall be a cabinet above the side CPR seat with a top-hinged non-framed heavy-duty Polycarbonate door. The bottom of the cabinet is to be sweep-out style. The entire frame shall hinge upward and be held in place by gas piston hold-open devices. The cabinet frame shall be held in the down position by a SouthCo latch. The interior cabinet dimensions shall be 8.25" high x 20.50" wide x 4.5" deep.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

**Left Front Overhead Cabinet:**

There shall be a left front overhead cabinet with combination sliding / speed load Polycarbonate doors installed. The bottom of the cabinet is to be sweep-out style. The cabinet doorframe shall be secured at the top by a full-length piano hinge. The entire frame shall hinge upward and be held in place by gas piston hold-open devices. The cabinet frame shall be held in the down position by two spring-loaded dead bolt style slide catches. The vertical ends of the speed load framed cabinet will have EPDM rubber foam to protect the handles from damage. All speed load cabinets that are taller than 23" and wider than 32" shall have a 1/8" x 1-1/2" anodized aluminum support. The interior cabinet dimensions shall be 18.75" high x 44" wide x 18.25" deep. This cabinet shall contain one (1) adjustable shelf each side of the center support / vertical divider.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

**Left Front Forward Cabinet:**

Forward of the left front overhead cabinet shall be a right hinged cabinet with solid surface. There shall be a SouthCo C5 metal latch installed. The interior cabinet dimensions shall be 18.75" high x 13" wide x 18.25" deep. This cabinet shall contain one (1) adjustable shelf each side of the center support / vertical divider.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

**Telemetry Area:**

The telemetry area shall be approximately 8" wide and located on the rearward / aft area of the side CPR

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seat (between the side CPR seat and the exterior D-3 compartment).

This area shall also contain a solid surface full depth counter top with retaining lips on all four (4) sides. The counter top shall match the design and colors of the main action area counter top and any other counter tops located within the patient compartment.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Street Side Action Area Storage Cabinet:**

There shall be a storage cabinet within the forward section of the street side action area below the left front overhead cabinet. The cabinet shall include sliding Polycarbonate doors. The vertical ends of the framed cabinet will have EPDM rubber foam to protect the handles from damage. All cabinets that are taller than 23" and wider than 32" shall have a 1/8" x 1-1/2" anodized aluminum support. The interior cabinet dimensions shall be 21.25" high x 20" wide x 5" deep. This cabinet shall contain one (1) adjustable shelf each side of the center support / vertical divider.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Action Area Equipment And Switch Panel:**

Integral of the action area storage cabinet shall be adequate space for the manufacturer to install RFD supplied KnoxVault Model #4439 and a Knox KeySecure 3B and a slanted section for the manufacturers switch panel and display. The KnoxVault shall be installed near the top of the cabinet and the KeySecure shall be mounted directly below. The action area equipment and switch panel shall be located on the rearward / aft side of the storage cabinet. This configuration shall be identical to the current Ambulance fleet.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Lower Action Area Storage Cabinet:**

There shall be a storage cabinet below the street side main action area counter top near the side CPR seat. The cabinet shall include a one-way sliding pocket door installed. The vertical ends of the framed cabinet will have EPDM rubber foam to protect the handles from damage. The interior cabinet dimensions shall be 12.50" high x 13.50" wide x 19.25" deep.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Side Facing CPR Seat:**

A seat approximately 21" wide (excluding hip pads) with rear hinged lid, allowing for storage under the seat, shall be recessed into the street side cabinet wall directly rearward of the main action area. The lid shall have a self-latching, stainless steel, paddle style-latching device. A structurally reinforced steel frame encompassed 7" torso form fitted backrest providing user stability, support, proper ergonomics and safety in the event of an impact in a side-facing seat. The design will assist in positioning an individual to better absorb an impact, whether it be a frontal, side or rear. The contoured lumbar backrest shall be tested to meet SAE Safety Standards. There will be left and right thigh protection cushions. All cushions shall be covered with heavy-duty vinyl. There shall be no piping on the cushions to accumulate contaminated material. All seams shall be sealed to repel contaminants. An IMMI 4-Point seat belt appropriately secured to the side wall shall be provided. Upper cabinets shall have left and right head protector cushions to match the seat cushion.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Below Side CPR Seat Storage:**

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There shall be full storage under the side CPR seat hinged lid. The interior storage area shall be 4" high X 24.25" wide x 20.25" deep.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Attendant Seat:**

A Valor high back, reclining, vacuum-formed, captain's chair seat shall be installed at the front of the patient compartment. The seat shall be covered with color coordinated heavy-duty vinyl with color selected by this agency. The seat shall include a 4-point seat belt that will match the street side and curb side facing seat belt restraints. This seat, positioned at the head of cot shall provide easy access to all of the action wall controls and outlets.

The seat must be mounted on a Valor provided swivel pedestal base for compliance. The pedestal shall allow both fore and aft adjustment and full swivel capabilities. The seat shall meet all FMVSS requirements.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Electrical Cabinet:**

The electrical storage cabinet shall be installed on the left front wall behind the rear facing attendant seat. There shall be a hinged access door installed for ease of access to the main electrical system. The door shall contain appropriate vents to allow air flow and prevent overheating any of the electrical components.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Right Front Stack Cabinet:**

A storage cabinet shall be installed on the right front wall that permits equipment to be accessed from either the patient compartment thru a ROM roll-up door or through the exterior P-1 compartment door. The interior cabinet dimensions shall be 55.75" high x 25" wide x 22.25" deep.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Right Front Stack Cabinet Door:**

A ROM auto-latch roll up door shall installed on the lower right front stack inside / outside area. A cam lock stop latch shall be installed on the door to stop the door from raising or lowering whenever the attendant removes their hand from the latch.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Top Right Front Stack Ceiling Cabinet:**

A storage cabinet shall be installed at ceiling height above the lower right front stack inside / outside area. A flip up solid hinged door shall be installed. The cabinet doorframe shall be secured at the top by a full-length piano hinge. The entire frame shall hinge upward and be held in place by gas piston hold-open devices. The door shall contain a SouthCo M1 latch with separate key lock cylinder on the left side for ease of operation. The interior cabinet dimensions shall be 13.25" high x 17.25" wide x 24.75" deep.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Cabinet Below The Pass-Thru Window:**

There shall be a dual cabinet installed within the center of the front wall below the cab to module sliding window.

On the cab side shall be a storage cabinet installed at the top directly below the sliding window. The

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cabinet shall include sliding Polycarbonate doors. The vertical ends of the framed cabinet will have EPDM rubber foam to protect the handles from damage. The interior cabinet dimensions shall be 6.75" high x 22" wide x 17.50" deep.

On the patient compartment module shall be a storage cabinet installed below the upper cab side storage cabinet. A ROM auto-latch roll up door shall installed within this storage area. A cam lock stop latch shall be installed on the door to stop the door from raising or lowering whenever the attendant removes their hand from the latch. The interior cabinet dimensions shall be 26.25" high x 22" wide x 16" deep.

***Bidder Understands And Will Supply Exactly As Written?                      YES                      NO***

### **Counter Top On Cabinet Below The Pass-Thru:**

The lower pass thru cabinet counter top shall be one piece, seamless, nonporous, solid surface and nonmetallic with retaining lips on all four (4) sides to create a formed recessed center area. The counter top lip shall be a minimum of 1". The counter top shall match the design and colors of the main action area counter top and any other counter tops located within the patient compartment.

***Bidder Understands And Will Supply Exactly As Written?                      YES                      NO***

### **Curb Side Squad Bench:**

The ambulance shall be equipped with a squad bench approximately 72" long by 22" wide. The squad bench lid shall have 70/30 split lid with a 2" foam cushion. The forward section shall include a fixed lid due to portable oxygen storage requirements below the lid and the rearward section shall have a flip-up lid, with two (2) heavy-duty, gas piston hold-open devices. The lid shall be attached to the bench with a continuous hinge. The lid shall have a self-latching, stainless steel, paddle style-latching device.

Two (2), structurally reinforced, steel frame encompassed, 7" form fitted backrests, providing proper ergonomics and safety in the event of an impact shall be installed. They shall be located in the right side wall, facing to the side along the length of the squad bench. The design will assist in positioning an individual to better absorb an impact, whether it be a frontal, side or rear. This contoured lumbar backrest system shall be tested to meet SAE Safety Standards. Two (2) IMMI 4-Point seat belts appropriately secured to the side wall shall be provided.

All cushions to be covered with heavy-duty vinyl and shall be installed with industrial grade, plastic hook and loop Velcro for easy removal and cleaning. There shall be no piping on the cushions to accumulate contaminated material. All seams shall be sealed to repel contaminants.

Three (3) sets of encased restraints shall be installed on the squad bench to be used to secure a patient on a backboard to the bench. Retractors shall be installed against the outer wall.

***Bidder Understands And Will Supply Exactly As Written?                      YES                      NO***

### **Below Curb Side Squad Bench Storage:**

There shall be storage under the curb side squad bench hinged lid. The interior storage area shall be 7.50" high X 47" wide x 20.25" deep.

***Bidder Understands And Will Supply Exactly As Written?                      YES                      NO***

### **Squad Bench Cargo Net:**

There shall be a full height cargo style restraint net installed at the head end of the squad bench. The net shall include allow simple removal and secured with a minimum of four (4) locations.

***Bidder Understands And Will Supply Exactly As Written?                      YES                      NO***

### **Portable Oxygen Bottle Storage:**



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Located at the head end of the squad bench shall be storage of two (2) oxygen bottles with storage from the side entry door step well. The horizontally installed bottles shall slide in under the squad bench and include a vertical divider to isolate the stored bottles. A flexible D-ring strap shall be secured to the cabinet wall. The D-ring will be used as an additional method to secure the neck of the bottle within the storage area. The interior shall be lined with polyurethane / Polyurea (Vortex coating) to prevent damage and reduce noise level. The cabinet shall contain a bottom-hinged door with a SouthCo latch.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Headrest Cushion:**

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Squad Bench Cabinets:**

There shall be a two-section bandage cabinet installed above the curb side squad bench. The bottom of each cabinet section shall be sweep-out style. Each section shall have a top hinged, non-framed heavy-duty Polycarbonate door. A SouthCo latch shall be installed on each cabinet section. The interior dimensions to each cabinet section shall be 6.50" high x 28.50" wide x 8" deep.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Glove Box Storage:**

Located above the side entry door head pad shall be a cabinet to store three (3) boxes of gloves. The recessed glove box holder shall be made from ABS plastic. There shall be a heavy-duty top-hinged Polycarbonate door with individual oval access holes to gain access to each box of gloves.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Street Side Ceiling Overhead Grab Rail:**

There shall be a formed 2" diameter powder coated aluminum overhead assist rail with four (4) attachment points installed. It shall be located along the left side / street side area of the center HVAC ducted system in the ceiling. This rail shall be a 100" long. The grab rail shall be powder coated "Yellow".

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Curbside Ceiling Grab Rail:**

There shall be a formed 2" diameter powder coated aluminum overhead assist rail with four (4) attachment points installed. It shall be located along the right side / curb side area of the center HVAC ducted system in the ceiling. This rail shall be a 100" long. The grab rail shall be powder coated "Yellow".

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Door Assist Rails:**

Each module entry door shall include an "L" shaped, formed 2" diameter powder coated aluminum entrance door assist handle, three (3) total. The "L" shall start horizontally under the door window and turn at a 90-degree angle up alongside the hinge side of the window to provide safe entry from the street level and safe exit from the patient floor. Each assist rail shall be powder coated "Yellow".

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***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Side Wall Assist Rail:**

There shall be a formed 2" diameter powder coated aluminum vertical assist rail installed on the left rear wall inside the entry door. The assist rail shall be 12" long. The assist rail shall be powder coated "Yellow".

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Recessed IV Brackets:**

There shall be four (4) Cast Products, Inc. model #IV2008 recessed rubber, non-swinging type IV hangers that fold flat when not in use mounted in the ceiling of the patient compartment. Two (2) shall be in the forward cot position and two (2) shall be in the mid/rear cot position. All brackets shall be bolted to the roof framing structure.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Button Style IV Brackets:**

There shall be six (6) chrome plated zinc alloy snap type fender hook installed to serve as IV hooks. There shall be two (2) mounted on each end of the squad bench cabinet and one (1) on the outside edge of each ceiling recessed IV bracket. The cabinet mounted button style IV hook shall contain a Velcro strap below the hook to retain the IV hook in a secure position.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Cabinet Latches:**

All specified hinged cabinets shall contain metal cabinet latches. All latches shall be compliant thru current AMD change notice 12. Plastic latches are not acceptable.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Clock:**

There shall be an 8" diameter Franklin analog clock with sweep second hand flush mounted above the rear head pad above the rear doors on the right side (toward curb side wall). The clock shall contain a removable face plate to access the controls of the clock. The clock shall be wired battery direct to the 12-volt battery system.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Locking Cabinet Doors:**

The top right front stack ceiling cabinet shall contain a separate key lock cylinder. There shall be two (2) keys supplied. The key shall be coded to match the entire Ambulance fleet.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Drop-In Style Sharps / Waste:**

There shall be a slide-out style sharps and waste within the exterior D-2 compartment to allow the containers to be emptied or exchanged from the exterior. It shall be located on the right wall area of the compartment. The sharps and waste shall be disposed of from cutouts within the street side action area counter top. A hinged stainless steel cover with metal pull ring shall be installed over both the sharps and waste containers. Included shall be a Covidien #8920SA sharps container and 8-quart rectangular waste

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container.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Equipment Straps:**

There shall 1-pair of D-ring style equipment straps provided and installed as directed by this agency. The straps shall allow a Physio Control LP15 monitor to be retained within the patient compartment area. There shall be two (2) 1" wide adjustable straps provided and installed by this agency. Both straps shall contain metal buckles. One (1) strap shall be sized for a LifePak within the street side action area below the Knox KeySecure. One (1) strap shall be sized for a LifePack within the head end of the curb side squad bench. All straps shall be installed to match the current Ambulance fleet.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Curbside Switch Panel Cabinet:**

An angled cabinet for the second rear switch panel and display shall be installed. The cabinet shall be mounted at the head end of the squad bench below the overhead storage cabinet. The underside of the cabinet shall be padded for occupant safety.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Interior Laminated Wall Color:**

The interior walls shall be laminated with Wilsonart White Nebula #4621-60, matte finish. Colors shall match the current fleet.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Seat Cushions And Head / Back Cushion Areas:**

The seating cushions shall be seam sealed, use high-density foam for the cushion material and shall have a PVC base. The cushion shall be installed with heavy-duty hook and loop for easy removal for cleaning and shall comply with the current KKK-1822 mandates. The vinyl color shall be DA-314 Desert Rose (Red). Colors shall match the current fleet.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Cabinet Welting:**

There shall be color matched, automotive grade welting placed between the cabinet sections and along the top of the cabinets where they meet the body headliner. The is to be Light Gray (to match the main laminate color).

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Solid Surface Counter Tops:**

The counter top shall be one piece, seamless, nonporous, solid surface and nonmetallic with a formed recessed center area to contain equipment, supplies, and fluids when vehicle is in motion. The preferred manufacturer shall be Corian. The counter top lip shall be a minimum of 1". The main counter top color and top lip shall be Platinum. A center accent stripe shall be installed to provide a distinguished appearance of quality and pride with the vehicle. The center accent stripe shall be Ruby Glass (Red). All colors shall match the current Ambulance fleet.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **Flooring:**

The flooring shall be Lonseal, Inc. with a flooring selection from the Lonplate II collection. The color shall be #424 Gunmetal Gray. The flooring shall be sealed by the manufacturer prior to final delivery. One (1) gallon of Lonseal, Inc. cleaner shall be supplied at delivery.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Roll-Up Flooring:**

The one-piece flooring shall extend up the street side wall by a minimum of 4" to a maximum of 10" (to be determined by this agency) and full height of the squad bench wall (to the bottom of the squad bench seat lid).

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **PATIENT COMPARTMENT ENVIRONMENTAL SYSTEMS**

### **Module Fresh Air Intake Vent:**

A filtered fresh air intake shall be mounted on the upper right front (passenger side) corner of the modular body. The heater / air conditioner fans shall control the intake of fresh air. A 12-volt powered fresh air intake fan shall be provided. The system shall be wired thru the exhaust vent circuit and switch of which shall draw fresh air in from the exterior. The system shall be a constant flow style with a thermostat to control heating and cooling, therefore providing a fresh environment throughout the patient compartment. The air return system shall be located within the right front cabinetry. This cabinetry shall include an integral plenum wall and duct system. This system shall allow the blower fans to pull air from the floor, \thereby speeding the process of heating/cooling and therefore provide a consistent temperature at all levels of the patient compartment.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Exhaust Fan:**

A Attwood Turbo 4000 Series II power exhaust vent fan shall be installed in the rear upper corner of the street side cabinet wall below the roofline. The fan shall be controlled from the rear control switch panel(s). There shall be dual vents with filters on the rear exterior body installed in a stack position. The combination of the fresh air intake vent and the rear powered exhaust vent shall provide efficient cross through patient compartment ventilation. The exhaust fan shall have a minimum of 200 CFM.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Rear Heat/AC Unit:**

A Pro Air brand, model 940 HVAC system shall be installed. The unit shall have as a minimum 32,000 BTU cooling, and 35,000 BTU heating with a 650 CFM fan.

The control switch for the patient compartment heater / air conditioner shall be installed through any specified switch panel location. There shall be a digital thermostat to select interior temperature. The heat or air conditioner mode shall be selected automatically by the temperature setting of the thermostat.

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

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **Heat / AC Unit Location:**

The combination heater / air conditioner evaporator shall be located above the cab to module pass thru sliding window configuration at ceiling height. A removable panel shall be installed over the front of the unit to allow service to the unit.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Ducted Heat/AC In The Ceiling Center Strip:**

The design of the patient compartment environmental system is to provide optimal air flow and distribution of conditioned air evenly to all areas of the module interior. Conditioned air shall not be discharged from one direct vented location area but shall be distributed from a central distribution plenum directly to eight (8) 360 degree adjustable ball swivel type air vents located in the center of the module ceiling. All outputs shall allow full flow of air and equal air pressure to all air vents. To provide even distribution of conditioned air throughout the patient compartment, there shall be two (2) rows of vents installed from the front of the module to the rear and shall be spaced evenly apart.

In order to support the efficient and effective performance of the system during the relative weather elements, the manufacturer shall include a reflective barrier insulation material between the roof structure and the conditioned air ducts.

A low profile vinyl wrapped aluminum center chamber shall be installed to contain each conditioned air ducted ventilation system / outputs. This center chamber shall be angled to prevent occupant injury and securely fastened to the structural members of the module roof.

The ducted air system shall provide a quieter interior while creating an even distribution of air movement throughout the module in addition to providing a consistent temperature throughout the module.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Auxiliary 12 Volt A/C External Condenser:**

The vehicle shall have an externally mounted, heavy-duty Pro Air model 106 auxiliary air conditioning condenser installed under the intermediate street side D-2 compartment. A heavy-duty rubber mud flap shall be installed in front of and behind the unit to limit the road debris from coming in contact with the unit.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Inline Booster Coolant Pump:**

A 12-volt centrifugal liquid pump shall be installed. The pump shall boost the flow capacity of the engine coolant. The pump shall be located in the exterior D-1 compartment behind a removable access panel.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Insulation:**

There shall be 2" thick, non-deteriorating, high-density "Yellow CertiFoam" plank used to insulate the vehicle. The thermal resistance of the insulation shall hold a 5-year aged value of 11.2 R @ 25-degrees fahrenheit mean temperature. The importance of aged value, as it relates to initial "R" values, is that over a 5-year period, the initial R value will deteriorate and overestimate the long term insulating ability.

This insulation shall be cut by machine to provide precise square cutting and minor modifications to any obstruction shall be permitted. The insulation shall be placed between all framing to include the module body walls, floor, ceiling and exterior compartment doors and patient entry doors.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

# **RIDGEFIELD FIRE DEPARTMENT**

## **AMBULANCE BID TECHNICAL SPECIFICATIONS**

### **Vapor Barrier:**

There shall be a four-millimeter vapor barrier placed in the module walls, ceiling and patient doors. Any seams of the vapor barrier material shall be taped together for effectiveness. This vapor barrier shall serve as an additional moisture barrier for the changing outside environment in addition to adding additional measures of preventing noise from entering the module.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Heat Insulation Blanket:**

To assist with allowing excessive heat from traveling thru the insulated module floor to the patient compartment, a flame retardant thermal heat insulation blanket shall be installed. The blanket shall be installed over the heat shield and installed on the bottom of the floor from the front of the module to the under the fuel tank. The heat barrier blanket shall be 3/8" thick lightweight, durable thermal blanket featuring 100% synthetic fiber felt that includes a high-tech foil heat barrier that blocks 70% of radiant heat up to 1500° F.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Undercoating:**

The module body shall be undercoated with automotive grade undercoating. All chassis manufacturer recommendations shall be followed.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **UV Lamp:**

The vehicle shall be equipped with a UV-C air and surface disinfection system within the module body, Evergreen ADU-136, or equal. This system shall be permanently installed and the lamp shall be visible to allow the crews to determine if the system is "on" and functioning. The system shall be wired to the vehicles appropriate power source from the unit. A switch within the module shall be included. The UV-C lamp / system shall be approved by this agency with supporting documentation and testing results.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **OXYGEN SYSTEM**

### **Oxygen System:**

Flexible oxygen hose from the oxygen compartment to the oxygen outlets shall be certified hose with brass fittings.

The oxygen system shall be capable of storing and supplying a minimum of 3,000 liters of oxygen. A suitable high-pressure hose shall be provided. The hose shall be certified to meet 250 PSI and have a 1,000 pound burst rating.

The entire oxygen system shall be subjected to a 200 PSI leak test for a minimum 2 hours. A certification label shall be located in the oxygen compartment.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Oxygen Display:**

Each control panel (both rear and front) shall indicate the tank pressure thru a digital readout and analog level gauge.

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Electric Solenoid Oxygen Valve:**

One (1) electric oxygen solenoid valve shall be installed in the oxygen compartment. A manual override valve shall also be included.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Oxygen Bottle Reducer:**

One (1) 50 PSI oxygen bottle reducer shall be included within the delivered vehicle. The unit shall be secured to the oxygen feed hose to allow a simple hook up at the oxygen bottle.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Street Side Action Area Oxygen Outlets:**

There shall be two (2) Ohio style oxygen outlets located within the street side main action area.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Right Wall Mounted Oxygen Outlet:**

There shall be one (1) Ohio style oxygen outlet located on the right interior wall at head of squad bench below the curb side switch panel / cabinet.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Oxygen Access/Viewing Door:**

Access to the onboard oxygen cylinder shall be provided through a hinged Polycarbonate door with a latch.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Oxygen Tank Bracket:**

The vehicle shall be equipped with a Ziamatic Corp. "OTS" electric oxygen cylinder lift located in the exterior D-1 compartment. The system shall be equipped with the appropriate cylinder bracket for a RFD supplied / installed "H" cylinder (9" diameter).

The Zico oxygen lift shall comply with SAE-J4043, AMD standard 003 for oxygen retention systems and GSA KKK-1822 specifications.

Located on the left wall of the exterior D-2 compartment near the door edge shall be a momentary rocker switch to control the electric oxygen lift. This switch location shall allow for maximum operator safety when using the oxygen lift.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

**Oxygen Tank Straps:**

The main oxygen tank straps shall include four (4) ratchet style restraint straps. Ziamatic part #3030-135-138.

***Bidder Understands And Will Supply Exactly As Written? YES NO***

## **SUCTION SYSTEM**

# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

## **Suction Pump:**

A SSCOR permanent onboard suction system shall be installed. The system shall include a 12-volt suction SSCOR / board pump, part #SB90120-RT installed within the base of the main electrical closet. The suction shall be controlled from the rear patient compartment switch panels.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Suction Outlet:**

An Ohio style suction quick disconnect outlet shall be mounted within the street side action area near the suction canister.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **SSCOR Suction:**

A permanent onboard suction system shall be installed within the street side action area. The system shall come complete with a stainless steel 2" gauge assembly and variable regulator, model #2200, injection molded canister holder, part #23002, patient tubing, HI-D, "the Big Stick" suction tip and 1200cc Bemis disposable canister. The complete system shall be installed in the same location as the current Ambulance fleet.

***Bidder Understands And Will Supply Exactly As Written?***                      **YES**                      **NO**

## **PAINT / DECALS**

### **AkzoNobel / Sikkens Paint Process:**

The ambulance manufacturer shall use an epoxy primer and polyurethane topcoat paint system.

All paint contains a film-forming component, a solvent thinner, and a pigment. In conventional paint the film-forming component and pigment are deposited on the surface as the solvent evaporates. In polyurethane paint, however, the film is formed when isocyanate, a chemical unique to polyurethane paint, becomes a plastic like substance. In one component polyurethane paint, this happens as isocyanate reacts with moisture in the air. In two component paint, a moisture curing chemical is added. Polyurethane paint has excellent performance characteristics: adhesion, hardness, gloss, flexibility, and resistance to abrasion, impact, weathering, acids and solvents.

The paint must have:

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

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **Facility Certification:**

The paint facility shall be in current compliance with 40 CFR (code of federal regulations) part 63 subpart HHHHHH national emission standards for hazardous air pollutants: Paint stripping and miscellaneous surface coating operations at area sources (6H-NESHAP). Spray guns shall also be high volume – low pressure certified.



# **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Painter Certification:**

All painters shall be certified. Training documentation shall include:

- \*Spray gun set up and usage.
- \*Spray gun maintenance.
- \*Hands on practical use of HVLP and RP Equipment.
- \*Cycle time reductions and improving productivity with correct equipment and usages.
- \*Air volume requirements.
- \*Air filtration and filter maintenance.
- \*Supplied air respiration.
- \*CO monitor requirements.
- \*Spot repair procedure.
- \*RPS cups.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

## **Ambulance Module Prep:**

Prior to assembly, all joints and seams are to be mechanically etched.

All welds shall be ground smooth prior to priming.

The bare substrate of the module is first cleaned with a strong surface cleaner to remove fabrication and pneumatic tool oils. For this reason, cleaning the surface prior to sanding prevents oils and contaminants from being imbedded into the substrate. After the sanding process, a mild surface cleaner removes any sanding dust residue along with pneumatic tool oil. A waterborne surface cleaner is available in case substrate was touched with bare hands or skin.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

The following steps must be followed in sequence to properly apply paint to the ambulance.

### **1) Surface Prep:**

Clean entire modular body with Sikkens OTO using the two-cloth method: one used to wipe on wet, the other used to wipe dry.

Using an orbital sander, (where polyester filler will be applied) 80-grit is used to provide a mechanical tooth for optimal adhesion. 180-grit is then used surrounding the 80-grit area. Sikkens M600 surface cleaner is used to remove sanding dust and pneumatic tool oil. If bare hands or skin accidentally touched the surface, Sikkens Autoprep waterborne cleaner is used to remove natural oils.

A Sikkens approved polyester body filler is applied over the 80-grit ground areas to cover the imperfections from welds. When body filler dries, it is first sanded with 80-grit then finish sanded with 180-grit to remove all 80-grit sand scratches. Blow off surface dust using approved air wand. After body work has been completed, the rest of the aluminum substrate on the module gets sanded with 180-grit sandpaper until the surface is bright and sand scratches are consistent. The module shall get blown off again to remove all sanding dust.

Step 1 is essential in achieving proper adhesion.

***Bidder Understands and Will Supply Exactly As Written?***                      **YES**                      **NO**

### **2) Epoxy Primer And High Build Primer Surface Application Process:**

First, if sanded aluminum substrate has not been primed within 8-hours, aluminum substrate gets re-abraded to remove oxidation that may have started on aluminum surface. Aluminum substrate gets cleaned with Sikkens M600 surface cleaner using the 2-towel method. Surface cleaners do not get

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

applied over body filler due to polyester filler being absorbent.

One coat of AkzoNobel LV262 Epoxy primer is applied. This epoxy primer slows down corrosion from happening if in case the unit (once out in the field) has stone chips or scratches down to aluminum. This product is a 2-component epoxy primer meaning it mixes with a hardener. Paint technicians are training to properly apply this product to achieve a minimum of 1-mil DFT (Dry Film Thickness) as required by AkzoNobel. A blank module schematic showing specific areas to measure dry film thickness is completed for each module /unit.

Allow LV262 40-minutes minimum dry time prior to applying AkzoNobel LV650 primer surfacer. Apply three (3) wet coats of AkzoNobel LV650 two (2) component low VOC high build primer surfacer. A dry film thickness of up to 8-mils can be achieved prior to sanding.

Minimum flash between coats is 30-seconds to 5-minutes. LV650 surfacer dries two (2) different ways. One way is overnight dry without accelerator; the other is with accelerator, which dries in 45-minutes at 70-degrees prior to block sanding.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **3) Sanding:**

Block sand entire module with 320-grit sandpaper minimizing any accidental cut through on edges. Blow off body with air gun and move unit to seam sealer department.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **4) Pre-Topcoat Preparation:**

Clean areas where with seam sealer is applied with Sikkens M600 surface cleaner. If by accident, bare hands or skin touched surface on module, Autoprep waterborne cleaner is used on these areas prior to using M600 cleaner. Both cleaners are used with the 2-towel method.

Seam seal with non-shrinking moisture-cured urethane seam sealer. Technicians follow seam sealer technical data sheets pertaining to application and dry times prior to applying AkzoNobel BT LV650 basecoat or BT LV650 Topcoat single-stage paint.

Move module into paint booth, prepare surface for paint.

Clean module with M600 surface cleaner. If by accident, bare hands or skin touch surface on the module, Autoprep waterborne cleaner is used on these areas prior to using M600 cleaner. Both cleaners are used with the 2-towel method.

Apply reduced LV262 epoxy over any visible cut through and give a 10-minute flash prior to applying BT LV650 basecoat or Topcoat.

Tack rag unit to remove any lint or dust that may have landed on surface.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **5) Topcoat Procedure**

Mix BT LV650 basecoat or Topcoat (single stage) polyurethane paint.

Fluid and spray pattern checks are done prior to applying BT LV650 basecoat, topcoat and clear coat. Apply BT LV650 basecoat until complete coverage is achieved. If topcoat is applied, a minimum of 1.8-mils are recommended after cut and buff procedure. Note: topcoat is not required to be have clear coat applied. Allow solid color BT LV650 basecoat to flash 20-minutes prior to applying 3-coats Sikkens ACIII clearcoat.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Paint Mil Thickness:**

The mil thicknesses are as follows:

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

Autocoat BT LV262 Epoxy Primer:	1.0 to 1.5 mils.
Autocoat BT LV650 2K Primer Surface:	1.0 to 3.0 mils.
Autocoat BT LV650 Basecoat color:	1.0 to 1.8 mils.
Autocoat BT ACIII Clearcoat:	<u>2.0 to 3.0 mils.</u>
Combined total:	5.0 to 9.3 mils.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Paint Design:**

The upper section of the cab and module, including the cab hood and module roof shall be White. The module body White shall match the chassis White color.

The lower section of the cab and module shall be painted Red. The paint scheme shall contain a "thunderbolt" design on the module. The paint shall extend thru the compartment and all cab door jambs. The entire rear wall shall be painted Red.

The paint scheme / design / Red color and all aspects of the exterior paint shall be identical to the current RFD Ambulance fleet. **No exceptions to this requirement.**

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Reflective Pinstripe:**

The Red and White paint break shall include a 1/4" 3M 680 series Black reflective pinstripe.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Module Roof Lettering:**

In addition to the required 32" star-of-life decal on the module roof, there shall be no less than five (5) 12" high 3M 680 Black reflective combination of numbers and symbols installed on the roof to indicate the vehicles ID number. All letters shall be Helvetica Bold font.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **3M White Scotchlite Striping:**

The vehicle shall include 3M 680 series White reflective striping that will match the current RFD Ambulance fleet. There shall be two (2) 1" wide White reflective stripes applied to the vehicle. The stripes shall be offset the center 6" wide reflective stripe by 1/2" each side, thus leaving 1/2" of exposed Red paint between the 1" stripes and the 6" reflective stripe.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Decals:**

There shall be a "Star of Life" decal package installed. This package shall include two (2) 4", two (2) 12.5", two (2) 17" and one (1) 32" decals.

The "Star of Life" decal package shall conform to the Federal specifications – color and size. All decals shall be reflective, including the roof decal. The roof decal is not required to include snake and staff. All decals shall be installed in conjunction with the lettering to create a uniform appearance.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Lettering:**

Prior to delivery, the vehicle shall be lettered with Real Gold, Inc. extra-large engine burl vinyl with Black printed outline / shadow. The letters shall be laminated with clear vinyl to allow the Black outline / shadow

## **RIDGEFIELD FIRE DEPARTMENT AMBULANCE BID TECHNICAL SPECIFICATIONS**

ink to be sealed and for added protection. In addition to the lettering, the vehicle shall also include printed cab door seals and American flag on each side. All lettering and graphics shall match the current RFD Ambulance fleet. **No exceptions to this requirement.**

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Rear Body Chevron:**

The entire exterior rear module body wall (includes rear doors) shall include 3M Diamond Grade 6" wide striping. Colors to be Red #983-72 and Fluorescent Yellow-Green #983-23. Each color shall be doubled to allow the stripes to be 12" wide. The rear wall chevron design shall match the current RFD Ambulance fleet. **No exceptions to this requirement.**

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Module Entry Door Chevron:**

The three (3) lower module entry door smooth aluminum door panels shall include 3M Diamond Grade 6" wide striping. Colors to be Red #983-72 and Fluorescent Yellow-Green #983-23.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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## **MISCELLANEOUS**

### **Front End Alignment:**

After completion of the ambulance conversion, the vehicle shall include a front-end alignment. Documentation of the front-end alignment shall be included within the owner's manual.

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Nomenclature:**

All nomenclature stickers shall be screen printed and permanently attached to a 30-mil Lexan plastic non-glare covering. They shall be adhesive backed and sized appropriately to their functional reading distance. The following labels shall be provided as standard, but not limited to, depending upon additional options ordered. Shall include "20 Amp Shore Power", "Antenna Access", "125V AC Outlet", "12 Volt Outlet", "Gasoline Only".

<b><i>Bidder Understands and Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **"NO SMOKING OXYGEN EQUIPPED / FASTEN SEAT BELTS" Decals:**

"No Smoking Oxygen Equipped / Fasten Seat Belts" self adhesive decals shall be installed in both the cab and the module.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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### **Equipment Mounting:**

Prior to final delivery, the RFD shall supply the following equipment to be installed. Includes: two (2) SCBA brackets, two (2) Streamlight handlights, miscellaneous brackets for tools (axe / haligan / bolt cutters) and fire extinguisher.

<b><i>Bidder Understands And Will Supply Exactly As Written?</i></b>	<b>YES</b>	<b>NO</b>
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**RIDGEFIELD FIRE DEPARTMENT  
AMBULANCE BID TECHNICAL SPECIFICATIONS**

**END OF TECHNICAL SPECIFICATIONS**

**BID PROPOSAL FORM**

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

Total Delivered Price Per Bid Specifications: \$ \_\_\_\_\_

*In Written*  
*Words* \_\_\_\_\_

Less Ford FIN Concession: \$ \_\_\_\_\_

*In Written*  
*Words* \_\_\_\_\_

Total Delivered Price Less Ford FIN: \$ \_\_\_\_\_

*In Written*  
*Words* \_\_\_\_\_

\_\_\_\_\_  
Total Delivery Lead Time (calendar days) Including Chassis And Conversion:  
\_\_\_\_\_  
\_\_\_\_\_

**AUTHORIZATION**

\_\_\_\_\_  
Authorized Signature of Bidder

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Typed Name

\_\_\_\_\_  
Street Address

***RIDGEFIELD FIRE DEPARTMENT  
AMBULANCE BID TECHNICAL SPECIFICATIONS***

\_\_\_\_\_  
Title

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Phone Number