

CITY OF GOSHEN



**SPECIFICATION DOCUMENTS
FOR
AMBULANCE WITH 4x2 CHASSIS
JN 2021-0014**

Proposals due by January 31, 1:45 p.m. (local time)

INSTRUCTIONS

1. Terms

- 1.1. For the purposes of this solicitation and proposed contract:
 - (a) The terms “bid,” “quote,” “offer” and “proposal” are synonymous.
 - (b) The terms “bidder,” “quoter,” or “offeror” refer to the person or other legal entity responding to and submitting a bid, quote, offer or proposal to the City of Goshen for the purchase of the supplies, specified in response to this solicitation.
 - (c) The term “Contractor” refers to the person or other legal entity that is awarded and enters into a contract with the City of Goshen for the purchase of the supplies, specified.
 - (d) The term “Specifications Documents” includes all documents for the Project, including the invitation, instructions, project specifications, plans, drawings, maps, and the terms and conditions to be part of the agreement.
 - (e) The term “Supplies” means equipment, goods and materials.

2. Contractual Terms and Conditions

- 2.1. The sample Agreement following these Instructions contains the terms and conditions that will be part of the agreement if a bidder/quoter/offeror’s proposal is accepted by the City. No agreement modifying these terms and conditions shall be binding unless made in writing and signed by both parties.

3. Examination and Representation

- 3.1. The bidder/quoter/offeror shall carefully examine these Specification Documents to fully inform themselves with the limitations and conditions under which the supplies, specified are to be provided.
- 3.2. The bidder/quoter/offeror shall fully inform themselves with the limitations and conditions under which the supplies, specified are to be provided, and all other relevant matters that may affect the cost, progress, delivery, and/or performance, including applicable local, state, or federal laws and regulations. The bidder/quoter/offeror shall make their own determinations as to conditions, assume all risk and responsibility, and complete the contract in and under conditions that the bidder/quoter/offeror may encounter or create, without additional costs to the City of Goshen.
- 3.3. The bidder/quoter/offeror agrees that if the bidder/quoter/offeror should execute a contract with the City of Goshen, the successful bidder/quoter/offeror shall make no claim against City because of estimates or statements made by any City officer or agent which may prove to be in any respect incorrect. The failure or omission of any bidder/quoter/offeror to receive or examine any form, instrument, addendum, or other document shall in no way relieve the successful bidder/quoter/offeror of any obligations with respect to its proposal submitted or contract executed. (See also Section 4.3.)

4. Clarifications and Addenda

- 4.1. All requests for clarification to this solicitation must be received at least seven (7) calendar days before the opening date to allow for the issuance of any addenda determined by the City to be necessary. Requests shall be made in writing and may be directed to the City of Goshen Legal Department, 204 East Jefferson Street, Goshen, IN 46528, or faxed to the attention of the Legal Department at (574) 537-3816. Inquiries should reference the applicable section, paragraph, and/or page number.
- 4.2. Interpretations or clarifications determined necessary by City in response to such requests will be issued by addenda and mailed, faxed or otherwise delivered to all parties recorded by the City as having received the Specification Documents. Only a request for clarification answered by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 4.3. Each bidder/quoter/offeror will ascertain prior to submitting a proposal that the bidder/quoter/offeror has received all addenda issued, and acknowledge the receipt of all addenda on the Proposal.

5. Specifications

- 5.1. The equipment, goods, materials and/or method described in the Specification Documents establish a standard or type, function and quality to be met. Any proposed substitution shall also meet the standard or type, function and quality.
- 5.2. Unless stated otherwise in this solicitation, all equipment, goods, and/or materials shall be new and that which is currently under standard production. No used or refurbished items will be accepted.
- 5.3. Whenever the terms “standard”, “recognized” or “reputable” manufacturer are used, this shall be construed to mean manufacturers who have been engaged in the business of fabricating equipment, goods or materials of the nature called for these Specification Documents for at least twelve (12) months prior to the date set for opening the proposals and the bidder/quoter/offeror can demonstrate to the satisfaction of City that said manufacturer has successfully installed in at least three (3) instances such equipment, goods or materials and that the performance of such has been satisfactory.

6. Basis of Proposals Price

- 6.1. A bidder/quoter/offeror’s proposal for the supplies, shall be based on lump sum price.
- 6.2. A bidder/quoter/offeror shall extend unit prices where required. In the event there is an error in the extension of prices, the unit price shall govern.
- 6.3. The price(s) shall cover and include all costs necessary to provide for all supervision, labor, materials, equipment, services, permits and other components required to complete the Project in accordance with these Specification Documents, including any incidentals whether or not specifically called for in these documents.
- 6.4. Proposals shall remain firm for a minimum period of sixty (60) days after the opening of the proposals.

- 6.5. The City of Goshen is exempt from federal excise and state sales taxes. Prices shall not include any tax for which the City is exempt. A tax exemption certificate will be provided if requested. City will not be responsible for any taxes levied on Contractor as a result of this contract. However, if it is later determined a tax must be paid by the City of Goshen, the contract price will be adjusted to reflect this liability.

7. Descriptive Literature

- 7.1. The bidder/quoter/offeror shall clearly identify the supplies being offered (manufacturer make, model number, style, etc.) and submit with their proposal sufficient descriptive literature, catalog cuts, technical data, guarantees, warranties, etc. to enable City to determine if the supplies offered meet the requirements of this solicitation. The failure to furnish this information may result in a bidder/quoter/offeror's proposal being considered non-responsive.

8. US Manufactured Certification

- 8.1. The Bidder shall ensure that the goods, supplies, materials and/or equipment being offered shall be manufactured in the United States. If steel or foundry products are used in (1) the manufacture of the goods, supplies, materials and/or equipment being offered, then the steel or foundry products shall be manufactured in the United States. This does not prevent a minimal use of foreign steel and iron Page 7 materials, if the cost of such materials does not exceed one-tenth of one percent (0.1%) of the total contract cost or \$2,500 whichever is greater. The cost is that shown to be the value of the steel and iron products as they are delivered to the project.

9. Exceptions

- 9.1. A proposal shall clearly detail in writing any deviation from or exception taken to the stated Specification Documents. Any equipment, goods, materials and/or method that City, in its sole discretion, determines to be equal or better to that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended will be considered, provided the bidder/quoter/offeror submits information that details how the equipment, goods, materials and/or method offered will meet or exceed the minimum requirements of criteria and quality to that named in the Specification Documents. In the absence of any stated deviation or exception, the proposal will be accepted as in strict compliance with all terms and conditions of the Specification Documents, and the bidder/quoter/offeror shall be held liable for strict compliance.

10. Non-Collusion Affidavit

- 10.1. The bidder/quoter/offeror shall submit with their proposal a signed non-collusion affidavit in which the bidder/quoter/offeror affirms, under the penalties for perjury, the following:
- (a) The bidder/quoter/offeror has not entered into a combination or agreement relative to the price to be offered by a person; to prevent a person from submitting a proposal; or to induce a person to refrain from submitting a proposal.
 - (b) The bidder/quoter/offeror's proposal is made without reference to any other proposal.
- 10.2. Any proposal found to be collusive will be rejected. Should City discover that the successful bidder/quoter/offeror's affidavit is false, City shall declare the contract forfeited and award a new contract.

11. Business Certification

- 11.1. The bidder/quoter/offeror must complete and submit with their proposal the Business Certification page to identify the form of business organization the bidder/quoter/offeror is operating under.
- 11.2. A limited partnership, limited liability partnership, limited liability company, and corporation is required to be registered with the Indiana Secretary of State to do business in the state of Indiana and with the City of Goshen in order to be considered responsible. If the business entity is not currently registered with the Indiana Secretary of State, the business entity must agree to become registered as a contingency of being awarded a contract. Failure to register with the Indiana Secretary of State within a reasonable period of time may result in a determination that the business entity is non-responsible and a contract awarded may be cancelled. This requirement DOES NOT apply to a sole proprietorship or general partnership.

12. Trusts

- 12.1. In accordance with Indiana Code § 5-22-3-5, a proposal submitted by a trust (as defined by Indiana Code § 30-4-1-1(a)) must identify each beneficiary of the trust and each settlor empowered to revoke or modify the trust.

13. Contracting with Relatives of Elected Officials

- 13.1. In accordance with Indiana Code § 36-1-21, the bidder/quoter/offeror must complete and submit with their proposal the Nepotism Disclosure page to disclose if the bidder/quoter/offeror is a relative of a City of Goshen elected official or a business entity that is wholly or partially owned by a relative of a City of Goshen elected official.

14. No Investment Activities in Iran

- 14.1. In accordance with Indiana Code § 5-22-16.5, by submitting a proposal, the bidder/quoter/offeror is certifying that the bidder/quoter/offeror does not engage in investment activities in Iran as defined by Indiana Code § 5-22-16.5-8. Providing false certification may result in the consequences listed in Indiana Code § 5-22-16.5-14, including considering the bidder/quoter/offeror as nonresponsible, termination of the contract if awarded, as well as bringing civil action against the contractor.

15. Preparation and Submission of Proposals

- 15.1. A response to this solicitation is an offer to contract with the City of Goshen.
- 15.2. A bidder/quoter/offeror must complete and submit all pages/forms requesting information that are included with this solicitation. Proposals shall be typed or legibly printed in ink, and the proposal must be signed by an authorized representative of the bidder/quoter/offeror. A proposal may be rejected if any required pages/forms or information requested are incomplete or omitted and/or if a proposal contains any alterations or erasures that are not initialed by the person signing the proposal.
- 15.3. A proposal must be signed by the person(s) legally authorized to bind the bidder/quoter/offeror to a contract. A proposal submitted by an agent of the bidder/quoter/offeror should have a current power of attorney attached certifying the agent's authority to bind the bidder/quoter/offeror.

- 15.4. A proposal shall be submitted in a sealed envelope. The envelope must be labeled with the following information:
 - (a) Bidder/quoter/offeror's name and address;
 - (b) The words, "PURCHASE OF A 4X2 CHASSIS WITH AMBULANCE BOX"; and
 - (c) Date of the opening as indicated in the Invitation section.
- 15.5. If a proposal is sent through the mail or other delivery system, the sealed envelope should be enclosed in a separate envelope with the notation "**PROPOSAL ENCLOSED**" on the face of the outer envelope.
- 15.6. In order to protect the integrity of the sealed solicitation process, failure to properly identify a proposal according to these instructions may result in disqualification of a proposal from consideration.
- 15.7. A proposal shall be filed with the Goshen Clerk-Treasurer's Office at 202 South Fifth Street, Goshen, Indiana 46528 by the date and time as indicated in the Invitation section.
- 15.8. A proposal submitted orally, by telephone, fax or email will NOT be considered.
- 15.9. A bidder/quoter/offeror will assume full responsibility for the timely delivery of a proposal to the location specified. A proposal arriving after the specified date and time will NOT be considered.
- 15.10. All proposals submitted become the property of the City of Goshen and are a matter of public record.

16. Withdrawal or Modification of Proposal

- 16.1. Any modifications made to a proposal before submission must be initialed in ink by the bidder/quoter/offeror's authorized representative.
- 16.2. Once a proposal is submitted to City, a bidder/quoter/offeror may, upon written request, modify or withdraw their proposal at any time prior to the opening date and time. A request to modify or withdraw a proposal must be signed by the same person or persons who signed the original proposal submitted.
- 16.3. No proposal may be modified or withdrawn after the opening of the proposals.

17. Alteration or Variation of Terms

- 17.1. The terms and conditions of the award will be those listed in this solicitation package and the resulting contract. It is mutually understood and agreed that no alteration or variation of the terms and conditions of this solicitation or resulting contract shall be binding unless specifically agreed to in writing by City. Further, no oral understanding or agreement shall be binding unless specifically agreed to in writing by the City.

18. Opening of Proposals

- 18.1. The proposals received will be opened in public by the Goshen Board of Public Works and Safety at the time and place shown in the Invitation section. The reading of the proposals received, however, does not determine the award of the contract.

19. Evaluation of Proposals and Award

- 19.1. The City of Goshen reserves the right to accept or reject any and/or all proposals and to waive any informalities or irregularities in any proposal received. City shall award a contract to the lowest responsible and responsive bidder/quoter/offeror or reject all proposals submitted.
- 19.2. In evaluating proposals, City may consider:
 - (a) Whether the bidder/quoter/offeror has submitted a proposal that conforms in all material respects to the Specification Documents.
 - (b) Whether the bidder/quoter/offeror has submitted a proposal that complies specifically with the Invitation and the Instructions sections.
 - (c) Whether the bidder/quoter/offeror has complied with all applicable statutes, ordinances, resolutions, or rules pertaining to the award of a public contract.
 - (d) The qualifications of the bidder/quoter/offeror, including the ability and capacity of the bidder/quoter/offeror to provide the supplies or service and/or perform the work specified; the integrity, character, and reputation of the bidder/quoter/offeror; and the competency and experience of the bidder/quoter/offeror.
 - (e) Cost of services to be provided by bidder/quoter/offeror based on City's selection of the base proposal and/or requested alternates (if any).
- 19.3. If a contract is awarded, the contract will be awarded to the lowest responsible and responsive bidder/quoter/offeror whose evaluation by City indicates that the award will be in the best interests of the City of Goshen.
- 19.4. The bidder/quoter/offeror to whom a contract is awarded will be required to execute a written contract within fourteen (14) days after being notified of the award.
- 19.5. The bidder/quoter/offeror to whom the contract is awarded shall furnish the City a performance bond in an amount equal to one hundred percent (100%) of the contract price within fourteen (14) calendar days after award of the contract. See "General Terms and Conditions" Section 12.

The following Sample Agreement contains the terms and conditions that will be part of the agreement if a bidder/quoter/offeror's proposal is accepted by City. No agreement modifying these terms and conditions shall be binding unless made in writing and signed by both parties.

PURCHASE AGREEMENT

Purchase of Ambulance with 4x2 Chassis

THIS PURCHASE AGREEMENT ("Agreement") is entered into on _____, 2021, which is the last signature date set forth below, by and between **OtherParty** ("Supplier"), whose mailing address is _____, and **City of Goshen, Indiana**, a municipal corporation and political subdivision of the State of Indiana acting through the Goshen Board of Public Works and Safety ("City").

In consideration of the terms, conditions and mutual covenants contained in this agreement, the parties agree as follows:

Section 1. Effective Date

The Agreement shall become effective on the day of execution and approval by both parties.

Section 2. Purchase

- (A) Subject to the terms and conditions set forth in this Agreement, Supplier shall provide to City the items, goods, materials, or equipment (hereinafter referred to as "Supplies") as specified in accordance with the attached Specifications entitled "Ambulance with 4x2 Chassis" attached as Attachment A.
- (B) In the event of any conflict between the terms of this Agreement and the terms contained in the Specifications (Attachment A) or Supplier's Proposal (Attachment B), the documents shall be given precedence in order as listed (this Agreement first, Specifications second, and Proposal third).

Section 3. Delivery

- (A) Supplier agrees to deliver all supplies by January 31, 2024.
- (B) The Supplies shall be delivered FOB Destination to the following address:
- (C) Delivery date shall be the date the complete items, goods, materials, or equipment ("Supplies"), installed and/or ready to operate (if applicable), has been delivered to City. To be accepted, the Supplies must successfully pass an inspection by City. The inspection shall include an operational test (if applicable) to ensure the Supplies meet both the specifications and are operable. Unless otherwise noted in the specifications, the inspection will be completed within fifteen (15) calendar days of the delivery date. Unless otherwise noted in the specifications, the warranty for the Supplies shall become effective on the date of acceptance. Acceptance also requires the delivery of all manuals, ownership papers, and a certificate of origin, if required, for the Supplies.

Section 4. Purchase Price; Payment

- (A) City agrees to compensate Supplier for the Supplies provided in accordance with Supplier's proposal the sum of \$_____.
- (B) City shall pay Supplier after delivery and final acceptance of the Supplies, and upon receipt of a detailed invoice from Supplier. Any payment made by the City before final acceptance of the Supplies shall not affect the obligation of Supplier to repair or replace any defective parts or equipment.
- (C) The invoice shall be sent to the following address, or at such other address as City may designate in writing.
- (D) Payment will be made within forty-five (45) days following City's receipt of the invoice. If any dispute arises, the undisputed amount will be paid. Payment is deemed to be made on the date of mailing the check.
- (E) Supplier is required to have a current W-9 form on file with the Goshen Clerk-Treasurer's Office before City will issue payment.

Section 5. Inspection

- (A) Supplier shall conduct final inspections on all Supplies prior to delivery to City. City has the right to inspect the Supplies to the extent practicable, at any time and place. If City determines as a result of inspection that the Supplies do not conform to all requirements of this Agreement, City may at City's sole option and discretion:
- (B) When the defects for any Supplies cannot be corrected practicably, City may at City's sole option and discretion:
- (C) If Supplier fails to correct performance or take necessary action to ensure future performance, in conformity with Agreement requirements, or when the defects for any Supplies cannot be corrected practicably, City may:
- (D) If, for any reason, City rejects the Supplies delivered by Supplier, City shall not be responsible for any shipping, restocking, or similar charges incurred by Supplier.
- (E) Any remedy provided by this section shall not limit City's other remedies available under this Agreement or as provided by applicable law.

Section 6. Workmanship and Quality; Warranty

Unless otherwise stated in the Specifications, Supplier shall guarantee the Supplies for a period of _____ from date of acceptance. Failure of any portion of the Supplies due to improper materials or workmanship, materials of construction or design may result, at City's option, in a refund to City of the purchase price of that portion which failed or, in the alternative, in replacement of that portion which failed at no cost to City, in addition to all other remedies provided by law and by this Agreement. City shall be the sole judge of the sufficiency of workmanship and quality of materials.

Section 7. Performance Bond

The successful bidder shall furnish the City a performance bond in an amount equal to one hundred percent (100%) of the contract price within fourteen (14) calendar days after award of the contract.

The performance bond shall be conditioned on the faithful performance/delivery of the purchase in accordance with the Specification Documents and the due payment of all lawful claims for all labor, materials, equipment, tools, fees and other items used in the performance of this contract. The performance bond shall specify that no change, modification, omission or addition to the terms and conditions of the Specification Documents or a defect in the contract or in the proceedings preliminary to the letting and awarding the contract shall not in any way affect or operate to release or discharge the surety.

The surety of the performance bond shall not be released no sooner than thirty (30) days after the date of the City of Goshen's final settlement with the Supplier and delivery of the supplies.

Section 8. Independent Contractor

Supplier shall operate as a separate entity and independent contractor of the City of Goshen. Any employees, agents or subcontractors of Supplier shall be under the sole and exclusive direction and control of Supplier and shall not be considered employees, agents or subcontractors of City. As such, Supplier is solely responsible for all taxes and none shall be withheld from the sums paid to Supplier. Supplier acknowledges that Supplier is not insured in any manner by City for any loss of any kind whatsoever. Supplier has no authority, express or implied, to bind or obligate City in any way.

Section 9. Non-Discrimination

Section 10. Employment Eligibility Verification

- (A) Supplier shall enroll in and verify the work eligibility status of all Supplier's newly hired employees through the E-Verify program as defined in Indiana Code § 22-5-1.7-3. Supplier is not required to participate in the E-Verify program should the program cease to exist. Supplier is not required to participate in the E-Verify program if Supplier is self-employed and does not employ any employees.
- (B) Supplier shall not knowingly employ or contract with an unauthorized alien, and Supplier shall not retain an employee or continue to contract with a person that the Supplier subsequently learns is an unauthorized alien.
- (C) Supplier shall require their subcontractors, who perform work under this contract, to certify to the Supplier that the subcontractor does not knowingly employ or contract with an unauthorized alien and that the subcontractor has enrolled and is participating in the E-Verify program. Supplier agrees to maintain this certification throughout the duration of the term of a contract with a subcontractor.
- (D) City may terminate the contract if Supplier fails to cure a breach of this provision no later than thirty (30) days after being notified by City of a breach.

Section 11. Contracting with Relatives

Pursuant to Indiana Code § 36-1-21, if the Supplier is a relative of a City of Goshen elected official or a business entity that is wholly or partially owned by a relative of a City of Goshen elected official, the Supplier certifies that Supplier has notified both the City of Goshen elected official and the City of Goshen Legal Department of the relationship prior to entering into this Agreement.

Section 12. No Investment Activities in Iran

In accordance with Indiana Code § 5-22-16.5, Supplier certifies that Supplier does not engage in investment activities in Iran as defined by Indiana Code § 5-22-16.5-8.

Section 13. Indemnification

Supplier shall indemnify and hold harmless the City of Goshen and City's agents, officers, and employees from and against (1) any and all liability, obligations, claims, actions, causes of action, judgments, liens, damages, penalties or injuries arising out of any intentional, reckless or negligent act or omission by Supplier or any of Supplier's agents, officers and employees; or (2) any defect in materials or workmanship of any supply, material, mechanism, or other product or service which Supplier or any of Supplier's officers, agents, employees, or subcontractors has supplied to City or has used in connection with this Agreement. Such indemnity shall include reasonable attorney's fees and all reasonable litigation costs and other expenses incurred by City only if Supplier is determined liable to the City for any intentional, reckless or negligent act or omission in a judicial proceeding, and shall not be limited by the amount of insurance coverage required, if any, under this Agreement.

Section 14. Insurance

- (A) Prior to commencing work, the Supplier shall furnish City a certificate of insurance in accordance with the following minimum requirements, shall maintain the insurance in full force and effect, and shall keep on deposit at all times during the term of the contract with City the certificates of proof issued by the insurance carrier that such insurance is in full force and effect. Supplier shall specifically include coverage for the City of Goshen as an additional insured for Employer's Liability, General Liability and Automobile Liability.
- (B) Each certificate shall require that written notice be given to the City at least thirty (30) days prior to the cancellation or a material change in the policy.
- (C) Supplier shall at least include the following types of insurance with the following minimum limits of liability:

Section 15. Force Majeure

- (A) Except for payment of sums due, neither party shall be liable to the other or deemed in default under this contract if and to the extent that such party's performance under this contract is prevented by reason of force majeure. The term "force majeure" means an occurrence that is beyond the control of the party and could not have been avoided by exercising reasonable diligence. Examples of force majeure are natural disasters or decrees of governmental bodies not the fault of the affected party.
- (B) If either party is delayed by force majeure, the party affected shall provide written notice to the other party immediately. The notice shall provide evidence of the force majeure event to the satisfaction of the other party. The party shall do everything possible to resume performance. If the period of non-performance exceeds thirty (30) calendar days, the party whose ability to perform has not been affected may, by giving written notice, terminate the contract and the other party shall have no recourse.

Section 16. Default

- (A) If Supplier fails to provide the Supplies or comply with the provisions of this Agreement, then Supplier may be considered in default.
- (B) It shall be mutually agreed that if Supplier fails to provide the Supplies or comply with the provisions of this Agreement, City may procure the same or similar items, goods, materials, or equipment from the open market. If the market price of those items, goods, materials, or equipment is greater than the Agreement price, Supplier shall be liable to City for the difference between the market price and the Agreement price, plus Supplier shall be liable to City for any incidental or consequential damages incurred by City as a result of Supplier's breach.
- (C) Supplier may also be considered in default by the City if any of the following occur:

Section 17. Termination

- (A) The Agreement may be terminated in whole or in part, at any time, by mutual written consent of both parties.
- (B) City may terminate this Agreement, in whole or in part, in the event of default by Supplier.
- (C) The rights and remedies of the parties under this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

Section 18. Notice

Any notice required or desired to be given under this Agreement shall be deemed sufficient if it is made in writing and delivered personally or sent by regular first-class mail to the parties at the following addresses, or at such other place as either party may designate in writing from time to time. Notice will be considered given three (3) days after the notice is deposited in the US mail or when received at the appropriate address.

City: City of Goshen, Indiana
 Attention: Goshen Legal Department
 204 East Jefferson St., Suite 2
 Goshen, IN 46528

Supplier: OtherParty

 and
 OtherParty
 Attention: _____, Registered Agent

Section 19. Subcontracting or Assignment

- (A) Supplier shall not subcontract or assign any right or interest under the Agreement, including the right to payment, without having prior written approval from City. Any attempt by Supplier to

subcontract or assign any portion of the Agreement shall not be construed to relieve Supplier from any responsibility to fulfill all contractual obligations.

- (B) In the event that City approves of any such subcontracting, assignment or delegation, Supplier shall remain solely responsible for managing, directing and paying the person or persons to whom such responsibilities or obligations are sublet, assigned or delegated. City shall have no obligation whatsoever toward such persons. Supplier shall take sole responsibility for the quality and quantity of any services rendered by such persons. Any consent given in accordance with this provision shall not be construed to relieve Supplier from any responsibility to fulfill all contractual obligations.

Section 20. Amendments

Any modification or amendment to the terms and conditions of the Agreement shall not be binding unless made in writing and signed by both parties. Any verbal representations or modifications concerning the Agreement shall be of no force and effect.

Section 21. Waiver of Rights

No right conferred on either party under this Agreement shall be deemed waived and no breach of this Agreement excused unless such waiver or excuse shall be in writing and signed by the party claimed to have waived such right.

Section 22. Applicable Laws

- (A) Supplier agrees to comply with all applicable federal, state, and local laws, rules, regulations, or ordinances. All contractual provisions legally required to be included are incorporated by reference.
- (B) Supplier agrees to obtain and maintain all required permits, licenses, registrations, and approvals, and shall comply with all health, safety, and environmental rules or regulations in the performance of the work. Failure to do so may be deemed a material breach of agreement.

Section 23. Miscellaneous

- (A) Any provision of this agreement or incorporated documents shall be interpreted in such a way that they are consistent with all provisions required by law to be inserted into the agreement. In the event of a conflict between these documents and applicable laws, rules, regulations or ordinances, the most stringent or legally binding requirement shall govern.
- (B) This agreement shall be construed in accordance with and governed by the laws of the State of Indiana and any suit must be brought in a court of competent jurisdiction in Elkhart County, Indiana.
- (C) In the event legal action is brought to enforce or interpret the terms and conditions of this agreement, the prevailing party of such action shall be entitled to recover all costs of that action, including reasonable attorneys' fees.

Section 24. Severability

In the event that any provision of the agreement is found to be invalid or unenforceable, then such provision shall be reformed in accordance with applicable law. The invalidity or unenforceability of any provision of the agreement shall not affect the validity or enforceability of any other provision of the agreement.

Section 25. Binding Effect

All provisions, covenants, terms and conditions of this agreement apply to and bind the parties and their legal heirs, representatives, successors and assigns.

Section 26. Entire Agreement

This agreement constitutes the entire agreement between the parties and supersedes all other agreements or understandings between City and Supplier.

Section 27. Authority to Bind Supplier

The undersigned affirm that all steps have been taken to authorize execution of this agreement, and upon the undersigned's execution, bind their respective organizations to the terms of the agreement.

IN WITNESS WHEREOF, the parties have executed this agreement on the dates as set forth below.

City of Goshen, Indiana
Goshen Board of Public Works and Safety

OtherParty

Jeremy P. Stutsman, Mayor

Michael A. Landis, Member

Mary Nichols, Member

DeWayne Riouse, Member

Barb Swartley, Member

Date Signed: _____

Printed: _____

Title: _____

Date Signed: _____

CONTRACTOR'S PROPOSAL

FOR

CITY OF GOSHEN

Ambulance Box with 4x2 Chassis

JN: 2021-0014

Bidder/quoter/offeror ("Contractor") shall complete this proposal in its entirety. A proposal must be filed with the Goshen Clerk-Treasurer's Office at 202 South Fifth Street, Goshen, Indiana 46528 by the date and time as indicated in the Invitation section. All proposals received will be publicly opened and read aloud by the Goshen Board of Public Works and Safety.

PART 1 – CONTRACTOR INFORMATION

Contractor Name: _____

Street Address: _____

City: _____ State: _____ Zip Code: _____

Mailing Address (if different): _____

City: _____ State: _____ Zip Code: _____

Contact Person: _____ Title: _____

Telephone Number: _____

Fax Number: _____

Email Address: _____

PART 2 – PROPOSAL

Contractor proposes to furnish all necessary supervision, labor, materials, equipment, services, permits and other components required to complete the Project in accordance with the Specification Documents, including any incidentals,

for a lump sum price of: _____ Dollars
(\$_____)

By submitting a proposal, the Contractor agrees that the proposal and price(s) shall remain firm for a minimum period of sixty (60) days after the opening of the proposals.

PART 3 – ADDENDA

The Contractor will ascertain prior to submitting a proposal that Contractor has received all addenda issued, and acknowledge the receipt of all addenda.

The Contractor acknowledges receipt of the following Addenda for the Project:

ADDENDA NUMBER(S)	DATED
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

_____ **NONE.** There were no addenda issued for this Project.

PART 5 – BUSINESS CERTIFICATION

Contractor must complete this page to identify the form of business organization the Contractor is operating under.

A limited partnership, limited liability partnership, limited liability company, and corporation is required to be registered with the Indiana Secretary of State to do business in the state of Indiana and with the City of Goshen in order to be considered responsible. If the business entity is not currently registered with the Indiana Secretary of State, the business entity must agree to become registered as a contingency of being awarded a contract. Failure to register with the Indiana Secretary of State within a reasonable period of time may result in a determination that the business entity is non-responsible and a contract awarded may be cancelled. This requirement DOES NOT apply to a sole proprietorship or general partnership.

The Contractor is operating as a (check one):

- Contractor is a SOLE PROPRIETORSHIP
- Contractor is a GENERAL PARTNERSHIP
- Contractor is a LIMITED PARTNERSHIP
- Contractor is a LIMITED LIABILITY PARTNERSHIP
- Contractor is a LIMITED LIABILITY COMPANY
- Contractor is a CORPORATION

The Contractor, excluding a sole proprietorship or general partnership, is organized under the laws of the (complete one):

State of _____ and is currently registered with the Indiana Secretary of State.
The Business ID number for the Contractor is _____.

State of _____ but IS NOT currently registered with the Indiana Secretary of State. By submitting this proposal, the Contractor agrees to register with the Indiana Secretary of State as a contingency of being awarded a contract.

Information concerning registration with the Indiana Secretary of State may be obtained by contacting the Indiana Secretary of State, Business Services Division, 302 W. Washington Street, Room E018, Indianapolis, IN 46204; (317) 234-9768; or <https://inbiz.in.gov/BOS/Home/Index>.

PART 6 – NEPOTISM DISCLOSURE

For the purpose of complying with Indiana Code § 36-1-21, identify below whether:

_____ Contractor **IS NOT** a relative of a City of Goshen elected official.

_____ Contractor **IS** a relative of a City of Goshen elected official. This includes an individual who is a relative of a City of Goshen elected official or a business entity that is wholly or partially owned by a relative of a City of Goshen elected official. Please specify the relative(s) below:

Name of elected official: _____

Relationship to Contractor: _____

PART 7 – OTHER REQUIRED SUBMITTALS

Contractor has attached to this Part the following:

_____ Proof Contractor possesses any required licensing

_____ Performance Bond

_____ Proposed construction schedule

_____ Descriptive literature, catalog cuts, technical data, guarantees, warranties, etc. of the supplies being offered

**DETAILED SPECIFICATIONS FOR
STAR OF LIFE AMBULANCE
AND
4X2CHASSIS**

SECTION A- WARRANTIES

Included with bid, all statement of warranty policies for all warranties

A- 1 Lifetime Structural Warranty

- 1) Supplier warranty to City that the new emergency vehicle body (exclusive of paint finish) is structurally sound and free from all structural defects of both material and workmanship, and further warrants that it will maintain such structural integrity for the life for the body.
- 2) Structural integrity of body including body frame, sub-floor, exterior skin, interior cabinets and exterior compartments
- 3) Warranty transferable subject to inspection by supplier

A- 2 Lifetime Electrical System Warranty

- 1) Supplier will warranty to City that the supplied electrical equipment as specified in this document are sound and free of all defects of both materials and workmanship, for the life of the vehicle or 100,000 miles whichever occurs first
- 2) This electrical equipment includes body door post switches, all wire terminals and crimps, main vehicle wiring harness and battery harness cables, relays, switches, automatic/manual reset circuit breakers, voltmeter, ammeter, battery disconnect switches, solenoids, all terminal strips, supplier installed electrical connections and power distribution panel
- 3) Warranty transferable subject to inspection by supplier

A- 3 Paint Warranty

- 1) Supplier will warranty to City that the paint is free from specific paint defects for 10 years from date the vehicle is delivered
- 2) Supplier will warranty 100% labor & materials for the following defects: coating system integrity, coating adhesion and UV related degradation, Gloss retention and color retention, Cracking or checking of the paint film, and Delaminating from the substrate or intercoat
- 3) Supplier will warranty materials and labor to repair defects resulting from dissimilar metals and crevice corrosion for a period of 5 years, 60,000 miles from date of delivery

A- 4 Chassis Warranty

Supplier will warranty to City three years, 36,000 miles minimum, bumper to bumper or as provided by chassis manufacturer.

A- 5 Cot Warranty

- 1) Cot shall be covered by a minimum of three (3) year X-Frame Powertrain Warranty and two (2) year bumper to bumper warranty
- 2) An English manual on the cot 650606160000 shall be provided.

A- 6 Ambulance Conversion

Ambulance conversion including the oxygen outlets, hoses and fittings, on-board aspiration system, interior cabinet and exterior door hardware and latching systems, cabinet, ceiling and wall finish material, moldings and trim, windows, upholstery and flooring, shall be covered by a minimum of 3-year, 36,000-mile limited warranty

A- 7 Crevice Corrosion

Supplier will warranty crevice corrosion warranty providing labor and material with the following coverage; Year 1-3/ 36,000 mile 100% of repair cost, Year 4/48,000 miles; 50% of repair cost, Year 5/60,000 miles; 25% of repair cost

A- 8 Deliverables

- 1) Included with bid, manufacturers detailed CAD blueprints of the unit proposed; showing the left, right, and rear exterior, the left, right, front, and top views of the interior
- 2) Included with bid, a detailed weight and electrical load analysis from the manufacturer generated specifically for vehicle proposed per the bid specification
- 3) At delivery, a complete detailed operating manual for the ambulance including three copies of full wiring schematics custom prepared specifically for the ambulance delivered
- 4) One copy provided in the operating manual
- 5) One copy provided in the electrical cabinet of the ambulance
- 6) One copy for the dealership files Included with bid a sample set of wiring diagrams showing the manufacturer's basic wiring system
- 7) Upon delivery a certified GVWR weight sticker attached to the vehicle to assure the ambulance meets all requirements pertaining to the weight carrying capacity of the vehicle

A- 9 Certifications

- 1) The following certifications must be provided by the manufacturer with the bid
- 2) Manufacturer must be a Certified Ambulance Builder and provide date of most recent certification.
- 3) Manufacturer must provide proof of product liability insurance in the amount of \$10,000,000.00
- 4) Bidder must certify manufacturer to have KKK-1822F certification for the model of ambulance being bid
- 5) Bidder must certify manufacturer to be registered with the National Highway Traffic Safety
- 6) Administration as a final stage manufacturer of motor vehicles. Documentation must be included with the bid submission.

SECTION B- MODULAR BODY

Type I Exterior body construction aluminum alloy

B- 1 Frames

- 1) Module body electric welded, unitized aluminum roll cage structure throughout
- 2) Framework consists of six individual frames constructed to insure squareness and flatness before being assembled into a box configuration

B- 2 Material

- 1) All material used on any frame member, corner and upper cove is high strength aluminum alloy minimum of 6061-T6
- 2) Material certifications showing 6061-T6 alloy shall be provided upon request to verify the use of this material for all frame members

B- 3 Welding

- 1) All welding on any part of the frame structure is performed by certified welders tested in welding this alloy and type of structure and certifications shall be provided upon request
- 2) All butt welds have 100% weld penetration using a filler wire approved for this alloy aluminum
- 3) All welding shall be done in accordance with American Welding Society (AWS), Structural Welding Code

B- 4 Floor Frame

- 1) Main floor structure consists of a primary load bearing support frame that consists of a minimum 2"x3"x.250" square wall tubular aluminum
- 2) Secondary support frames consist at a minimum of 2" x 2" x .250" (square) and a minimum of 1 1/2" x 2" x .125" (rectangular) wall tubular aluminum
- 3) Areas between exterior compartments and subfloor support members are a minimum of 2" x 2" x .250 (square)

B-5 Vertical Frames

B-5.1 Left and Right Sides

- 1) Vertical left and right-side frames consist of heavy-duty custom aluminum extrusion members
- 2) Vertical corner and horizontal upper "Main Beam" consist of an extrusion with the minimum dimensions of 5 3/4 by 3 7/8 inches with a cross section across the web of .1875 inches
- 3) Built into the inside edge of the vertical and horizontal section an area where the exterior door seal shall mate
- 4) This door jamb area is designed into, and is a part of the main corner extrusion, not welded in place
- 5) The inside door jamb is part of the structural member has minimum dimensions of 1 inch wide by 1 1/4 inches deep and has minimum side vertical wall thicknesses of .1875 inches

- 6) This door seal and jam section is recessed behind the exterior surface of the body approximately 7/8 of an inch to allow the door seal to be placed outboard of the door latches and provide for a full uninterrupted hollow core door seal mounted on every door
- 7) Each door of the vehicle shall seal on this integrated section of the extrusion
- 8) Outer exterior mounted finish trim sealed to the body during fabrication with a high strength automotive sealant which can be painted
- 9) The FMVSS 206 rated door closure bolt mounted directly to this structural member and not to a welded door jamb section
- 10) Door alignment maintained by discrete alignment grooves extruded in the custom shape to eliminate the need for excessive adjustment allowance
- 11) The area of the structural member which is in contact with the roof box beams incorporates a 1/2-inch flange to carry the load of the roof structure and resulting static load when applied to prevent the need for the roof and roof structure to be held in place by the welds only
- 12) The main support, structural members around the door openings incorporate a built-in door seal and jam surface similar to the one found around the main corner extrusion, with all the same strength and design features
- 13) Two distinctly different types of structural members are used for different types of door configurations:
- 14) Doors which are placed in the modular body which are not adjacent to any other door use an extrusion with the overall dimensions of 3 inches wide by 2 inches deep
- 15) This extrusion forms the two vertical and two horizontal door seal, and jam surfaces
- 16) Doors of this type which are placed on the forward most or rear most positions of the body use the main corner extrusion with its built-in door seal to act as one side of the structural door seal and jam surface
- 17) A door which extends the full height of the modular body uses the upper most main corner extrusion for the top horizontal door seal and jam surface
- 18) Door configurations which have two doors adjacent to one another use a structural body extrusion with minimum dimensions of 4 inches wide by 2 inches deep
- 19) Between each door is a minimum of a 2-inch structural wall and floor support
- 20) Similar to previous door structural extrusions this member incorporates two built in door sealing surfaces without the need for welding additional parts.
- 21) The remaining structural members of the vertical side frames use a minimum of 2 inch by 2 inches by .125-inch-thick wall and a minimum of 1 1/2 inch by 2 inches by .125-inch-thick wall structural box beam members
- 22) All members of the side vertical frames are placed at a maximum of 12 inches on center with closer spacing in areas of critical strength requirements
- 23) Along the floor line, a minimum of 2 inch by 2 inches by .1875-inch structural angle attached to the side frame, which then during assembly into a module is fully welded to the floor frame
- 24) These members act as the main attachment point for the side frames, where the vertical frames meet the floor frame, and at this point of attachment, full welds are utilized

B-6 Front and Rear

- 1) Front and rear frames fabricated using the same main structural corner extrusion as the side vertical frame along the horizontal top edge
- 2) Remaining structural members of this frame use a minimum of 2 inch by 2 inch and a minimum of 2 inch by 1 1/2 inch by .125 inch structural box beam members
- 3) These structural members are placed on a minimum of 20 inches on center with closer spacing used in areas of critical strength
- 4) Rear facing door openings use custom aluminum extrusions in place of box beam members
- 5) The door openings are as specified for the doors located on the vertical side frames as described previously

B-7 Roof Frame

- 1) Roof frame of the vehicle is fabricated from a minimum of 2 inch by 1 1/2 inch by .125-inch box beam structural members
- 2) Transverse frame members are spaced a maximum of 12 inches on center

B-8 Module Assembly

- 1) Structural frame work is a self-supporting body and not require the use of the exterior skin for structural integrity
- 2) Framed body, without the skin is capable of supporting the required static load of the vehicle
- 3) Floor frame welded to the two vertical side frames at the area of the floor, in front and behind the wheel box area with 100% continuous welding in these areas
- 4) Full perimeter welding and center bonding of the exterior panels enhance the overall strength of the modular body

B-9 Body Protection

- 1) Per Federal Motor Vehicle Safety standards, vehicle is designed to protect the occupants or equipment from side impacts accomplished by:
- 2) Two side impact rails with minimum dimensions of, 2 inches by 5 inches by .125 inch 6061-T6 aluminum alloy
- 3) Structural box beam member located approximately 24 inches from the lower side rail; and approximately 18 inches from the upper side
- 4) Full structural members, which extend across the body in the transverse direction between the compartments

B-10 Modular Body Door Protection

- 1) In addition to the vertical body sides, each door with a vertical height greater than 30 inches, on the left and right sides of the vehicle, incorporates a minimum of 2 inch by 5 inches by .125 inch 6061-T6 aluminum alloy, structural box beam members
- 2) Each member is welded to the interior door extrusions
- 3) Structural members are placed approximately 24 inches from the lower side rail

B-11 Exterior Panels

- 1) The two sides, front and rear are covered with a minimum of .125" thick 5052-H34 stretcher leveled aluminum alloy sheet

- 2) Center areas of the sheets are applied using "Very High Bond" structural bonding tape after both the sheets and the structure are thoroughly cleaned with an approved solvent
- 3) In addition to the structural bonding tape the exterior skin is welded along the perimeter corners and along all door openings in areas that will not show dimple on the finished body module
- 4) The side panels of the vehicle are a single piece and not welded or fabricated
- 5) Additional welding done at the lower rub rail area where the body exterior panels meet the lower structural support members to completely bond the exterior panel to the substructure and in an area where weld dimples will not show on the finished vehicle

B-12 Roof Sheet

- 1) The roof sheet is a minimum of one-piece sheet of .125" 5052-H34 aluminum with no seams in the roof panel or any overlapping seams
- 2) The roof sheet is fully welded to the roof sub frame from the inside.
- 3) The outside perimeter of the roof sheet where it meets the upper cove is 100% welded prior to painting to eliminate the need for caulks or sealers and the possibilities of water leaks into the body

B-13 Corner and Roof Corner Extrusions

- 1) Exterior body corners and coves are an extruded aluminum section made from a minimum of 6061-T6 aluminum
- 2) Both the corners and roof corner extrusions have a 1 5/8" radius hollow extrusion design with an inside flat mating surface at a minimum
- 3) Exterior surface designed to form a smooth transition at all corners of the body
- 4) Corners designed in such a way as to provide an interlocking surface with the "Main Beam" extrusion and provides a weld surface to attach the corners to the main beam using threaded mechanical fasteners to pull the two surfaces tight prior to the welding

B-14 Corner Castings

- 1) Upper four corners of the module have a cast aluminum ball corner that matches the radius of the corner extrusions
- 2) These ball corners are completely 100% welded in place to pre-vent water leaks and finished to have a smooth transition at the corner

B-15 Equipment Mount Locations & Reinforcements

B-15.1 Areas within the body that have equipment mounted or items bolted have additional structural members welded in place as follows:

1. At a minimum of .250" thick 1.25" by 2.5" structural angle to mount squad bench and seat belt restraints installed on the side interior walls, including left side attendant seat
2. Cot mounts are mounted/bolted to structural members welded within the floor structure

3. Rear facing attendant seat pedestal is mounted to a reinforced structural channel member between the frame members of the floor structure
4. The oxygen bottle retention bracket is bolted to a reinforcing structure within the storage compartment. Oxygen bottle is always bolted to a structural member, not interior cabinets only
5. Reinforcing plates for ceiling dome lights are installed between the roof frame members
6. Double laminated reinforcing plates are installed in the front body frame for added strength in the areas where the body is bolted to the cab, in addition to structural angles in the front frame above the cab roof

B-16 Wheel Well Construction

- 1) Rear wheel well housings are designed to OEM manufacturers recommended clearances
- 2) The inner well is formed to follow the contours of the wheel and fabricated from a minimum of .125 aluminum sheet, and extend down to the lower body skirt level
- 3) Tolerances include clearance for full tire chains
- 4) All wheel well housings completely sealed and undercoated prior to mounting the body

B-17 Exterior Compartment Construction

- 1) Exterior compartments are fabricated from fully enclosed aluminum sheets
- 2) The floor and ceiling material is fabricated from a minimum of .125" aluminum sheets
- 3) Each compartment is its own independent unit with two sides, rear, top and bottom, and not share a common wall with an adjoining compartment
- 4) All vertical seams of the compartment are continuous one-piece bend or 100% welded construction with no overlapping caulked vertical seams
- 5) Each compartment unit is welded to the inside of the structural doorjamb
- 6) All compartments incorporate a flush sweep out design, compartment floor lips or door gaskets so not come above or protrude into the compartment opening at all

B-18 Stepwell Compartment

- 1) A recessed step well compartment is inside the side entrance door
- 2) The compartment extends into the body approximately 12" and is the full width of the side entrance door
- 3) The vertical sides of the compartment are fabricated from a minimum of .100 polished aluminum diamond plate
- 4) The floor includes nonskid turtle tile not aluminum diamond plate, that is removable with a drain/sweep out plug for ease of cleaning
- 5) The sub-floor of the compartment is fabricated from a minimum of 3/16" aluminum plate to provide a heavy duty walk surface which will not flex under foot
- 6) The upper edge where the step well meets the flooring material includes non-slip polished aluminum threshold trim, which is screwed in place.

B-19 Exterior Compartment Shelves

- 1) All shelves specified in exterior compartments are fabricated from a minimum of .125" formed aluminum diamond plate with a 1" flange bent up on both the front and rear of the shelf

- 2) The shelf is mounted to heavy-duty UNISTRUT shelving standards to allow for full adjustment
- 3) The front edge of the shelf is finished with a Trim-Lock snap on vinyl edging or equivalent

B-20 Exterior Compartment Finish

- 1) The rear and two sidewalls of the interior surface of the exterior compartments are fabricated from a minimum of 100% welded, .080" polished aluminum diamond plate panels

B-21 Cab to Body Pass-Thru

- 2) A cab to body pass-thru window installed in the front of the body and rear of cab
- 3) In the front of the body the module framework is positioned to allow for a minimum opening of 18" wide x 18" high
- 4) The opening has a full perimeter 5/8" flange on the body side with a minimum of 2" radius in the corners
- 5) The rear of the cab is modified by adding a flange to the rear glass center framework section
- 6) The frame flange has a matching 5/8" flange to align with the opening in the body and to provide approximately a 1 3/4" gap between the cab and body for flexing
- 7) An automotive quality EPDM rubber bellows material with steel spring carrier attachments completely sealed at the seam is attached to the flange
- 8) The seal is semi-permanent and removable if required at some future time
- 9) The rubber bellows are covered under the minimum 3 year/36,000-mile Limited Warranty

B-22 Body Mounting Rubber Donuts

- 1) Modular ambulance body mounted to the chassis in such a manner to facilitate easy removal for future remounting with other manufacturer's vehicle chassis having the cab to axle dimensions
- 2) Mounting devices, a minimum of ten (10) high strength 5/8" Grade 8 bolts, five (5) on each side
- 3) Such bolts secure the body to the frame via rubber isolation mounting donuts that are mounted to the frame rail of the chassis utilizing steel outriggers secured to the frame with (2) grade 8 bolts on the side and One (1) through the donut
- 4) Outriggers fabricated from a minimum of ASTM A36 3/8" steel plate with 1/4" steel gussets for maximum strength
- 5) Mounting surface for the donut has a reinforced thickness of a minimum of 7/8". ASTM A36 Steel Plate, a Tensile strength of 58000 to 80000 PSI, and a Yield strength 36000 PSI minimum – which is equal to the Chassis frame specifications
- 6) A minimum of full length 2" x 3" x 1/4" mounting channel is attached with Grade 8 bolts through the donut
- 7) Body floor frame is fully welded to the mounting channel at all cross members
- 8) Floor frame tubes are a minimum of 2 x 3 x .250 (1/4") tubular aluminum 6061T6
- 9) Mounting system meets or exceeds all FMVSS requirements.

B-23 Lowered Side Skirts

- 1) Right and left side skirts of the body, forward of the rear wheels, are lower than the right and left skirts aft of the rear wheels to allow easier access into the side entrance door and the left side forward compartment of the vehicle.
- 2) An intermediate step provided in the side entrance door step well-constructed of aluminum diamond plate with a turtle tile nonskid stepping surface on the intermediate step

B-24 Door Construction

- 1) All doors including personnel and compartment doors constructed of a custom designed extrusion made of 6061-T6 aluminum alloy
- 2) The bent exterior door panel is fabricated from a minimum of .125" 5052-H34 aluminum alloy panels that have the exact properties and quality as the exterior side panels
- 3) Each door pan is manufactured with a minimum of 3/4" sharp inside corner bend to minimize outside bend radius
- 4) Custom extrusion is 45-degree miter cut and fit into the 3/4" recessed area of the pan
- 5) The extrusion is fully welded to the door pan along the entire perimeter in addition to 100% welding on the outside corners of the door pan
- 6) The door has an overall dimension of 2 1/2", with the primary door seal being mounted to the door at the 3/4" dimension of the door exterior pan
- 7) The door latching hardware is mounted inboard of the seal in all cases
- 8) The door has gussets welded from the inside and is reinforced in areas where windows are to be installed and for areas where heavy objects might be hung from them
- 9) The door extrusion designed in such a way to provide two surface grooves which are used for proper alignment of the door hardware concealed within the door
- 10) The grooves are used for proper in-out placement of the hardware so that proper alignment is always maintained
- 11) All slots and cutouts required for the rotary latches machined or stamped prior to the construction of the door
- 12) Door configurations requiring double doors, utilize a structural member attached to the adjoining edge of the second opening door
- 13) This structural member matches the seal surface of the door jams on the balance of the door opening and is welded in place and a permanent member of the door

B-25 Door Seals

- 1) The door incorporates a continuous seal permanently attached around the entire perimeter of the door
- 2) Automotive latching hardware does not interrupt the seal surface
- 3) The seal is a custom designed hollow core seal specifically designed for hinged doors,
- 4) a "Dynamic" type seal with vent holes on the outside edge to allow for easier closing of door against seal

B-26 Door Hinges

- 1) Each door is hung with stainless steel continuous hinges with a minimum 1/4" pin which is staked every six inches to prevent the pin from sliding
- 2) The hinges are held to the door and to the body with a minimum 1/4-20 stainless steel threaded machine fasteners every 4" on both sides and not using rivets on hinges
- 3) All vehicle hinge bolts installed with the use of LOC-TITE thread lock material or equivalent
- 4) All hinges installed on the body include a Dielectric barrier between the dissimilar stainless-steel hinge surface and the painted aluminum body
- 5) The dielectric tape shall have a dielectric barrier of a minimum of .0035" and have a dielectric strength of a minimum of 10,000 volt

B-27 Door Latch Hardware

- 1) Every door utilizes an automotive type rotary slam latch
- 2) All doors used for personnel access utilizes two latches; one located on the top of the door the other at the bottom
- 3) All rotary slam latches are activated by adjustable steel rods
- 4) All door hardware and rod assemblies designed to minimize hardware rattle
- 5) Compartments that require double opening doors incorporate (2) point latches on first closing door in addition to second closing door
- 6) The latches are activated by a handle in each compartment door on the exterior which matches the other exterior handles on the vehicle
- 7) All door hardware, including rods and latches are concealed within the inner door panel

B-28 Anodized Aluminum Drip Moldings

- 1) Anodized extruded aluminum drip moldings provided above all exterior compartment and entrance doors
- 2) The moldings are attached without the use of unsightly screws and can be easily replaceable if damaged
- 3) This molding directs excess water away from the compartment and entrance door opening

B-29 Compartment Door Bumpers

- 1) Heavy duty screw on type rubber (Styrene butadiene rubber, SBR) bumpers installed on all compartments that may come in contact with one another
- 2) Door Sweep Gasket
- 3) All modular body entrance doors are equipped with a door sweep EPDM rubber gasket or equivalent
- 4) The rubber is attached to the top of the door and prevents water from collecting on the top of the door extrusion and dropping on the operator when the door is opened
- 5) The gasket/sweep material is installed in such a way as to prevent being torn off and increase its sealing potential when hit with a stream of water

C LOC-TITE

All exterior door hinge bolts, inner door panels on both compartment and entrance door panel, and door latching bolts are installed with the use of LOC-TITE thread locking material or equivalent

C-1 Power Locking Entrance Door Handles

- 1) The right side and right and left rear entrance doors incorporate a Trimark chrome automotive style paddle handle with two latches per door
- 2) The exterior handle has a black housing and chrome release paddle
- 3) No mounting hardware is exposed to the outside for security reasons
- 4) The inside handles on all entrance doors including the left rear door are a matching automotive design, flush paddle release type designed specifically for use with this system
- 5) Door hardware incorporates a rod activated power door locking system
- 6) All rods used for interior door release mechanisms incorporate anti-rattle devices to prevent door hardware noise
- 7) All entrance doors incorporate a power locking unlocking feature
- 8) The control of the power door locks is from a switch located on the driver's console
- 9) All handles have key activated override of power locking feature

C-2 Power Locking Compartment Door Handles

- 1) All compartment doors incorporate automotive style paddle handles
- 2) The exterior handle has a black housing and chrome release paddle
- 3) No mounting hardware is exposed to the outside for security reasons
- 4) Door hardware incorporates a rod activated power door locking system
- 5) All compartment doors incorporate a power locking - unlocking feature
- 6) The control of the door locks is from a switch located on the driver's console
- 7) All handles have key activated override of power locking feature

C-3 Gas Spring Door Holders

- 1) All hinged compartment doors and right-side entrance door incorporates a pneumatic gas spring door holder
- 2) The mounting bracket, piston end for the door side is secured to the 1/4" gusset within the door
- 3) The door holder gas spring end is attached to compartment ceiling
- 4) The gas spring is installed with a 10-degree pitch downward to improve function and extend life of gas spring
- 5) The Gas spring door check on compartment "A", "B", "C", "D", "E" and "F" are set beyond the standard 90-degree, open default position to allow easier access into this compartment
- 6) The rear entrance doors incorporate a Cast Products, Grabber door holder device to hold the door at approximately 170 degrees with the door holders securely bolted to the vehicle substructure of the body

SECTION D- COMPARTMENTS

- 1) COMPARTMENT "A" - Left front compartment with the dimensions of 20w x 86h x 21.75
- 2) COMPARTMENT "B" - Left side half high compartment with dimensions of 43w x 36h x 21.75d has custom double doors
- 3) COMPARTMENT "C" - Left rear full height compartment; behind left rear wheels with dimensions of 32"w x 55"h
- 4) COMPARTMENT "D" - Right front inside/outside storage compartment, with the dimensions of 20w x 55h Above the vehicle floor level, access is from either the exterior or the interior of the vehicle with a depth of 26" below floor level is outside only access of the lower compartment with a dimension of 24" w x 14"h x 21.75" d, has a 110 volt and (2) 12-volt outlets.
- 5) COMPARTMENT "E" - Right rear behind wheel well dimensions determined by manufacturer's engineering. Decision made at pre-build meeting
- 6) COMPARTMENT "F". - Right rear compartment with the dimensions 20w x 83h x 21.75d that is notched at the top forward 31"h x 16" w for inside access only the Dri-Dek material or equivalent interior finish of the exterior compartments shall consist of a heavy duty sprayed on urethane coating. The urethane coating has a non-slip texture with an abrasion, chemical and UV resistant interior door panels on compartment doors are made of a minimum of .100" polished aluminum diamond plate held on with threaded fasteners that provide access for repairs or replacement of hardware. Heavy duty stainless steel protection plates are installed on the lower edge of all entrance and compartment door openings. The plates are a formed polished stainless-steel angle with dimensions of 1/2" x 1", by full width of the door opening. The angle plates are permanently mounted without the use of screws and are removable for replacement if necessary with all edges filed and deburred for a finished appearance. The exterior compartments are vented to the exterior of the vehicle with the vents located in the lower portion of the compartments to allow air to escape and allow the compartment door to close with ease, The vents are added to an area above floor level to prevent road debris from entering the compartment the vents have a total of 25 square inches of Dri-Dek material or equivalent installed on all floors of the exterior compartments and are custom cut to fit around oxygen bottles and mounted equipment. The flush sweep-out floor edges include the Dri-Dek tapered edges a minimum of .125" rubber mat material is installed on all shelves of the exterior compartments that is custom cut to fit each compartment shelf

D-1 Compartment Configurations & Equipment

- 1) Compartment A - Install the Oxygen bracket as described
- 2) COMPARTMENT B - One (1) vertically adjustable aluminum diamond plate shelves mounted on Unistrut or equivalent shelving standards
- 3) COMPARTMENT C - One (1) vertically adjustable aluminum diamond plate shelf mounted on Unistrut or equivalent shelving standards. Two lengths of aluminum, heavy

duty 1 1/2" Unistrut or equivalent mounted in the upper section of compartment "C" on the notched area for the mounting for 3 SCBA brackets that will be provided. Three (3) Zico Counter Mounts for Customer supplied SCBA bottle holders (the brackets will be shipped loose).

- 4) COMPARTMENT E - has two (2) Partial height dividers, one (1) located at the rear outer edge of the notch and one (1) under the notch with the center space created by the dividers wide enough to store a Stryker stair chair with tracks, the right rear full height compartment has (2) black rubber friction mounts for securing two (2) backboards, the mount is fabricated from an "L" shaped (45"h x 16"d) 2" aluminum channel at a minimum, the channel is bolted to the interior compartment and the rubber friction mount is press fitted onto each side of the 2" channel, full length with proper spacing provided to allow for Long Boards with runners

D-2 REAR STEP BUMPER

- 1) A full length reinforced rear bumper installed on the rear of vehicle
- 2) The bumper is at a minimum fabricated from 3" aluminum 6061-T6 structural channel and securely bolted to the vehicle frame using high strength, grade 8, 1/2" bolts
- 3) The bumper has contoured ends and is covered with polished aluminum diamond plate end caps
- 4) Two full end gussets fabricated from a minimum 3" x 2" x 1/4" structural aluminum tube 6061-T6 provided to support the bumper ends in the event of minor impact
- 5) The bumper incorporates a design that allows it to be recessed under the rear of the body to allow the chassis frame to absorb minor impact without any damage to ambulance body
- 6) The rear step bumper incorporates a 44" long by 9 1/2" deep, lift-up center section made of extruded aluminum, "Diamond Back" safety grating
- 7) The step hinges on a full-length stainless-steel piano hinge
- 8) When the step is in the load position the step is totally within the exterior of the body and not protruding beyond the door sill
- 9) Two (2) Heavy duty black rubber dock bumpers are installed on the rear bumper ends, (1) each side
- 10) The dock bumpers are 2" high, 10" long and protrude 2" outward from rear bumper
- 11) The dock bumpers shall be bolted to the structural channel of the rear step bumper

D-3 Aluminum Diamond Plate Accessories

- 1) Front Stone Guards - High polished at a minimum of .100 aluminum diamond plate stone guards installed on the front body corners one piece & contoured to fit the 1 5/8" outside radius of the body removable for repair in event of damage edges sealed with a closed cell gasket around the perimeter to prevent moisture from getting behind panels.
- 2) Offset Diamond Plate Rub Rails - Heavy duty polished aluminum diamond plate rub rails installed on the lower body skirt panels under the door line fabricated at a minimum from .19 thick (3/16"), aluminum bent in channel form ends are capped with a polished cast aluminum shape that will blend with channel rails attached to the body with 1.5" x 1.25"

diameter, polyurethane spacers that hold the channel and end caps off the body to prevent debris from accumulating between the Rub Rails and the painted body

- 3) Curbside Diamond Plate Step - Custom fitted, polish aluminum diamond plate cover bolted on and easily removable includes an upper and lower aluminum grip strut helper step built into the stepping surface area all seams and corners are 100% Heliarc welded for strength and a finished appearance
- 4) StreetSide Diamond Plate-Step/Slide-Out Battery Cover - A full polished aluminum diamond plate enclosure fabricated and installed on the street side of the cab enclosure includes a hinged access door to allow access to the vehicle batteries. Batteries mounted on a slide-out tray utilizing (2) heavy duty slides which lock in the stored position enclosure has the same finish and appearance as the curbside cover.
- 5) Rear Diamond Plate Panel & Corner Guards - A polished aluminum diamond plate kick panel installed above the rear step bumper and below the rear doors panel its flush on all sides step riser panel is removable panels installed on the rear body corners panels extend to the rear step riser and protect the lower area of the body around the rear recessed bumper step panel height approximately 4" in height (dependent on chassis).

E- EXTERIOR

E-1 Exterior Trim

- 1) Rear Wheel Fenderettes - Polished Stainless Steel, rolled fenderettes installed around the rear wheel opening sized to allow for proper tire clearance. The fenderettes are bolted on for easy removal and all hardware concealed
- 2) License Plate Holder - A recessed Cast Products polished aluminum license plate holder installed in the left rear body panel of the ambulance. It includes One (1) LED license plate light activated with the running / headlights of the vehicle
- 3) Undercoat - The underside, modular body of the vehicle undercoated using an automotive protective coating and sound deadener

E-2 Exterior Body Windows

- 1) Sliding Side Door Window - A Transportation Products, Inc 18"W x 22"H window installed in the side entrance door sliding, 31% tinted automotive safety glass mounted within an aluminum black anodized frame window completely sealed and held to the door via an inside clamp ring which matches the exterior of the window incorporates a sliding removable screen.
- 2) Fixed Rear Door Windows - Two (2) Transportation Products, Inc. 16"W x 22"H windows installed in the rear entrance doors fixed automotive 31% tinted safety glass mounted with an aluminum black anodized frame windows completely sealed and held to the door via an inside clamp ring, which matches the exterior of the window

F- INTERIOR MODULAR BODY CONSTRUCTION

F-1 Standard Cabinet Construction

- 1) Interior cabinets of the vehicle completely constructed of 3/4" and 1/2" premium grade, cabinet birch plywood or equivalent
- 2) All cabinets held together with glue, staples and threaded screw fasteners
- 3) Each cabinet includes a reinforced attachment point where it is secured to the vehicle framework
- 4) All cabinets attached directly to the vehicle framework and all mounting bolts used on a maximum of 12" centers for any cabinet
- 5) All cabinets covered with high pressure plastic laminate and trimmed with aluminum moldings for a finished appearance
- 6) A full height left front cabinet, full height right rear cabinet, and a full height cabinet in the right front that can be accessed from inside the patient compartment has rounded corners of radius 1.5" on the inboard vertical edges
- 7) Rounded corner constructed from two extrusions made from a minimum of 6061-T6 aluminum
- 8) Interior extrusion designed to attach two perpendicular sheets of furniture grade laminated plywood
- 9) Exterior or visible extrusion satin anodized and designed to snap into the interior extrusion, so that it may be replaced if damaged
- 10) If the full height left front cabinet, right rear cabinet, or full height cabinet in the right front have specific components preventing the cabinet from incorporating the rounded corner design it will have the edge of the cabinet finished with anodized aluminum three quarter round molding
- 11) All adjustable shelves within the interior cabinets mounted to Unistrut or equivalent shelving standards
- 12) Each cabinet equipped with four adjustable shelving standards for each cabinet with (4) retaining clips for each shelf
- 13) The shelf has two (2) securing screws attached to retaining clips
- 14) The shelf is the full width and depth of the cabinet with a 1" lip on the front edge
- 15) All hinged doors equipped with hinges and a locking Southco positive latching device to prevent opening while in motion
- 16) All surfaces of the door including the edges finished to match the interior of the vehicle cabinets
- 17) A vinyl covered soffit trim piece installed around the perimeter of the interior cabinets where they meet the ceiling
- 18) Soffit trim added to allow access to the cabinet mounting bolts and provide a finished transition between the ceiling and cabinet surfaces

F-2 Walls

- 1) All walls of the vehicle fabricated using 1/4" plywood or equivalent covered with color coordinated high pressure plastic laminates
- 2) All walls held on using threaded fasteners

F-3 Wire Raceway

- 1) A full-length drop-down wire raceway installed down the center of the ceiling
- 2) Raceway finished with padded vinyl material to match the upholstery in the vehicle

F-4 Cushion & Upholstery Foam Padding

- 1) The foam padding on all head bumpers and upper padded surfaces a minimum of Valera 2A, closed cell foam which is laminated and layered to a 1/2" thickness to provide both compression resistance and compression density
- 2) The laminated, closed cell foam creates a padded surface that acts as an air-spring when compressed
- 3) This specialty foam naturally resists force and will not "bottom out" upon impact and provides positive resistance to pressures applied in any dimension
- 4) The foam padding on all side attendants, squad-bench seating and all seating backrests is a 3" Nimbus open cell foam with a # 1865 grade standard or equivalent which provides maximum rigidity while still maintaining comfortable seating upon a variety of weight compression
- 5) An 1/8" thickness of Valera 2A or equivalent closed cell foam applied to the radius area of the ceiling Heat and Air Conditioning duct work to provide a softer surface while enhancing the thermal properties of the heating and cooling system
- 6) The upholstered center section of the side and rear body entrance doors include the 1/8" Valera 2A or equivalent closed cell foam to provide a uniform appearance and a softer surface with an increase in thermal resistance

F-5 Insulation

- 1) Modular body insulation - The entire inside surface of the modular body, including walls and ceiling is insulated with a minimum of 1.7" (44mm) thick, AU 6020-2 High Performance Acoustic, Thinsulate
- 2) The thermal property of the insulation is R, 5.8 at 44mm thickness
- 3) The entire inside surface of the modular body, including walls and ceiling, is insulated with additional aluminum faced radiant barrier insulation to form an extra radiant barrier
- 4) Areas behind heat generating light fixtures shall not be insulated
- 5) The insulation completely fills the voids between the frame members and the exterior skin
- 6) The interior surfaces of the rear wheel wells and the exterior surface of the side entrance door step well shall be sound deadened with a composite acoustical sound deadening

material specifically designed for the reduction of transmitted sound in single skin aluminum panels

- 7) All exterior entrance doors are sound deadened with a composite acoustical sound deadening material
- 8) The entire exterior skin surface of the interior door shall have this material bonded to it
- 9) The modular personnel entrance doors have an additional thermal insulation of 2" thick "Thinsulate" bonded in place, with clearance provided for door hardware
- 10) All exterior compartment doors insulated and sound deadened with a slow rise foam in place insulation and sound deadening material
- 11) The entire exterior skin surface of the interior of the door have this material bonded to it
- 12) The floor consists of 3/4" Expanded PVC Polymer material or equivalent with a minimum of .016 lbs. per cu in density and be impervious to fluid intrusion
- 13) An aluminum sub-floor installed between the floor material and the floor frame members.

F-6 Front Bulkhead Wall

- 1) Pass thru window - approximate opening size 18" high by 18" wide centered in the front wall of the modular body.
- 2) Heater/air conditioner cabinet - provided in the upper most area, centered above the cab to body pass-thru cabinet designed to allow for quick easy removal of Heater/Air Conditioner unit without the removal of any other equipment interior of the cabinet designed to allow fresh air intake from the front of the exterior body and exit to a closable vent located under the cabinet platform to allow fresh air from the exterior of the vehicle to shut off in the summer months for maximum air conditioning performance lower platform also allows adequate return air flow to the Heater/Air Conditioner unit air return has a minimum air opening in the cabinet for two 6" by 10" filtered return grills
- 3) Electrical distribution cabinet - provided on the front left wall of the body approximately 16" deep x 18" wide and run from the floor to the underside platform of the heater/air conditioner cabinet has a single removable aluminum door approximately 12" wide by 24" high secured with four threaded fasteners and includes an opening in the center area with a hinged access door will latch in the closed position by two flush mounted trigger latches and vinyl covered to blend in with the other components in the vehicle all the main wiring harnesses terminate within this compartment cabinet provided with adequate compartment ventilation cabinet access door covered in heavy duty vinyl to match interior upholstery
- 4) Interior storage cabinet - a cabinet in the front bulkhead area with (2) 1/2" acrylic doors with a Southco latch or equivalent 2 shelves are included cabinet has a matching Meganite counter top surface
- 5) Right Front Interior Storage Cabinet, Upper – Right front cabinet 50" high x 30" wide x 19" deep. This cabinet shall be inside/outside accessible. A full height ROM roll up door

shall be provided. The ROM door shall three (3) clear viewing panels in each slat. This cabinet shall be provided with 4 adjustable shelves.

- 6) Right Front Upper Cabinet, Tropicool Climate Control System The right front middle interior access cabinet incorporates a Tropi Cool 1.2 Climate control system for Medications or equivalent this mirrored stainless-steel unit is designed to cool and/or heat within one-degree tolerance and averages 50 degrees off ambient
- 7) Right Front Lower, In/Out Access Storage Compartment - The interior right front storage cabinet of the vehicle designed to provide access from both the inside of the vehicle or through the exterior compartment door size of the compartment aligns with the exterior height and width of the exterior compartment door area above the floor level of the vehicle width of the compartment from the inside extends to the pass thru area to the cab approximate dimensions 36 3/4" high by 30 1/2" wide by 19" deep equipped with two (2) adjustable shelves that are fully adjustable within the inside area of the cabinet provided with a ROM roll up door slats of this door has (3) clear windows cut into each slat that are evenly spaced across each one.

F-7 Right Side

Squad Bench, One Person:

- 1) A one (1)-person squad bench provided on the right-side wall with dimensions of approximately 38 11/16" long x 19" high x 20" deep.
- 2) Squad bench is bolted to reinforced members of the framework utilizing 7/16" high strength bolts
- 3) Storage area of the squad bench accessible by lifting the seat cushions
- 4) Inside area of the squad bench is laminated with high pressure plastic laminates
- 5) Bench has upholstered padded 3" thick seat cushions approximately 18" wide x 44" long
- 6) Lower cushion is removable and easily cleaned or replaced if damaged
- 7) Cushions held to the platform with #8 screw type mechanical fasteners, which is permanently attached to the underside of the cushion and platform surface of the squad bench
- 8) Cushion/lid held open and closed by two (2) gas spring hold opens and hinged at the rear with full length piano hinges
- 9) Mounts for the gas spring installed into reinforced areas within the seat lid platform
- 10) Backrest is vinyl covered, fixed (non-drop down) rectangular in shape
- 11) Backrest matches the color and width of the squad bench cushion, and is mounted so that it can be removed
- 12) Mounted center and with 6-point harness
- 13) Lid of the squad bench is equipped with a slam type positive closure device that prevents opening of squad bench lid in the event of an accident

- 14) Release for lid of the squad bench is a stainless-steel slam type Trimark paddle handle located on the outside surface of the squad bench, and incorporate a catch device on the underside of the lid
- 15) An auxiliary switch panel mounted in the right-side upper cabinet in a vinyl covered switch pod
- 16) Panel consists of (6) momentary contact switches to control lighting, climate control fan speed, door locks, and Oxygen Solenoid
- 17) Function provides "3-way" style switching with the lighting controls at the life support station
- 18) The step well of the vehicle is modified to extend under the squad bench and the recessed area provides a storage location for two "d" size oxygen cylinders .

F-5 Forward Below Counter Level Interior Storage

An interior storage cabinet approximately 15" wide x 20" high x 22" deep is located forward of the right-side attendant seat and below counter level

F-6 Meganite Counter Top Front Counter Area

- 1) The counter surface in the right-side front shall be covered with genuine "color to be determined by City at prebuild" color, Meganite counter top material or equivalent.
- 2) Meganite is permanently bonded and sized to cover the entire surface of the counter area
- 3) Counter top has a 1" built-in lip around the entire perimeter for containment purposes edge of the counter top facing inboard is a 1.5" radius

F-7 Right Side Forward Upper Interior Storage

- 1) An interior storage cabinet located forward of the right-side attendant seat mounted to the ceiling and includes a 45-degree angled surface for increased accessibility to the right-side attendant seat position
- 2) A Knox 5520 Mini Med Vault located at the top, a 2-way radio installed in the middle and the auxiliary switch panel located at the bottom

F-7.1 Combination Slide-Out Trash and Sharps Bin

- 1) A combination slide-out trash bin and Sharps container provided under the squad bench cabinet, forward of wheel well custom built into the bench and provided with a slide-out drawer
- 2) Flush Southco Polished Stainless-Steel latch to access a removable Rubbermaid plastic trash pail and disposable sharps container which is mounted to the drawer slides into aisle, toward the center of the vehicle designed to include an aluminum door laminated to match the interior cabinets a totally self-contained unit and is sealed on all sides to contain its contents during transit.

F-7.2 Overhead Storage Above Squad Bench with Sliding Doors

- 1) Overhead storage cabinet provided and installed in the area above the squad bench
- 2) Has two (2) transparent sliding doors.
- 3) Entire lower edge corner is padded to prevent sharp corners
- 4) Area in the forward portion incorporates the right-side oxygen outlet

F-7.3 Forward Below Counter (2) Drawers

- 1) Two (2) drawers installed in the right-side front work station
- 2) Top drawer approximately 18" wide x 7" high 16" deep
- 3) Top drawer has six (6) vertical, adjustable Plexiglas dividers from the front of the drawer to the back and one (1) slotted vertical Plexiglas divider in the center, side to side
- 4) Center drawer approximately 18" wide x 10" high x 16" deep and is a fluid warming drawer.
- 5) Center drawer warmer has 12-volt constant power.
- 6) Drawers do not extend into and or over the cot.

F-7.4 Rear Storage Notched into Compartment "E"

- 1) Storage is provided that is accessible from the inside only in the upper notched into the upper compartment "E" area
- 2) Accessible from the squad bench side through double ½" Plexiglas doors and from the isle side through another set of double ½" Plexiglas doors
- 3) The opening facing the squad bench is approximately 20"h x 16" w and has two adjustable shelves
- 4) The opening facing the isle side is approximately 30"h x 16" w

F-7.5 Knox Mini Med vault

- 1) A Knox model #5520 Mini Med Vault with flange supplied and installed
- 2) Installed in the forward area of the right side, angled overhead cabinet
- 3) 12-volt constant power supplied for the Vault

F-7.6 Cut & Mount (1) Radio in Right Side Angled Cabinet

- 1) Provide one (1) custom fit cutout and mounting of the city supplied radio head in the right-side angled cabinet, including the required mounting brackets for city's radio components
- 2) Does not include any routing of wiring or technical installation of radio equipment
- 3) Cutouts dimensions will be provided by city at the prebuild meeting

F-7.7 Backrest, Fixed

Backrest is vinyl covered, fixed (non-drop down), rectangular in shape that matches the color and width of the squad bench cushion, and mounted so that it can be removed.

F-8 Left Side

F-8.1 Attendant Seat-Double Wide

- 1) A "bench set" left side attendant seat is built into the left wall cabinet incorporates an approximate 76" wide x 20" deep seat area with a cushion which is 21" above the floor, a backrest, and a separate headrest
- 2) Seat includes full size padded head bumpers with a 1" thick padding for both the forward and rear cabinets that are immediately adjacent to the left side attendant to prevent injury during vehicle motion

F-8.2 Attendant Seat Backrest - A left side attendant seat includes a full height backrest cushion which extends from the seat to the ceiling, backrest cushion approximately 2" thick with restraint system

F-8.3 Attendant Seat, Under Seat Storage

- 1) Underside of the left side attendant seat is lined with a brushed aluminum pan and allows for full under seat storage
- 2) Seat cushion is hinged in the rear and held open and closed by a single gas spring device
- 3) Seat cushion equipped with a slam type positive stainless steel TriMark paddle latch

SECTION G- LIFE SUPPORT STATION

G-1.1 Storage Cabinet

- 1) Storage cabinet provided at the head of the Life Support Switch Panel
- 2) Storage cabinet has a hinged transparent door with a Southco Polished Stainless-Steel positive latch and one (1) adjustable shelf within the cabinet

G-1.2 Shoreline Box-Out Head of Switch Pod

- 1) area at the head of the switch pod is boxed out to accommodate the shoreline
- 2) boxed out area matches the interior laminate color
- 3) size approximately 12" wide and 2" deep and extends from counter top to the upper switch pod
- 4) located behind Life Support Station Storage Cabinet

G-1.3 Life Support Station Upper Storage Cabinet, With Restocking Lift-Up Door

- 1) storage cabinet provided above the Life Support Control Panel
- 2) rear most edge has a 45-degree angled panel to eliminate any obstructive corners in the area of the Life Support Station working area
- 3) rear surface is covered with a padded head bumper surface
- 4) storage cabinet provided with a full framed sliding transparent cabinet door which is also capable of lifting for full restocking access to the cabinet and one (1) adjustable shelf within the cabinet
- 5) door held open with two gas springs and held closed with two positive slam latches

- 6) frame made of a custom designed aluminum extrusion and held together with (4) #10 mechanical fasteners in each corner
- 7) entire lower edge is padded to prevent sharp edges

G-1.4 Meganite Counter Top Front Counter Area

- 1) Counter surface in the front Life Support Station is covered with genuine "Midnight Sky Mist" color, Meganite counter top material permanently bonded and sized to cover the entire surface of the counter area
- 2) Counter top has a 1" built-in lip around the entire perimeter for containment purposes
- 3) edge of the counter top facing inboard is a 1.5" radius

G-1.5 Pull-Out Writing / Storage Surface

- 1) an aluminum drawer with a gas spring hold open/close device installed below the Life Support Station counter
- 2) a Lexan writing surface is provided inside the drawer, flush with the top of the drawer interior
- 3) surface is hinged approximately 15 1/2" back to allow access to storage space in the drawer
- 4) drawer face is laminated to match the interior of the ambulance all drawers do not extend into or over the cot

G-2 Left Rear Storage Cabinets

G-2.1 Left Rear Interior Cabinet Upper with Restocking Lift-Up Door

- 1) storage cabinet provided in the upper left rear corner of the body
- 2) cabinet has sliding transparent doors and one (1) adjustable shelf
- 3) interior cabinet provided with a full framed sliding transparent cabinet door which is also capable of lifting for full restocking access to the cabinet
- 4) door held open with two gas springs and held closed with two positive slam latches
- 5) frame made of a custom designed aluminum extrusion and held together with (4) #10 mechanical fasteners in each corner
- 6) entire lower edge corner padded to prevent sharp corners

G-2.2 Interior Cabinet Doors, Dividers & Shelving

- 1) All transparent doors where specified within this specification are tinted
- 2) All sliding doors are Lexan and are installed in double, anodized aluminum tracks with Standard Products rubber flocked inserts to prevent movement and inadvertent sliding
- 3) all hinged transparent doors are provided as 1/2" acrylic and include stainless steel locking Southco positive closure latches

- 4) all sliding doors have anodized aluminum full length pull handles installed on the leading outside edge of the door with an anodized trim installed on the edge of the following side of the door for a finished appearance
- 5) all hinged doors are equipped with a positive closure device such as a polished stainless steel Southco slam latch or equivalent to prevent inadvertent opening when in motion
- 6) the cabinets listed below are provided with adjustable Lexan dividers:
- 7) eight (8) in LSS upper cabinet, four (4) above the shelf and four (4) below the shelf
- 8) six (6) the upper drawer in cabinet head of Squad Bench to run from the front of the drawer to the back
- 9) one (1) slotted Plexiglas divider positioned in the middle of the drawer running side to side
- 10) the interior cabinets of the vehicle are provided with Unistrut shelving standards and are aluminum with the approximate dimensions of 3/8" by 1" wide that are securely fastened to the interior of the cabinets with #10 threaded fasteners

G-2.3 Interior Entrance Doors

- 1) all entrance door panels are mounted with machine screw threaded fasteners which are installed with thread locking, Loc-Tite material
- 2) the inside surface of the right side and rear entrance doors have three (3) sections
- 3) the upper is an aluminum panel covered with high pressure plastic laminates which matches the interior cabinets
- 4) the center area which covers the door hardware is a padded vinyl section
- 5) the lower panel is a single piece of polished aluminum diamond plate, to act as a wear surface
- 6) the panels are held in place with threaded mechanical fasteners and are removable for servicing of door hardware
- 7) a cushioned, matching vinyl covered "bump protection" head bumper is mounted in the interior of the side entrance door area and is designed to provide both onward and upward contact protection
- 8) a cushioned, matching vinyl covered "bump protection" head bumper is mounted in the interior above the Rear entrance doors and is designed to provide both onward and upward contact protection

G-2.4 Interior Grab Rails & Handles

- 1) all ceiling grab rails installed in the ambulance meet the requirements of the A.M.D grab rail retention test at a minimum. Test documentation shall be provided upon request
- 2) an Antimicrobial powder coated grab rail is installed in the ceiling over the squad bench 72" long x 1 1/4" in diameter stainless steel tube, with welded stanchions every 24" fully radiused ends to eliminate a head injury hazard bolted directly to the structure members of the ceiling frame work.

- 3) An antimicrobial powder coated grab rail installed in the ceiling over the cove 96" full-length stainless-steel tube, 1 1/4" in diameter with welded stanchions every 24" fully radiused ends to eliminate a head injury hazard and bolted directly to the structure members of the ceiling frame work
- 4) One (1) 18" satin finish stainless steel grab handle installed on the custom squad bench cabinet at a 45-degree angle mounted facing the step area fabricated from 1 1/4" diameter tube with radiused ends and matches the overhead grab rail
- 5) An antimicrobial powder coated 18" grab handle installed at each rear entrance door fabricated from 1 1/4" diameter Stainless tube with radiused ends and matches the overhead grab rail
- 6) The side entrance door equipped with a custom built 45-degree antimicrobial powder coated grab handle extends from under the door window in the horizontal plane and then diagonally to the lower outside corner of the door fabricated from stainless steel 1 1/4" diameter tube with fully welded construction handle is bolted directly to the structural members with the door with the use 1/4"-20 threaded fasteners
- 7) A spring loaded grab handle installed under the window of each rear entrance door and bolted to reinforced members welded within each door
- 8) The side entrance door equipped with One (1) 18" satin finish stainless steel grab handle installed left of the exterior side of the entrance door that is fabricated from 1 1/4" diameter tube and has radiused ends

G-2.5 Seat Belts

- 1) One (1) six-point seat belt provided on the rear facing attendant seat with enclosed automatic locking retractors and push button releases
- 2) seat belt and seat belt mount are tested to F.M.V.S.S. 210 and Federal Specifications KKK-A-1822 at a minimum (documentation available upon request)
- 3) two (2) sets of six-point seat belts installed for two (2) persons seated on the squad bench and have enclosed automatic locking retractors with push button releases
- 4) seat belts and seat belt mounts tested to F.M.V.S.S. 210 and Federal Specifications KKK-A-1822 at a minimum
- 5) two (2) sets of six-point seat belt installed at the left side attendant seat have enclosed automatic locking retractors with push button releases
- 6) seat belt and seat belt mount tested to F.M.V.S.S. 210 and Federal Specifications KKK-A-1822 (documentation shall be available upon request)

G-2.6 Rear Facing Attendant Seat

- 1) the ambulance provided with an EVS brand, model 1870-03 rear facing attendant seat or equivalent
- 2) seat includes a built-in child seat, three-point harness, ABS seat back and is mounted on an EVS brand, model SB-2 base

- 3) seat has forward and back adjustment and is covered in sewn color of upholstery to match the balance of the vinyl in the ambulance
- 4) all seats and seat installations are tested and certified to meet FMVSS standards

G-2.7 Cot Mounting

- 1) Stryker mounting plates for a Stryker Power Load installed in the center position of the ambulance
- 2) The mount is aligned to hold a STRYKER cot
- 3) The mounting to the vehicle is certified to meet AMD standard 004 litter retention test
- 4) Test documentation provided upon request
- 5) Power Load and Cot as listed in I- 8.0 & I- 8.1

G-2.8 Permanent Mounted Iv Holder

- 1) One (1) Cast Products Rubber "Recessed" dual IV holder installed in the ceiling over cot, holder is bolted to reinforcing plates located within the ceiling, includes a Velcro strap for securing IV during transport
- 2) One (1) Cast Products Rubber "Recessed" dual IV holder installed in the ceiling over squad bench, holder is bolted to reinforcing plates located within the ceiling includes a Velcro strap for securing IV during transport.

G-3.0 Interior Surfaces & Colors

- 1) The ceiling panel of the ambulance is Kydex-T or equivalent, high impact thermoplastic panel laminated to a 1/4" subpanel
- 2) Entire assembly bolted directly to the ceiling structural framework panel is the fire-retardant grade of Kydex-T or equivalent
- 3) All components (including lights, IV holders and grab rails) mounted to the ceiling are mounted to the structural frame work of the ceiling
- 4) Ceiling panel attached to the vehicle framework without the use of visible hardware
- 5) The interior color of the upper laminated cabinets shall be "determined at the prebuild by City.
- 6) Vinyl padded head bumpers installed in areas where head injury can occur one (1) located at the rear door, one (1) at the side door, one (1) at the cab to body door
- 7) Full padding provided around the cabinets on the left side attendant seat area
- 8) All upholstery used in the vehicle is a high-quality automotive grade vinyl upholstery
- 9) All upholstery is seamless flat upholstery utilizing minimal stitching on the outside corners.
- 10) all material meets the requirements of FMVSS 302
- 11) upholstery color shall be "determined at the prebuild by City"

G-4.0 Interior Flooring

- 1) A commercial quality LONSEAL Mfg. Loncoin II floor covering or equivalent installed and glued down, utilizing heavy duty vinyl floor adhesive
- 2) The sub-floor is a ¾" expanded PVC composite material or equivalent
- 3) The floor shall be prepared with a body filler material prior to installation of flooring material to eliminate holes or bubbles in the flooring surface
- 4) The flooring on both the left side wall and right-side squad bench incorporates a three-inch roll-up section of the vinyl flooring material
- 5) The flooring material is finished with an anodized aluminum trim
- 6) The trim is secured in place with mechanical fasteners and has a tapered top surface to prevent accumulation of dirt and foreign material
- 7) The underside is designed to prevent infiltration behind the trim to eliminate the possibility of foreign liquid material from becoming trapped behind the flooring where it cannot be disinfected.

G-5.0 Glove Box Holder

- 1) There is recessed storage for three (3) glove boxes over side entrance door including a hinged, Lexan door with front facing glove access holes

G-6.0 "Fasten Seat Belt" & "No Smoking" Signs

- 1) Two (2) large face "No Smoking" signs and one (1) Fasten Seat Belt sign shall be installed in the patient compartment of the ambulance

G-7.0 Entrance Door Reflectors

Per the requirements of Federal Specifications KKK-A-1822 three (3) 3" diameter red reflectors are mounted to the inside outer corner of each entrance door - Two (2) rear doors

SECTION H-Oxygen & Aspiration Systems

- 1) The Oxygen delivery system consists of a permanent mount DOT approved Medical Oxygen Cylinder
- 2) The oxygen line from the cylinder to the distribution outlets is oxygen cleaned, high pressure electrically conductive, "Green" hose with swaged fittings
- 3) All fittings and hardware used are medical oxygen quality and cleaned for oxygen use
- 4) All oxygen hoses are encased in high temperature protective loom to avoid chafing and physical damage
- 5) All fittings are completely accessible for service or inspection without the removal of any cabinets or wall panels
- 6) The entire system shall be installed, inspected, tested and labeled per the requirements of Federal Specifications KKK-A-1822

- 7) The oxygen storage cylinder is accessible through a transparent door for manual on/off control of the main valve and to visually monitor the tank pressure on the regulator gauge
- 8) The oxygen, vacuum and air systems in the vehicle is compatible with AIR LIQUIDE equipment

H-1 Dual Oxygen Outlet

- 1) One (1) Air Liquide dual oxygen outlet is flush mounted within the Life Support Station panel with the distance from the primary patient to the Life Support Station not exceeding 35" per the requirements of KKK-A-1822

H-2 Ceiling Mounted Recessed Oxygen Port –

- 1) A recessed oxygen access port is installed in the front ceiling raceway approximately 7' off rear doors port is near flush within the ducted climate control center wire raceway port terminates with a green, plastic barbed fitting designed for use with oxygen

H-3 Oxygen Pressure Gauge, Tank Pressure –

- 2) An oxygen pressure gauge; 2" analog dial for tank pressure is installed in the Life Support Station area of the vehicle
- 3) Gauge is full scale type for Medical oxygen use and is connected to the main oxygen cylinder with a high pressure (3,000 PSI working pressure) Parflex flexible line with high pressure fittings
- 4) Location of the gauge shall be determined by the selection of the upper storage cabinet

H-4 Oxygen Loader / Unloader –

- 1) The vehicle is equipped with a device to load and unload the main oxygen cylinder in and out of the vehicle
- 2) Device is located in the oxygen compartment of the vehicle and operate in the up and down mode by an electrical linear actuator device
- 3) Up/down control is a hand held pendant style controller supplied by the device manufacturer
- 4) Linear actuator extends a pair of parallel arms which extend first, outward then, downward
- 5) Attached to the arms is a ziamatic oxygen bottle holder for the size bottle required
- 6) Ultimate lifting capacity of the loading device is 205 pounds
- 7) As a safety feature, the zico quick-release oxygen tank lift system or equivalent motor is designed to allow being back-driven in the event that the device has been deployed with the truck initially at a height that can drop, such as with air ride. The air-ride system will be activated by an "air ride permissive circuit"
- 8) Circuit is designed to restrict the operation of the air ride "dump" feature to when the rear entrance door is opened or, if the momentary air ride dump switch option has been

selected, that switch is activated. This is an added safety feature to prevent damage to the zico, quick-release oxygen tank lift system”

- 9) Oxygen flow meter - a 5-15 liter per minute ball type flow meter is provided and installed
- 10) Constant flow selector valve - one (1) lsp model 233, constant flow selector valve with diamond adapter is provided and installed

H-5 Large tank oxygen regulator –

One (1) model #12-001540 (aka 1633-2) or equivalent, large tank oxygen bottle regulator is provided and installed

H-6 Oxygen cylinder wrench –

An oxygen cylinder wrench is permanently attached to the wall of the oxygen compartment in a custom wrench holder with a permanent lanyard attachment to both the wrench and the compartment designed to prevent loss of the wrench

H-7 Suction System

- 1) An electrically powered suction aspirator system with an illuminated switch and a panel mounted, labeled, quick disconnect inlet device on the action area panel
- 2) Suction pump is located in an area that is accessible but sound and vibration insulated from the patient compartment
- 3) Pump is vented to the vehicle's exterior
- 4) All components, electrical, pressure and/or vacuum, and other lines and accessories, are securely mounted yet readily accessible
- 5) Aspirator system provides a free air flow of at least 30 liters per minute (lpm) and minimum of 300 mm (11.81 in.) Hg vacuum within four seconds after the suction tube is closed
- 6) A vacuum control and a shut-off valve, or combination thereof to adjust vacuum levels and to discontinue aspiration instantly
- 7) A vacuum indicator gauge of 76 mm +/-13 mm (3" +/-0.5") in diameter, with numerical markers at least every 100 mm hg and a total range of 0 to 760 mm hg
- 8) Collection container is unbreakable and transparent with a minimum 1,000 ml capacity

SECTION I. ELECTRICAL SYSTEMS

I- 1.0 Electrical 12 Volt

- 1) The entire 12-volt Electrical System shall comply with the recommended standards and practices per FMVSS, Federal Specifications KKK-A-1822 & SAE or equivalent where applicable
- 2) The entire 12-volt DC Electrical System incorporates SXL Thermoplastic High Temperature Copper wire each wire is color coded with function imprinted every four inches for immediate identification
- 3) All exposed wiring is covered with Packard Flec or equal, black with gray stripe, convoluted loom with minimum of 300-degree F. Temperature rating
- 4) Large Heyco type or rubber insulators used where wires pass through sheet metal or structural members

- 5) All circuits are protected with circuit breakers suitable to the circuit demand
- 6) Any wire carrying a load to an appliance in the 12-volt Electrical System is 16-gauge wire minimum
- 7) Electrical System consists of five main wiring harnesses which terminate at the Electrical Distribution Panel
- 8) Distribution panel is centrally located with connections resulting through 45 pin Connectors
- 9) Harnesses include one (1) for left body, one (1) for right body, one (1) for Life Support Station, one (1) for cab switch console and one (1) for chassis
- 10) All electrical components are mounted using a "plug in" type assembly which affords speedy replacement of failed components
- 11) Entire unit is housed in a readily accessible maintenance cabinet built into front wall of the personnel compartment attached to inside of door is complete documentation of 12-volt Electrical System.
- 12) The main power distribution panel consists of a plug-in modular system which includes locations for 42 plug-in circuit breakers and 60 plug-in relays, as standard equipment to have standard circuit configuration while remaining totally flexible for custom circuits when required
- 13) All circuits consist of plug-in relays and plug-in circuit breakers only

I-1.1 Circuit Breakers

- 1) All circuit breakers 30 amp or less, shall be plugged in Manual and or Auto Reset type
- 2) All circuits which require greater capacity shall utilize a Cooper Electric or equal 40 or 50 amp "MAXI-AMP" manual or auto reset circuit breaker, dependent on electrical application

I-1.2 Relays

- 1) Devices being switched with loads in excess of one (1) amp (12 watt) shall be accomplished through Potter & Brumfield or equal, 40-amp SPDT 12-volt automotive relay switching devices
- 2) All relays used in the panel are of the same type to insure complete compatibility and ease of re-placement
- 3) Relays are controlled through a ground signal from all switches, including door post switches
- 4) All relays are plugged into the modular panel assembly including the 70-amp power relays where required
- 5) All relay circuits utilizing the SPDT relays and SPST 70-amp relay include internal suppression to eliminate voltage spikes in the electrical system

I-1.3 Grounding

- 1) All Modular Bodies are grounded to the vehicle chassis with two (2) 0 GA braided, tinned copper grounding straps

- 2) These ground straps meet requirements of both KKK-1822-F and Ford QVM Bulletin Q-18
- 3) Each appliance (i.e. Lights, fans) are grounded to the body structure in close proximity to its location or by a ground harness as required
- 4) Ground shall be equivalent to its feed wire size and be minimized in length
- 5) Each ground attached directly to the vehicle structure uses machine screws with star washers or ring terminals with serrated ring to insure a positive contact at all times
- 6) All Body harnesses are contained within the body and do not run on the underside exterior of the body
- 7) Under hood harness are protected within high temperature convoluted loom
- 8) All connections exposed to the elements, or under hood, are made within "waterproof" heat shrink connections this type of connection is also be used on all heavy-duty battery cables
- 9) All battery cables, both positive and ground are machine crimped and fully soldered prior to addition of waterproof heat shrink tubing
- 10) Any exposed connections not in heat shrink and battery connections not soldered shall be rejected
- 11) All Electrical Systems include three (3) spare relays and spares of the correct size circuit breakers utilized that are mounted within the Electrical Distribution Panel
- 12) 12V - 110 VOLT CIRCUIT SCHEMATIC DOCUMENTATION - All harnesses, relays, circuit breaker terminal junction points and circuits shall be drawn on individual 8 1/2 x 11 size drawings
- 13) Each individual circuit shall be on One (1) drawing, for ease of troubleshooting
- 14) All electrical systems are designed for this vehicle
- 15) All schematics include only what circuits are provided in the proposed vehicle

I-1.4 Electrical Analysis

- 1) Proper balance of the electrical system output and vehicle draw is critical in the design of this emergency vehicles
- 2) vehicle proposed provided with a detailed electrical analysis generated by the Supplier of the ambulance and specific to this proposed vehicle and specific electrical equipment requested

I-1.5 Door Post Switches Entrance and Compartment Doors

- 1) Sealed door post switches installed in all entrance and compartment doors
- 2) All switches are sealed from the elements to prevent moisture damage and to prolong service life
- 3) The switches are warranted for lifetime of vehicle
- 4) All door post switches activate the grounds of relays only
- 5) The door post switch carries no more than 140 milliamps of electrical current

I-1.6 12 Volt Utility & Medical Outlets

- 1) 12 VOLT MEDICAL OUTLET - Two (2) 12-volt Power Point outlet provided outlet is circuit breaker protected and provides a source directly from the vehicle batteries, and bypass the vehicles master battery disconnect switch outlet located at the Life Support Station
- 2) 12 VOLT MEDICAL OUTLET - Two (2) 12-volt Power Point outlet provided outlet is circuit breaker protected and provides a source directly from the vehicle batteries, and bypass the vehicles master battery disconnect switch, outlet located in the right front in/out access compartment
- 3) 12 VOLT MEDICAL OUTLET - Two (2) 12-volt Power Point outlet provided to charge 12-volt equipment, outlet is circuit breaker protected and provides a source directly from the vehicle batteries, and bypass the vehicles master battery disconnect switch outlet located in the right front upper compartment

I-1.7 Cab & Chassis Electrical Modifications

- 1) Module Disconnect Switch, K3 Classic - A high current disconnect device installed per the requirements of KKK-A-1822 to power all ambulance vehicle conversion and modular body functions device is activated by a heavy-duty lever type switch mounted on the side of the console
- 2) A “battery saver” circuit to disconnect the module after 5 minutes without the ignition system on
- 3) Waterproof Deutsch Type Connectors –
- 4) Electrical connectors used on PLCEV added circuits of less than 20 Amps under the chassis hood and the chassis fenders are high quality, waterproof Deutsch type
- 5) All connectors in these areas are sealed
- 6) Sockets and pins are machined type

SECTION J- Front & Rear Switch Pane Equipment & Systems

J-1 Voltmeter

- 1) A Transportation Safety Devices 270 degree sweep analog type voltmeter installed within easy view of driver
- 2) Voltmeter is circuit breaker protected
- 3) Voltmeter is tied to the battery side of the master disconnect switch to allow a constant reading on the voltmeter when the switch is off
- 4) Voltmeter installed with an angled bezel for better viewing by driver

J-2 Low Voltage Alarm

- 1) A Low Voltage System with a dual indicator light green/red installed in the driver’s console
- 2) Green indicates voltage system is above 11.8 volts
- 3) Red indicates when system voltage drops below 11.8 volts for more than 2 minutes and vehicle needs to reduce load and at that time an audible alarm will sound

- 4) Alarm provided with a cancel switch to momentary silence the alarm red light will remain on both the switch legend and the indicator until the system returns to 12.8 or above

J- 3.0 Antenna & Communications Radio Equipment

- 1) Antenna - A Coaxial Antenna lead prewired from a location in the wire raceway to the location of the two-way communication radios
- 2) Antenna lead in the roof includes a connector soldered to end of cable for install of two-way communication radio antenna

J-3.1 Antenna Leads –

- 1) Three (3) coaxial cable antenna leads installed and positioned within the body roof, in numerical order, the exact location and numerical order shall be determined at the prebuild meeting
- 2) They shall terminate in the following locations

J-3.2 Antenna Bases - The antenna bases provided shall be mounted in the following locations on the body roof of the vehicle

- 1) One (1) under the streetside front dome light
- 2) One (1) under the streetside middle dome light
- 3) One (1) under the curbside front dome light
- 4) One (1) under the curbside middle dome light

J-3.3 Radio Power Leads - A 10-gauge constant power positive lead and 10-gauge ground provided with 30-amp circuit protection

- 1) One (1) located under the front cab console labeled “VHF” Radio
- 2) One (1) located under Front Console Labeled “MDT”

J-3.4 Radio Power Leads - A 10-gauge constant power positive lead and 10 gauge ground provided with 30 amp circuit protection

- 1) One (1) located behind the L/S/S
- 2) One (1) located behind the angled overhead cabinet on the curbside

J-3.5 Radio Power Leads - An 8-gauge constant power positive lead and 8-gauge ground provided with 40 amp circuit protection located behind the driver seat

J-4 12 Volt Electrical Equipment

- 1) Color Back-Up Camera and Module Camera / Monitor System - The vehicle is equipped with a backup camera / monitor
- 2) Camera and monitor capable of transmitting a full color display
- 3) Camera is mounted on the back of the vehicle and includes an air deflector to reduce dirt accumulation
- 4) Camera is capable of 110 degrees of horizontal image and 90 degree of vertical image

- 5) Module camera is installed in interior, front of the module viewing towards the rear of the patient module
- 6) Front monitor shall be capable for continuous monitoring of this camera with the exception of when the vehicle is placed into reverse
- 7) Monitor is mounted on a 4" pivot pedestal from the cab ceiling between cab sun visors. The monitor shall be a 5.6-inch full color LCD display screen. The monitor shall be connected by a shielded cable to minimize interference
- 8) The Back-up Camera system automatically activates every time the vehicle is shifted into the reverse gear provided the control switch is set to the standby mode
- 9) Continuous monitoring is provided when the control switch is set to the manual mode, and not dependent on the reverse gear selection

J-5 Prewired Stream-Lite Light Boxes –

- 1) The vehicle is pre-wired for hand-held portable lights as listed below
- 2) Light boxes are tied to the 12-volt constant circuit located within the vehicle
- 3) The 12-volt circuit shall be properly labeled and circuit breaker protected at the battery source

J-6 Intellitec Clock W/Sweep Second Hand –

- 1) An Intellitec digital clock or equivalent with sweep second hand and elapsed timer is installed on the face of the angled 45-degree cabinet above the LSS area
- 2) clock is powered by a constant, protected, 12-volt source directly from the batteries
- 3) clock has a 4-digit display to allow for easy viewing when seated in any position in the rear of the ambulance
- 4) clock is 6.75 x 4.75 x 1.25 mounted in a 6" x 5" panel cut out using 4 screws

J-7 Liquidspring Ride Lowering Switch

- 1) The suspension system shall be capable of lowering the height of the rear floor by the use of an electric dump solenoid
- 2) Solenoid activated when the left rear door is opened
- 3) An on/off override switch is located just inside the left rear door to control the function of the suspension dump with the door
- 4) The suspension shall rise to the ride position when the door is closed regardless of the switch position
- 5) Switching the switch will be one touch on/off

J-8 Voice Intercom –

- 1) A sigtronic SE-8 under helmet flex mic Quality 2 station intercom system is installed in the vehicle
- 2) Master station is mounted in the cab, and interfaced with (2) communication radios
- 3) Each station provided with a removable headset suitable for the application
- 4) System includes the components, and be configured in the location of the headsets as listed below to match current Rescue 1 from City

J-9 12 Volt Hot Utility Power Lead

- 1) The vehicle is pre-wired with a 12-volt HOT power lead terminating inside the front Cab console
- 2) Wiring is 12AWG, and includes a power and ground conductor encased in loom
- 3) The ends are capped, and the circuit labeled

J-10 115 Volt AC Electrical

- 1) The vehicle includes a 115-volt AC Electrical system separate and distinct from the vehicles 12-volt electrical system
- 2) The entire system designed and tested to meet the requirements of the NFPA National Electrical Code (NEC) where applicable and use the balance of the NEC for general practices and procedures associated with high voltage 115/230-volt AC Electrical wiring and devices
- 3) The vehicle meets and be tested to all requirements of AMD standard 009 with Test Documentation and verification provided upon request

J-11 115 Volt Electrical Schematics –

- 1) A complete wiring schematic provided which indicates the systems entire 115 volt Electrical System
- 2) Schematic shall be done in the same format as the 12 volt wiring schematics and be provided upon delivery of the vehicle
- 3) 115 VOLT WIRING - All wiring is three (3) conductors, 10 GA or 12 GA minimum stranded copper cable as required by the circuit requirements
- 4) All conductors have a 105-degree Celsius rated insulation, with tinned conductors rated at 600 volts
- 5) All cable wiring is encased in high temperature protective loom where exposed
- 6) A 115-volt twist-lock male plug rated at 20 amps or more with a friction-assisted cover assembly, UL listed for exterior use is located on the driver's side of the ambulance body close to the driver's door to energize the vehicle's 115-volt AC circuit from an exterior power source
- 7) This connector is labeled: "115-volt AC, 60Hz, 20-amp power supply"
- 8) A pigtail with twist-lock and standard three-prong ends is provided

J-13 115 Volt Power Distribution Box –

- 1) A 115-volt power distribution box installed in the vehicle's main electrical cabinet
- 2) Distribution box consists of an enclosure with a 20-amp magnetic type circuit breaker installed
- 3) Circuit breaker powers duplex receptacles also mounted within the distribution box
- 4) All wiring and circuits provided are sized for a 20-amp capacity, 12-gauge conductor minimum

J-14 115 VOLT OUTLETS INTERIOR –

- 1) One (1) 115-volt AC Duplex Electrical outlet is installed in the vehicle located on the back wall of the Life Support Station
- 2) Outlet is "Lighted" duplex type

- 3) Neon light within the outlet glows when live power is at the outlet
- 4) All outlets within the vehicle are GFCI required

J-15 115 Volt Outlet Interior –

- 1) One (1) 115-volt AC Duplex Electrical outlet is installed in the vehicle located in the right front compartment
- 2) Outlet is "Lighted" hospital grade duplex type
- 3) Neon light within the outlet glows when live power is at the outlet
- 4) All outlets within the vehicle are GFCI required

J-16 115 Volt Outlet Interior –

- 1) One (1) 115-volt AC Duplex Electrical outlet installed in the vehicle located in the right front upper compartment
- 2) Outlet is "Lighted" hospital grade duplex type
- 3) Neon light within the outlet glows when live power is at the outlet
- 4) All outlets within the vehicle are GFCI required

J-17 115 Volt Outlets Interior –

- 1) Two (2) additional 115-volt AC Duplex Electrical outlets installed in the vehicle
- 2) one (1) outlet located above the right front counter top and one (1) located in the front cab console
- 3) outlets are "Lighted" duplex type
- 4) neon light within the outlet glows when live power is at the outlet
- 5) all outlets within the vehicle are GFCI required

J-18 12 Volt To 115 Volt Inverter - 2500t Watt Inverter

- 1) A Vanner Model 20-1050 CUL, 2500-watt inverter or equivalent shall be installed in the rear electrical equipment cabinet of the vehicle
- 2) inverter has a built-in transfer switch to power equipment from both the shoreline or vehicle power
- 3) unit also include a 55-amp battery charger built into the unit
- 4) all battery leads to inverter are powered by a 2 GA SXL battery cable, minimum, directly from the battery side of the vehicles master disconnect switch

J-19 Switches

- 1) All switches shall be 12-volt two (2) or (3) position heavy duty Carling Contura X, Full size, Euro-Look Rocker switches, with a black matte finish
- 2) Each switch has an integral pilot light which activates in the "On" position, including the Horn/Siren switch
- 3) The only switches that do not have a pilot light are momentary switches, or equivalent
- 4) No switch carries more than one (1) Amp of power, (12 watts)
- 5) All switches have a plug-in connector on the bottom of the switch contacts for ease of service and supporting a lifetime electrical warranty
- 6) All switches are mounted in a custom designed one-piece panel this vehicle

- 7) The switch panel are backlit Light Emitting Diode (LED) lighting behind the individual switch legends
- 8) The switch panels are finished in a black matte finish
- 9) All custom legends are made of matte black Lexan inserts with translucent lettering to designate each function
- 10) When complete, the surface of the panel has a look of a homogeneous surface without the need for white legends
- 11) All switch circuits are designed for the life of the vehicle.

J-20 Battery "On" Indicator

- 1) A Master battery "On" indicator installed on the driver's console of vehicle
- 2) Indicator is a minimum of 1/2" in diameter and glow whenever the batteries are connected to the system

J-21 Door Open Indicator Light

- 1) A Red indicator light is installed in the drivers switch console to indicate that an entrance door is ajar
- 2) The light activates whenever the master battery disconnect switch is activated and an entrance door is opened
- 3) Indicator is a minimum of 1/2" in diameter
- 4) The door open indicator is relay controlled and the door post switches activate the relay

J-22 Compartment Open Indicator Light

- 1) An Amber indicator light is installed in the drivers switch console to indicate that a compartment door is ajar
- 2) The light activates whenever the master battery disconnect switch is activated and a compartment door is opened
- 3) Indicator is a minimum of 1/2" in diameter
- 4) The compartment open indicators are relay controlled and the door post switches activate the relay

J-23 Audible Door/Compartment Open Alarm

- 1) A high decibel, electronic beeper alarm installed and activates when a module entrance door or compartment door is opened
- 2) alarm sounds only when the vehicle is placed in drive or reverse and be independent of the door open/compartment open warning lights in the console
- 3) warning lights activate anytime an entrance or compartment door is opened

J-24 Parking Brake Alarm And Indicator

- 1) The vehicle is equipped with a Dual-Mode alarm that will sound when the vehicles shift lever is in Neutral and the Parking Brake is not applied
- 2) the alarm will sound when the vehicle gear selector is in reverse or a forward drive gear and the Parking Brake is applied
- 3) the alarm includes an indicator light in the drivers console

- 4) an audible alarm sounds when the condition exists when the vehicle is in the run mode and when the emergency sequencer switch is on

J-25 Cab Work Lights –

- 1) Two (2) Sound Off LED overhead universal utility dome lights installed in the ceiling of the cab
- 2) lights are located one (1) over the driver seat and one (1) over the officer seat
- 3) lights are activated by a two-position switch on the light, On-Off/White LED – Red LED

J-26 Electronic Throttle –

- 1) The OEM Chassis is equipped with an electronic throttle device which is specifically designed for use with this emergency vehicle
- 2) throttle activates under the following conditions: Parking brake set, engine running, and vehicle in park
- 3) throttle does not activate whenever vehicle is in a transmission drive position or when the vehicle service brake is applied, or accelerator pedal is depressed

J-27 Back-Up Alarm with Disable Switch

- 1) An audible backup alarm is installed under the rear step area of the vehicle
- 2) Back-up alarm activates any time the vehicle is shifted into reverse gear
- 3) A relay controlled momentary cancel switch installed in the drivers console to disable the backup alarm when it may not be required
- 4) Circuitry designed to allow the alarm to be reset automatically and function the very next time the vehicle is placed in reverse

J-28 Havis-Sheild Questar Spotlight –

A Havis-Shield Questar CD-QS-1 spotlight or equivalent mounted on the cab roof located close to the Officer Seat

SECTION-K LOAD MANAGER/ SEQUENCER

- 1) A combination Load Manager/Sequencer installed in the driver's console
- 2) Load Manager automatically sheds load to maintain balance between alternator output and draw, by turning predetermined functions to the off position
- 3) Load Manager includes an override emergency bypass switch in the main electrical panel
- 4) Sequencer function turns the emergency lighting on, one at a time in a predetermined order, and turns them off in reverse order
- 5) SILENT SIGNAL SYSTEM - A visual intercom, (Silent Signal System) installed in both the front and rear switch panels
- 6) Rear panel includes (3) Rocker switches with Red, Green, and Amber switches which power (3) indicator lights mounted to the side of the drivers console
- 7) A momentary button provided to activate an electrical buzzer to signal the attention of the driver via an audible indication

SECTION -L

Please see the OEM Chassis Specification. The Supplier shall provide necessary activation switch wiring

L-1 Air Horn Activation Switch

The air horn electric solenoid is activated by a momentary switch labeled "Air Horn" located in the driver's console of the cab using only electric operated systems

L-2 Entrance Door Power Door Lock Switches

1) The power door lock mechanisms shall be controlled by the OEM door switches

L-3 Remote Keyless Entry

- 1) The power door lock switch located on the drivers' and passengers' side cab doors is wired to activate the power lock/unlock function of the ambulance body entrance doors
- 2) Switch is tied to the battery side of the master disconnect switch and function whenever depressed
- 3) In addition to the cab door control of the power door locks, a remote keyless entry system shall be installed
- 4) System locks and unlocks the cab and ambulance doors specified above
- 5) Vehicle shall be delivered with two remote keyless entry devices and programmed to operate with the vehicle
- 6) Remote device capable of being attached to the key ring of the vehicle

L-4 Power Door Locks Override Switch

1) A concealed emergency override switch provided and located in the rear tail board area

SECTION-M EMERGENCY / SIREN WARNING SYSTEM

M-1 Whelen Carbide canbus controller with 21 button siren controllers

M-1.1 Lighted Horn/Siren Switch –

- 1) A switch installed in the drivers console to select between OEM Horn ring function of the vehicle Horn or Horn ring activation of the Siren
- 2) switch has a lighted indicator and control a SPST relay located within the electrical distribution cabinet
- 3) relay controlled circuit is required to eliminate any potential voltage drop problems due to high amperage draw of the OEM Horns

M-1.2 Electronic Siren, Flush Head W/Whelen Remote Dual Amp, W/295hfsa7

- 1) A Whelen Engineering Company Model 295HFSA7 Remote Dual Amp Siren with remote control head installed flush in the driver's console
- 2) siren includes standard siren tones, public address, air horn, and radio rebroadcast
- 3) siren shall be backlit for night operation and include a hard-wired microphone

- 4) siren is a remote siren amplifier and includes self-diagnostics to warn the driver about a potential problem with the siren

M-1.3 Electronic Siren, Federal E-Q2b –

- 1) A Federal Signal Corporation Model E-Q2B 100 watt Siren with digital output controller and removable noise cancelling microphone provided and installed flush in the driver's console
- 2) siren includes the following siren tones, Q-Wail, "Q" Brake, Yelp, PA, Radio Rebroadcast and Air horn
- 3) siren shall be a remote siren amplifier and include self-diagnostics to warn the driver about a potential problem with the siren

M-2 Siren Speaker System

M-2.1 Thru- Bumper Mounted Speaker System –

- 1) The front bumper of the vehicle is equipped with two (2) Federal BP200 speaker assemblies
- 2) speakers are mounted in the front bumper with stainless steel speaker covers
- 3) speaker assemblies include two (2) high efficiency 200-watt speaker drivers

M-2.3 Whelen "Howler" Additional Low Frequency System –

- 1) Whelen HOWLER, additional Low Frequency Speaker system installed under the front bumper of the vehicle
- 2) Unit installed with its own amplifier and is connected to the existing Whelen SLS series siren

SECTION N- Lighting

N-1 Cab Mounted Warning Lights

- 1) Seven Super LED lights measuring maximum 7 13/16"H x 9 3/16"W with chrome bezels mounted on the front of the body with lighting colors RRRCRRR and lenses to be clear
- 2) The five center light heads attached to a custom-made auxiliary condenser cover fabricated from .125" aluminum sheet and painted body color
- 3) The two outermost of the center five light heads at an approximate 45-degree angle to increase off-side conspicuity. The other two lights are on the box on each side of the condenser cover

N-2 Body Lighting

N-2.1 Intersection

- 1) The vehicle is equipped with two (2) red Whelen M7 Series flashing warning lights installed, one each side front fender as far forward as possible
- 2) Lights include an integrated metalized flange chrome housing

N-2.2 Grille

- 1) The vehicle is equipped with four (4) Whelen M9 Series flashing warning lights installed in the grille
- 2) Color of the lights shall be two (2) red upper and two (2) white lower
- 3) Lights flash in an “X” pattern
- 4) Lights include an integrated metalized flange chrome housing

N-2.3 Independent, Body Light Flash

- 1) All Body & Cab flashing LED flashing lights provided a switched primary /secondary circuit, which will supply a steady source of power instead of a flashing output to the flashing lights
- 2) All body and cab warning lights will flash in an unsynchronized, random pattern, as set by the internal flash of each individual light head
- 3) Flashing lights shall be considered compliant with KKK recognized alternate flash patterns
- 4) Primary is all warning lights on, secondary mode will shut down all lower level lights (beltline and below)
- 5) All light lenses shall be clear

N-3 Whelen M9 Series Light, Flanges –

All Whelen M9 vehicle lights equipped with a Whelen M9FC Chrome flange

N-3.1 Whelen Super-Led Flashing Warning Light, Front, Upper Left

- 1) The vehicle equipped with a Whelen M9 Series Super-LED warning light
- 2) Includes one (1) light assembly on the front, upper left portion of the body
- 3) All lights include metalized flange chrome housing, designed for this fixture
- 4) Light shall be Red with a clear lens cover

N-3.2 Whelen Super-Led Flashing Warning Light, Front, Upper Right

1. The vehicle equipped with a Whelen M9 Series Super-LED warning light
2. Includes one (1) light assembly on the front, upper right portion of the body
3. Lights include metalized flange chrome housing, designed for this fixture
4. Light shall be Red with a clear lens cover

N-3.3 Whelen Super-Led Flashing Warning Light, Upper Left Side, Forward

1. The vehicle equipped with a Whelen M9 Series Super-LED warning light
2. Includes one (1) light assembly on the left side, upper left, forward portion of the body
3. All lights include metalized flange chrome housing, designed for this fixture
4. Light shall be Red with a clear lens cover

N-3.4 Whelen Super-Led Flashing Warning Light, Upper Left Side, Aft

1. The vehicle equipped with a Whelen M9 Series Super-LED warning light
2. Includes one (1) light assembly on the left side, upper aft portion of the body
3. All lights include metalized flange chrome housing, designed for this fixture
4. Light shall be Red with a clear lens cover

N-3.5 Whelen Super-Led Flashing Warning Light, Upper Right Side, Forward

1. The vehicle equipped with a Whelen M9 Series Super-LED warning light
2. includes one (1) light assembly on the right side, upper forward portion of the body
3. all lights include metalized flange chrome housing, designed for this fixture
4. light shall be Red with a clear lens cover

N-3.6 Whelen Super-Led Flashing Warning Light, Upper Right Side, Aft

1. The vehicle equipped with a Whelen M9 Series Super-LED warning light
2. Includes one (1) light assembly on the right side, upper aft portion of the body
3. All lights include metalized flange chrome housing, designed for this fixture
4. Light shall be Red with a clear lens cover

N-3.7 Whelen Super-Led Flashing Warning Light, Rear, Upper Left

1. The vehicle equipped with a Whelen M9 Series Super-LED warning light
2. includes one (1) light assembly on the rear, upper left portion of the body
3. all lights include metalized flange chrome housing, designed for this fixture
4. light shall be Red with a clear lens cover

N-3.8 Whelen Super-Led Flashing Warning Light, Rear, Upper Center

1. The vehicle shall be equipped with a Whelen M9 Series Super-LED warning light
2. Includes one (1) light assembly on the rear, upper Center of the body
3. All lights shall include metalized flange chrome housing, designed for this fixture
4. Light shall be Amber with a clear lens cover

N-3.9 Whelen Super-Led Flashing Warning Light, Rear, Upper Right

1. The vehicle equipped with a Whelen M9 Series Super-LED warning light
2. Includes one (1) light assembly on the rear, upper right portion of the body
3. All lights include metalized flange chrome housing, designed for this fixture
4. Light shall be Red with a clear lens cover

N-3.10 Whelen Super-Led Flashing Warning Light, Window Level, Rear, Left Panel

1. The vehicle equipped with a Whelen M9 Super-LED warning light
2. Includes one (1) light assembly on the Rear left panel situated so when the back door is open, the light shall be visible through the center portion of the door window
3. All lights include metalized flange chrome housing, designed for this fixture
4. Light shall be a vertical split light, Red/Amber with a clear lens cover

N-3.11 Whelen Super-Led Flashing Warning Light, Window Level, Rear, Right Panel

1. The vehicle equipped with a Whelen M9 Super-LED warning light
2. Includes one (1) light assembly on the Rear right panel situated so when the back door is open, the light shall be visible through the center portion of the door window
3. All lights include metalized flange chrome housing, designed for this fixture
4. Light shall be a vertical split light, Red/Amber with a clear lens cover

N-4 Secondary Body Mounted Lights

shall be considered any of the warning lights that are placed below the horizontal plane of the rear flashing lights at rear window level

N-4.1 Whelen Led Flashing Warning Lights, Over Rear Wheel

- 1) The vehicle equipped with M7 Whelen LED, Mini-Size flashing warning lights
- 2) Two lights - one over each rear wheel area
- 3) Red/white Split Color with clear Lens
- 4) Lights incorporate integrated metalized flange chrome housing

N-4.2 Lower Side Body Led Warning Lights, Os

- 1) Ten (10) additional warning lights, Whelen Model OS installed on the lower sides of the ambulance body
- 2) Lights installed just above the lower rub rails - five on each side
- 3) Lights shall random Flash on/off - Red/White/Red/White/Red

N-4.3 Flashing Warning Light Equipment

- 1) LED REAR ENTRANCE DOOR SAFETY LIGHTS, (FULL TIME) - The Rear entrance doors, (2 doors total) equipped with Three (3) OS Series LED flashing lights
- 2) Lights activate and randomly flash when the vehicle's master switch is on and the entrance doors are open
- 3) Each door operates their lights independently
- 4) Lights semi-recessed with chrome housings, with 3 lights spaced on the lower portion of each door
- 5) Operation of each light assembly dedicated to each door circuit independently

N-4.4 Led side entrance door safety lights, (full time)

- 1) The Side entrance doors equipped with Three (3) OS Series LED flashing lights
- 2) Lights activate and randomly flash when the vehicle's master switch is on and the entrance doors are open
- 3) Each door operates their lights independently
- 4) Lights semi-recessed with chrome housings, with 3 lights spaced on the lower portion of each door
- 5) Operation of each light assembly dedicated to each door circuit independently

- 6) Color: Amber

N-5 Exterior Vehicle Lights & Equipment

- 1) Dot lighthouse lenses
- 2) All Dot light head lenses are colored
- 3) Whelen Independent, Rear Body Flashing Lights - CLEAR Lens

N-6 Whelen Led Vehicle Tail Lights

- 1) The vehicle equipped with two (2) Whelen M6 Super LED red stop/tail lights
- 2) Lights located on the lower outboard corners of each side of the rear of the vehicle
- 3) Body designed to eliminate the lights from being exposed to the elements from the backside

N-6 Vehicle Back-Up Lights

- 1) The vehicle equipped with two Whelen M6 Super LED, rear backup lights, one each side on the inboard side of the lower panel
- 2) Lights operate any time the vehicle is placed in reverse
- 3) Light includes integrated metalized chrome housing
- 4) Body designed in such a way to eliminate the lights from being exposed to the elements from the backside.

N-7 Whelen Led Populated Amber Directional Lights –

- 1) A pair of Whelen M6 Super LED amber arrow directional signal lights installed on the rear of the vehicle directly above the stop/tail and back-up lights
- 2) Lights include integrated metalized chrome flange housing on each fixture

N-8 Exterior Lights Vertical Stack –

The rear stop/tail, turn, and back up light heads stacked vertically I/L/O the standard side by side layout

N-9 Marker/Clearance Lights

Whelen os, led marker and clearance lights installed on the front rear and both sides of the body to meet all federal lighting requirements fmvss 108

N-9.1 Additional Marker/Clearance Lights –

Additional LED Style Marker and Clearance lights installed on the left and right forward body sides of the body meeting the standard Federal lighting requirements of FMVSS 108

N-9.2 Lower Flashing Marker Lights –

- 1) Two (2) Lower marker clearance lights installed on each side at the belt line area of the vehicle, one front, and one rear

- 2) Lights wired to the side directional lights and activate any time the vehicles directional switch is activated
- 3) Marker clearance light also includes an integrated reflex reflector into the lens

N-10 Running Board Illumination Lights, Led –

- 1) The vehicle equipped with two (2) four-inch (4”) LED lights surface mounted onto the front of the body at the level just above the cab running boards
- 2) Lights activate when the drivers or passenger side cab doors are open
- 3) Circuit relay controlled and includes an independent circuit breaker

N-11 Docking Illumination Lights, Led –

Innovative Lighting 580 Series Lights installed one (1) one behind each rear wheel both lights come on in reverse and the left side with left turn and right side with right turn

N-12 Exterior 12 Volt Flood Lights

N-12.1 Whelen Side M9, Led Scene Lights

Two (2) Whelen M9 Series Super LED Scene lights installed on the left upper side of the vehicle lights include metalized chrome flange housings specifically designed for each light.

N-12.2 Whelen Side M9, Led Scene Lights

Two (2) Whelen M9 Series Super LED Scene lights installed on the Right upper side of the vehicle lights include metalized chrome flange housings specifically designed for each light.

N-12.3 Whelen Side M9, Led Scene Lights

Two (2) Whelen M9 Series Super LED Scene lights installed on the upper rear of the vehicle, above the rear entrance doors lights include metalized chrome flange housings specifically designed for each light.

N-12.4 Right Side Flood Light, Control –

- 1) The right-side flood lights of the vehicle controlled by two modes
- 2) First mode is flood lights shall function from the relay-controlled circuit and lighted switch located in the driver’s console
- 3) Second mode is the flood lights activated when the right-side entrance door is opened
- 4) All circuits relay controlled with no load current passing through the door post switch

N-12.5 Left Side Flood Light, Control –

The left side flood lights of the vehicle function by the relay-controlled circuit activated by the left flood lighted switch in the driver’s console

N-12.6 Rear Flood Lights –

- 1) The rear flood lights automatically activate when the rear door is opened or when the vehicle is placed in reverse
- 2) All flood light circuits shall be relay controlled

N-12.7 Rear Flood Light Switch

- 1) The rear flood lights mounted on the rear of the vehicle controlled "on/off" by a single pole lighted switch located in the driver's console
- 2) Rear flood light switch shall override both backup function and the flood lights "on" with the door open function, and shall not be affected by those circuits

N-12.8 Right Side Flood Light Cancel Switch

- 1) A right-side flood light cancel switch installed directly inside the side entrance door
- 2) switch is mounted within the interior wall or cabinet
- 3) switch is a single pole momentary switch
- 4) circuit automatically turns off the right-side flood lights and the step well light with a single touch of the switch
- 5) circuit automatically re-arms itself the next time the side entrance door is opened
- 6) circuit is relay controlled

N-12.9 Rear Flood Light Cancel Switch

- 1) A flood light cancel switch installed directly inside the rear entrance door
- 2) Switch mounted within the cabinet adjacent to the door
- 3) Switch is a single pole momentary switch
- 4) Circuit automatically turns off the flood lights with a single touch of the switch
- 5) Circuit automatically re-arms itself the next time the rear entrance doors are opened
- 6) Circuit is relay controlled

N-12.10 Rear Side Flood Lights –

- 1) The left and right, rear side, flood lights activate when the vehicle is placed in reverse
- 2) Lights illuminate to provide better side illumination when backing up the vehicle during periods of darkness
- 3) Circuit is relay controlled, without the use of voltage reducing diodes or rectifiers
- 4) All flood and reverse circuits function independently when the vehicle is not in reverse

N-13 Interior & Compartment Lighting

N-13.1 Dome Lighting

- 1) Six (6) Whelen 80C0EHCR, LED dome lights equally spaced down both sides of the ceiling
- 2) Each light includes the High/Low intensity feature

- 3) Lights shall be relay controlled and have a lighted double throw switch in the rear Life Support panel
- 4) All lights to be mounted to vehicle frame work, not to ceiling panel material

N-13.2 Dome Lights with Door Open –

- 1) The dome lights mounted in the ceiling of the vehicle are activated to the low intensity position when the personnel entrance doors are open
- 2) Circuit shall be relay controlled and the dome light current is not controlled by the door post switch

N-13.3 Rom Led Ceiling Lights

- 1) Four (4) rectangular Durolumen V3 White LED light fixtures installed and equally spaced in between the (6) dome lights
- 2) Fixtures have reinforced housings which locks in place
- 3) Lights shall be relay controlled and switched by a lighted single pole switch in the rear Life Support switch panel
- 4) All lights mounted to the vehicle ceiling structural members and not to the ceiling panel material alone

N-14 Exterior Compartment Led Combination Lighting

- 1) All exterior compartments have one or two (as required) 4" LED recessed in combination with LED rope lights
- 2) Each compartment has the LED rope lights installed on both the left and right vertical side of the compartment, in addition to the 4" recessed, light installed in the ceiling
- 3) Compartment lights controlled by an automatic door post switch in each door
- 4) Recessed lights are located near the top of the compartment for full compartment illumination
- 5) Compartment open indication light activates anytime any compartment door is opened
- 6) Door post switch activates the compartment lighting relays
- 7) Door post switch shall not carry the current of the compartment lights

N-14.1 Whelen Led Strip-Lite Right Front, In/Out –

An indirect light located in the Right front In/Out compartment area light a Whelen Level 3 intensity LED Strip light controlled by the opening and closing of compartment doors

N14.2 WHELEN (LSS Area) LED STRIP-LITE –

- 1) An indirect light located above the Life Support Station counter used to illuminate the action area
- 2) Light a LED 10" high intensity model and switched by a switch in the rear switch panel
- 3) Rear panel light switch also activates the light in the oxygen storage compartment

N-15 Patient Procedure Lights

- 1) The ceiling of the ambulance equipped with two rectangular Durolumen V3 White LED light fixtures, mounted in the ceiling wire raceway
- 2) Lights located directly over the center position of the stretcher
- 3) Lights controlled by a separate relay-controlled circuit and switch in the rear switch panel

N-16 Stepwell Light –

- 1) An independent, recessed LED step well light provided in the rear side of the diamond plate step well and automatically activates whenever the side entrance door is open
- 2) Exterior protected from weather and damage
- 3) All connections weatherproof, sealed connectors

N-17 Rectangular Light; "Check Out" Timer –

- 1) A 60-minute mechanical timer provided at the side door of the vehicle to allow the Rectangular lights to be turned to the on position when the vehicle exterior power source is connected and shall be powered by the vehicles 12-volt battery charger
- 2) Lights controlled by an additional transfer relay to prevent the lights from discharging the vehicle batteries when the shoreline is not plugged in
- 3) Timer only functions when the shoreline is plugged in, and will not function when the battery switch is activated

N-18 Dual Dome Light Switches

- 1) Per the requirements of KKK-A-1822, two independent dome light circuits with two independent switches provided to control two banks of (3) dome lights each
- 2) Switches shall be marked in the Life Support panel as left dome light and right dome light
- 3) Each switch powers the low mode of the fixtures independently

SECTION O. CLIMATE CONTROL SYSTEM

O- 1.0 Climate Control System

The Ambulance Climate Control System in the chassis, shall only function when the vehicle is in the run mode to reduce the electrical load on the vehicle when the engine is not running

O-2.0 Flow-Thru Ventilation –

- 1) A high-volume power exhaust ventilation system installed on the left rear side panel of the vehicle
- 2) It consists of a 280 CFM, (2) speed blower motor
- 3) Blower is mounted to an anti-vibration plate welded to the inside wall
- 4) Installations which produce excessive noise due to vibration shall be cause for rejection
- 5) A Cast Products polished aluminum cowl vent with internal, rubber back flow flap is installed on the exterior of the modular body

- 6) Dual closeable intake vents placed in the interior rear corner cabinet

O-3.0 Auxiliary Air Conditioning Condenser –

- 1) The vehicle equipped with an auxiliary air conditioning condenser to enhance the heat rejection rate of the unit mounted in the chassis air conditioning system
- 2) Condenser is fan cooled by a condenser mounted 12 volt cooling fan
- 3) Fan shall be relay controlled and only be activated when the rear air conditioner unit is activated

O-4.0 Ducted Heater and Air Conditioning System

- 1) The unit has a minimum capacity of 38,000 BTU Air Conditioner, and 60,000 BTU Heat combination unit with a high-performance pressure type 620 CFM blower
- 2) Climate control unit permanently attached to the double ductwork system running full length of the ceiling of the vehicle
- 3) Each duct is fully radiused with approximate dimensions of 5" wide and not protrude more than 2 3/4" from the ceiling
- 4) Each duct has four (4) equally spaced front to rear, fully adjustable 4way adjustable louvers with shut off feature at each register
- 5) duct work is covered with a fully padded vinyl covering and also incorporates the vehicles drop down wire raceway cover in the center
- 6) Heater/air conditioner unit located in the front of the vehicle centered above the cab to body pass through
- 7) An air cleaner filter media installed in the return air grille located in the underside of the cabinet
- 8) Climate control unit includes a twin air return system
- 9) One mounted high and one mounted low for full air re-circulation
- 10) The entire climate control unit is double insulated first by the standard body insulation and secondly by a fully encompassing 5/16" thick reflective insulation
- 11) Reflective insulation extends the full length of the raceway duct, front wall and ceiling of the climate control cabinet
- 12) All heater hoses shall be provided as EPDM rubber, Hose which meets or exceeds OEM Spec. WSEM96D34-A4; AUMP 6398 for High Temperature Heater Hose
- 13) Systems heater includes an electric 2-way, internally piloted, normally closed solenoid valve which only opens when the heater unit is "On" and when the vehicle is running
- 14) Heater shut off valve also includes an emergency shut off switch located within the rear power distribution panel
- 15) All Air Conditioner hoses shall be heavy duty type Barrier Hose which utilizes triple layer technology and have machine crimped ends
- 16) Proof is provided that this is an operating climate control system, offered as a standard component the emergency vehicle production
- 17) A user list of vehicles utilizing this system shall be provided with the bid

O-5.0 Electronic Digital Display Thermostat Control

- 1) An electronic Climate Control thermostat used to monitor and control both air conditioning and heating in the rear patient compartment
- 2) Thermostat includes a digital display, with 1/2" digits, which displays ambient temperature in the patient compartment
- 3) Displays desired set temperature when the "Temp Set" Switch is depressed
- 4) Fan speed may be either automatically controlled depending on the temperature differential in the vehicle, or overridden and manually toggled, or turned off by the "Hot Cool" Switch
- 5) Thermostat unit temperature probe is located in the upper, mid-level in the patient compartment
- 6) Auxiliary Coolant Pump Climate Control System - An auxiliary coolant pump added to increase coolant flow to the rear heater core
- 7) pump is exactly sized to provide required heat to rear unit, while not reducing the effective heat in the vehicle cab
- 8) pump is controlled by the vehicle climate control system thermostat
- 9) pump is located in a protected location and easily serviceable if required in the future

SECTION P. CAB CONSOLE

P- 1.0 Radio and Siren Console

- 1) An individually custom designed Radio and Siren Console provided and mounted to the floor of the cab
- 2) Equipped with a removable lid for access when servicing
- 3) Console follows the contours of the floor to minimize its protrusion
- 4) Console constructed of a minimum of .125" aluminum covered in dark grey Line X, bed-liner material to match interior décor
- 5) All switches and controls within easy reach of both the driver and passenger

P- 2.0 Cut & Mount Radios in Console

- 1) Two (2) custom fit cutouts and mounting of the City supplied Radio heads, in the Radio /Siren Cab Console, including the required mounting brackets for City supplied radio components
- 2) Does not include any routing of wiring or technical installation of radio equipment
- 3) Cut outs provided as determined by City at prebuild meeting
- 4) Radios are provided by City and are not purchased by the Supplier

P- 3.0 Custom Map Box

- 1) A custom map box fabricated to match the cab console and installed behind the cab console

- 2) Map box includes two 3/16" removable Lexan dividers, which divides the area into a maximum of three sections
- 3) Incorporated into it storage for dispensing of three (3) latex glove boxes positioned vertically and two (2) jumbo sized cup holders
- 4) Exact design finalized at the pre-build meeting

P- 4.0 Docking Station

- 1) A Gamber Johnson Computer Pole or equivalent supplied and installed
- 2) One (1) DS52 Flat Floor High Seat Base Pole (or model appropriate for this chassis)
- 3) One (1) QAOJ-Upper-M Quick Adjust Upper Tube Assembly
- 4) One (1) 7160-0230 Support Brace
- 5) Installed through the front console and shall not interfere with dash, any airbags or compromise leg room
- 6) A computer provided by City is not to be purchased by the Supplier

SECTION Q. COMMUNICATION RADIO

Q- 1.0 Communication Radio Mounting

- 1) One (1) radio chassis mounted in the vehicle with the equipment provided by City during construction of the vehicle
- 2) Supplying the radio equipment or any electrical and/or cable hook up of the equipment is not the responsibility of Supplier
- 3) Radio chassis location to be determined at Prebuild meeting

Q- 2.0 Communication Equipment Mounting

Mount two (2) radio chargers in the vehicles front console equipment supplied to Supplier during the construction of the ambulance mounting will include 12-volt power and ground

Q- 3.0 Radio Cables

- 1) Two (2) radio cable/s run during construction of the vehicle
- 2) Cables provided to Supplier during the construction of the ambulance
- 3) City will supply and install the radio equipment - all cables installed per the radio cable manufactures instructions in location as listed

SECTION R. CHASSIS EQUIPMENT

R- 1.0 Liquid Spring Suspension System

- 1) A liquidspring LLC kneeling Compressible Liquid Adaptive Suspension System provided and installed on the rear axle of the chassis
- 2) Includes a heavy duty, high capacity 12V power module with a fluid reservoir, designed to bolt on the chassis frame rail
- 3) Fill time for the kneeling feature shall not exceed 20 seconds

- 4) System wired to kneel whenever the left leaf of the rear entry door is open
- 5) System automatically returns to designed ride height when the door is closed

R- 1.1 Kneeling Feature Override Switch

- 1) An on/off style switch is installed to allow this agency to override the rear suspension kneeling feature
- 2) When this switch is in the "on" position, allows the system to kneel whenever the left rear entry door is open
- 3) When this switch is in the "off" position, the kneeling feature will be disabled
- 4) Switch installed curb side low by rear doors

R- 2.0 Hub & Lug Covers

High Quality "Real Wheels" or equal polished stainless-steel hub and lug nut covers supplied and installed on all four wheels.

R- 3.0 Front Stabilizer Bar

- 1) A heavy-duty OEM front stabilizer bar installed to improve handling of the vehicle
- 2) Bar shall be completely bolted and meet all the criteria of QVM for mounting equipment to frame rails with no drilling or welding to the vehicle frame flanges

R- 4.0 Rear Stabilizer Bar

A heavy-duty OEM rear stabilizer bar installed to improve handling of the vehicle bar shall be completely bolted and meet all criteria of QVM for mounting equipment to frame rails with no drilling or welding to the vehicle frame flanges

R- 5.0 Rubber Mud Flaps

Rubber Heavy Duty Truck type mud flaps provided behind the rear wheels of the vehicle bolted to the inner fender liners of the modular body, behind the rear tires

R- 6.0 Horizontal Exhaust

The vehicle exhaust shall be a horizontal exhaust exiting just ahead of the tires on the driver's side

R- 7.0 Drive Shaft Hoop

A fabricated steel driveshaft hoop shall encompass the driveshaft

R- 8.0 Equipment with Delivery

- 1) The following equipment shall be removed out of City's current ambulance and reinstalled per City's requirements into the new vehicle prior to delivery:
- 2) A Stryker Power Load Model 6390
- 3) A Technimount monitor securing base

- 4) Two (2) Zico, Quick Release Strapless “D” Bottle Bracket Model QR-D-2 installed in the recessed stepwell area
- 5) Two (2) (5) lb. Fire Extinguishers, ABC and two (2) #862 Amerex Mounts
- 6) A Traffic Pre-Emption System
- 7) I- 8.1 Stryker 6506 Power Pro XT Cots
- 8) Two (2) Stryker 6506 Power Pro XT cots shall be provided and shall include:
 - a) 6086602010 Dual Wheel Lock
 - b) 6085033000 PR Cot Retaining Post
 - c) 6506026000 Power Pro Standard Components
 - d) 6506040000 XPS Option
 - e) 0054200994 No Runner/HE O2
 - f) 6500147000 Equipment Hook
 - g) 6506127000 Power-LOAD Compatible Option
 - h) 6500082000 Knee-Gatch/Trendelenburg
 - i) 6500241000 Fowler O2 Bottle Holder
 - j) 6506036000 No HE Section O2 Bottle
 - k) 6500130000 Pocketed Back Rest Pouch
 - l) 6500128000 Head End Storage Flat
 - m) 6500028000 120V AC Smart Charging Kit
 - n) 6092036018 J Hook
 - o) 6500003130 KNEE GATCH BOLSTER mattress, XPS
 - p) 6506038000 Steer Lock Option
 - q) 0054030000 DOM SHIP
 - r) 6500315000 3 Stage IV Pole PR Option
 - s) 6500001430 X-RESTRAINT PACKAGE
 - t) 6506012003 STANDARD FOWLER
 - u) 1060CT for Power-PRO XT

SECTION S. VEHICLE PAINTING

S- 1.0 Painting Process

The entire modular body shall be prepared and painted in strict accordance to Sikkens painting processes for aluminum. All Sikkens products shall be used throughout the preparation and painting stages, eliminating any incompatible products

S- 2.0 Paint Procedures for Major Components

S- 2.1 Surface Preparation

- 1) All surfaces shall be washed thoroughly with OTO degreaser prior to any sanding, blasting and or body work to prevent the impingement of contamination into substrate
- 2) Surface shall be thoroughly abraded with DA 180-220 grit

- 3) All areas requiring body work shall be ground with 24 to 36 grit, and re-cleaned with OTO degreaser

S- 2.2 Body Work

- 1) All body worked areas shall be filled with Evercoat Z-Grip body filler
- 2) All filled areas will be sanded with 180 grit dry paper
- 3) Evercoat Eurosoft Glaze putty to be applied over any body filler
- 4) Glaze putty to be sanded with 180 dry grit paper
- 5) Prime with Autosurfacers 940Hs

S- 2.3 Pre-treat Chemical Wash Process

- 1) Pre-wet surface with D.I. water
- 2) A mixed solution of OAKITE brightener/cleaner to 5% by volume of D.I. water shall be applied to the entire modular body
- 3) The solution will be thoroughly brushed in over the entire surface
- 4) There will be a 5-minute dwell time before rinsing
- 5) The entire surface will be rinsed thoroughly with D.I. water
- 6) The entire body surface will have CHEMETALL 4707 non-chrome conversion coating mixed at 4% with D.I. water applied to it
- 7) There will be a dwell time 3 minutes before rinsing
- 8) The body must be completely dry before applying sealer
- 9) The body must be sealed and painted within 24hrs after the 4707 treatment is completed

S- 2.4 Application of Primer / Sealer

- 1) One (1) Wet coat of Autocoat ABP Sealer shall be applied using 50-60 PSI (HVLP) at the spray gun to achieve a minimum dry film build of 2.5 mils, 10-15 minutes of flash time shall be allowed between coats
- 2) Primed Body shall be allowed to dry 20 minutes - 8 hours at 70 degrees F/50% RH prior to top coating

S- 2.5 Autocoat ABP Polyurethane Top Coat-Finish System

Two (2) Wet coats of (ABP) Base Coat color shall be applied to prepared body using 50-60 PSI at the HVLP gun to achieve film build of 1.2 - 1.4 mils, 5 - 10 Minutes flash-time shall be allowed between coats

S- 2.6 Autoclear ABP Urethane Clear

- 1) Two (2) Wet coats of Autoclear ABP shall be applied at an air pressure of 50-60 PSI (HVLP) to achieve a dry film build minimum of 1.2 - 1.4 mils, 5 - 10 Minutes flash time between coats
- 2) Force Dry (Bake)
- 3) Bake for 45 minutes with a surface temperature of a minimum of 140 degrees F
- 4) Sand body using 800 grit finish paper with roof panel masked off
- 5) Clean body thoroughly
- 6) Apply One (1) finished coat of Autoclear ABP minimizing spray time and contamination

- 7) Force Dry (Bake)

S- 2.7 Striping Autobase Clearcoat System - (Base)

- 1) Sand desired area with 400 dry grit paper
- 2) Clean surface with Autoclean degreaser
- 3) Mask off remainder of unit
- 4) 1-2 Medium coats of Autobase color shall be applied at a pressure of 50-60 PSI (HVLP) to achieve a dry film build of not more than .5 mils.
- 5) 2-5 Minutes flash time between coats
- 6) Dry for a minimum of 20 minutes at 70 degrees F 50%RH before applying Autoclear ABP
- 7) Two (2) Wet coats of Autoclear ABP shall be applied at an air pressure of 50-60 PSI (HVLP) to achieve a dry film build minimum of 1.2 - 1.4 mils. H. 5-10 Minutes flash time between coats
- 8) Force Dry (Bake)
- 9) Bake for 45 minutes with a surface temperature of a minimum of 140 degrees F

S- 3.0 Paint Corrosion Protection

- 1) All exterior fastener locations that penetrate the paint on the modular body are to be treated with Electrolysis Corrosion Kontrol (ECK)
- 2) Every external fastener hole shall have ECK sprayed into the hole for full coverage
- 3) The perimeter of the hole shall be covered with a minimum of .5 diameter of ECK to protect the head of the fastener from touching the painted surface
- 4) All applications of ECK are to take place before component mounting.
- 5) The fasteners that are included in this process are for the following components: Lights, Light Bars, Hinges, Diamond plate panels, Fuel fill, License plate holder, Shoreline, Vent Covers, Rain Gutters, Rub Rails, Fenderettes and Door Grabbers
- 6) Additional items that are mounted to the painted body will also be included
- 7) When an item is cut into the body causing an unpainted edge, the unpainted edge shall be completely coated with ECK prior to component mounting

S- 4.0 Paint Color

The paint color shall be OEM Black over Red

S- 5.0 Cab Paint

- 1) The cab color shall remain OEM manufacturer's Cab color Black over Red and match GFD ambulance 923
- 2) Special Paint Option Request
- 3) Custom Two-Tone painted Hood
- 4) All paint colors and paint design lay-out is to match City's newest ambulance

S- 6.0 Graphic, Lettering & Rear Body Chevron

- 1) All lettering, reflective striping and rear body chevron shall be included and installed
- 2) The material, font, colors and layout shall match the City's newest ambulance
- 3) The rear body chevron shall incorporate in it a printed American Flag

S- 7.0 Star of Life, Roof Mounted

A 32" Star of Life decal shall be center mounted on the body roof of the vehicle

S- 8.0 Prep, Clean & Detail Vehicle

The new vehicle shall be cleaned and detailed both inside and out, for final delivery

Chassis Cab 4X2 Wheel Drive

Wheelbase 193" - 108" CA Dual Rear

G.V.W. 18,000 lbs.

Powertrain/Functional:

Engine: 6.7L "Powerstroke" Turbo Diesel V8 300

hp @2800 RPM, 660 lbs torque @1600 RPM

Single Stage Turbo Charger

Instant Start Glow Plugs for quick engine starts

Diesel Emissions Fluid 6 gallon tank - mounted
behind frame rail on drivers side

Intelligent Oil Life Monitor

Engine block heater

Water Pump with 125 gallons per minute flow rate

Transmission: Heavy Duty "TorqShift" Ten Speed Automatic
with selectable drive modes; Normal, Tow Haul, Eco, Deep Sand/Snow

Electronic Shift on the Fly with automatic locking
front hubs with manual override.

Brakes - 4 wheel Anti-lock Braking System

Traction Control - DRW Models

Fuel Capacity: 40 gallon single tank (aft axle)

Front Axle: 7,000 lb. Monobeam, Dana Super 60

Rear Axle: 13,660lb. Full Floating Dana S110

Suspension:

Heavy Duty Front Coil Springs
Rear Leaf Springs, main & auxiliary
Shock absorbers, front & rear 1.38"
Stabilizer bar, front and rear
Power Steering
Steering Damper

Instrumentation: multifunction switch message center:

Gauges: Oil Pressure, Coolant Temperature, Trans Temp,
w/Indicator Lights, Tachometer, Trip Odometer, Turbo boost,
water in fuel warning light, low/contaminated diesel exhaust
fluid warning lights, glow plug preheat indicator

Engine Calibration significantly reduces the possibility
of depower mode when in stationary PTO mode

Operator Commanded regen allowed down to
30% of DPF filter full instead of 100%

Stationary elevated idle control (SEIC) is built into the
engine control module

Must meet definition of Emergency Vehicle;
ambulance or fire truck in the federal register

Rear axle 4.10 Limited Slip
Dual OEM HD Alternators (total 397 amps) 67B
Dual 750 CCA Batteries
Operated Commanded Regeneration (OCR) #98R

Safety/Security:

Driver/Passenger frontal and side air bag/curtain
Passenger side air bag deactivation switch
Belt-Minder - chime & flashing warning light on instrument panel if belts not buckled
Safety Belts - color coordinated with height adjustment
(front outboard seating positions only)
SOS Post-Crash Alert System

Securi-lock Anti-Theft Ignition

Tires:

Front & Rear LT225/70R 19.5G All Position (6) #THB

Spare Tire: LT225/70R 19.5G (All Position)

Wheels; 10 hole Disc, 19.5" x 6" Steel, Wheels to be Painted Black on all sides

Exterior Trim:

Dual Electric Horns

Chrome Front Bumper & Grille Surround

Front Tow Hooks

Lights - roof/marker clearance lights

Under Hood Service Light

Dual Beam Jewel Effect Headlights

High Mount Stop Light

Mirrors: Black POWER Telescoping Trailer Tow with

Power Heated Glass, Integrated clearance lights,

Turn signals, LED security approach lights,

Utility lighting System (LED side mirror spotlights) #54F

XLT Interior Cab Trim: #663A

Air Conditioning

Cloth Headliner, Map Pockets

AM/FM Radio w /MP3 /Clock

SYNC 3 8" LCD Productivity Screen in IP Cluster #913

Overhead Console with dual storage bin and map lights

Outside Temperature Display

Interval Windshield Wipers

Tilt Steering Wheel/Speed Control - steering wheel mounted

Power Windows/Door Locks

Black Vinyl Floor (No Floor Mats)

Headlights on audible alarm

Dual overhead Map Light

Daytime Running Lights

Front seats, high series cloth - 40/20/40 #3S

Driver Assist Technology

Audible Lane Departure Warning

Pre-Collision Assist with Automatic Emergency Braking and forward collision warning

Automatic High Beam Headlights

Adjustable Pedals: gas and brake

Color Scheme:

Exterior Color: Oxford White #Z1

Interior Color: Medium Earth Gray

Miscellaneous

Spare Tire and Wheel for Rear

Fill Fuel Tank: - The fuel tank shall be filled at the time of vehicle delivery

City of Goshen Indiana
AMBULANCE WITH 4x2 CHASSIS
JN 2021-0014

Bid Addendum #1

Date of Addendum: January 5, 2022

Bid Opening Date: January 31, 2022

The purpose of this addendum is to provide clarification to the specification documents for the purchase of equipment. The following changes, additions, modifications and corrections hereinafter set forth shall apply to the Specification Documents for the equipment and shall be made a part thereof and subject to all the requirements thereof, as if originally specified and/or shown.

This Addendum #1 consists of three (3) pages.

Page 13

Add:

D-1 Compartment Configurations & Equipment

5) Three (3) Zico Counter Mounts for Customer supplied SCBA Bottle Holders. The brackets will be shipped loose.

Page 20

Add:

F-7.8 RIGHT SIDE REARWARD BELOW COUNTER LEVEL INTERIOR STORAGE

An interior storage cabinet shall be located rearward of the right-side attendant seat and below counter level. It shall be approximately 16 3/8" wide x 18" high x 21 3/4" deep. A three (3) drawer storage cabinet shall be installed below the counter area rearward of the right-side attendant seat facing the seat area. Each drawer shall be lined with ribbed rubber matting and have locking Southco latches. The counter surface in the right-side rear shall be covered with "Midnight Pearl" color, Solid Surface counter top material. The Solid Surface shall be permanently bonded and sized to cover the entire surface of the counter area. The counter top shall have a 1" built-in lip around the entire perimeter for containment purposes. The edge of the counter top facing inboard shall be a 1.5" radius. ABS or other plastic counter surfaces are not acceptable.

Page 21

Add:

Life Support Station Upper Storage Cabinet, With Restocking Lift-Up Door

...measuring 38" wide x 12.25" high, minimum.

Page 20

Knox Mini Med vault

- 1) A Knox model #5520 Mini Med Vault with flange supplied and installed
Model # should be changed to Knox model # 5230R3K – Mini-Medvault with rear antenna and recessed door.

Page 23

G-2.2 Interior Cabinet Doors, Dividers & Shelving

Add:

11) Where applicable, EMS supply cabinet doors and frames have “Pad Eyes” or equivalent installed for an “Inventory Tagging System.”

Page 27

C- 1.0 OXYGEN & ASPIRATION SYSTEMS

8) The oxygen, vacuum and air systems in the vehicle is compatible with AIR LIQUIDE equipment
Air Liquide should be changed to Ohnedra compatible

Page 27

C-DUAL OXYGEN OUTLET

- 1) One (1) Air Liquide dual oxygen outlet is flush mounted within the Life Support Station
Air Liquide should be changed to Ohnedra compatible

Page 31

12 Volt Utility & Medical Outlets

Add:

3) The above compartments are to be combined into one (1). The total number of 12-vold outlets will be four (4). Outlined in B-8.6

Page 35

12 Volt To 115 Volt Inverter

Need to change: 2500-watt inverter to 1050-watt inverter

Page 50

Q- 1.0 Communication Radio Mounting

Need to add:

- 1) Dual band radio in front Motorola APX8500 Dual Band radio.
- 2) Rear is an APX6500 mobile 7/800 radio, remote mount

Page 52

R- 8.0 Equipment with Delivery

The current spec could be interpreted as we want 3 cots. We do not want any cots. We will transfer existing, or if it's too old, we will purchase a new cot ourselves. (We get a better deal than the manufacturer)

Should be this list:

- 1) The following equipment shall be removed out of City's current ambulance and reinstalled per City's requirements into the new vehicle prior to delivery:
- 2) A Stryker Power Load
- 3) A Technimount monitor securing base
- 4) Two (2) (5) lb. Fire Extinguishers, ABC and two (2) #862 Amerex Mounts
- 5) A Traffic Pre-Emption System

Each bidder/quoter/offeror will ascertain prior to submitting a proposal that the bidder/quoter/offeror has received all addenda issued, and acknowledge the receipt of all addenda on the Proposal.