

City of Mentor

Purchase Special Rescue Unit

May 2020

Prepared under the supervision of
Deputy Chief Ron Zak
Date May 15, 2020
Fire Department

Approved By:
Fire Chief Robert Searles
Fire Department
Date May 15, 2020

CITY OF MENTOR OFFICIALS

ADMINISTRATION

Kenneth J. Filipiak, City Manager

David W. Malinowski, Finance Director

Richard A. Hennig, Law Director

David A. Swiger, City Engineer

Matthew Schweikert, Director of Public Works

Kenneth Kaminski, Director of Parks, Recreation and Public Facilities

Kevin Malecek, Director of Economic Development and International Trade

Kathy Mitchell, Planning Director

Kenneth K. Gunsch, Chief of Police

Robert Searles, Fire Chief

COUNCIL

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Janet Dowling

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John A. Krueger

Scott J. Marn

Julie Schiavoni, Clerk of Council

THE CITY OF MENTOR
8500 CIVIC CENTER BOULEVARD
MENTOR, OH 44060
SPECIFICATIONS AND BID FORMS FOR:
PURCHASE OF SPECIAL RESCUE UNIT

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PURCHASING OFFICE

DATE: Wednesday, June 10, 2020

12:00 NOON

ALL BIDS SUBMITTED MUST INCLUDE THE REQUIRED BID DEPOSIT AND A PROPERLY EXECUTED BUSINESS ENTITY RESOLUTION (BER).

BIDDERS ACCEPTANCE TO CONTRACT PAGE AVAILABLE ONLY BY CONTACTING VERONICA FETSKO, FETSKO@CITYOFMENTOR.COM OR 440-974-5776.

I. LEGAL NOTICE

The CITY OF MENTOR will receive sealed bids at the Purchasing Office, 8500 Civic Center Blvd., Mentor, Ohio 44060, until NOON (local time) on JUNE 10, 2020 for:

PURCHASE OF A SPECIAL RESCUE UNIT

Bids must be in accordance with specifications advertised on the City of Mentor website: www.cityofmentor.com/category/rfp or RFP's will be available for pick-up at the Purchasing Office for the cost of printing.

Kenneth Filipiak, City Manager
(cityofmentor.com/news/legalnotices)

NEWS HERALD:

PUBLISH DATES:

May 27, 2020

June 3, 2020

II.

INSTRUCTIONS TO BIDDERS

The Instructions to Bidders governs, except where amended by the Specifications.

The Bidder is responsible for reading and understanding all items herein:

1. Except as otherwise provided herein, the Instructions to Bidders, Proposal-Contract Form, and all specifications, drawings and other documents referred to herein shall be a part of the contract.

2. **DEFINITIONS:**

- A. The term "Bidder" or "Contractor" shall mean the corporation, partnership or individual proposing or under contract to furnish the material, labor, and/or equipment listed in the Specifications.
- B. The term "City" shall mean the City of Mentor, Ohio.
- C. "Calendar Day" shall mean every day shown on the calendar.
- D. "City Manager" shall mean the Mentor City Manager or his duly authorized representative.

3. **PROPOSAL:** To be entitled to consideration, a proposal must be made in accordance with the following instructions:

- A. **Preparation:** Each proposal shall be submitted on the forms furnished by the City. All signatures shall be clearly and legibly written in long hand. No oral, facsimile or telephonic proposal or modifications will be considered. Each proposal shall show the breakdown for each item as directed on the Proposal-Contract Form. All proposals shall be considered informal which contain items not specified in the Proposal-Contract Form.

Prices for material and equipment shall include transporting and delivery to any place designated on the City's purchase order, within the corporate limits of the City. In the event of a discrepancy between unit proposal prices and extension thereof, the unit proposal price shall govern.

- B. **Names of Bidders:** Each proposal shall give the full business address of the Bidder(s) and be signed by them with their usual signature. Proposals by partnerships shall furnish the full names of all partners and shall be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and title of the person signing.

Proposals by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and title of the President, Secretary or other person authorized to bind it in the matter.

The name of each person signing shall also be typed or printed below the signature. A proposal by a person who affixes to their signature the word "President," "Secretary," "Agent" or other title without disclosing their principal may be held to be the proposal of the individual signing.

When requested by the City, satisfactory evidence of the authority of the officer or agent signing on behalf of a corporation or partnership shall be furnished.

- C. **Delivery:** The proposal shall be sealed in an envelope, addressed to:

City of Mentor
c/o Purchasing Department
8500 Civic Center Boulevard
Mentor, Ohio 44060

and delivered to the office of the Purchasing Coordinator on the date set forth in the legal advertisement. The sealed envelope shall also bear the name of the Bidder, the general item(s) proposed, and the date the proposals are to be opened. Proposals will be received until the date and time specified in the legal advertisement. Proposals will be opened and read immediately thereafter, in 2nd Floor Conference Room, Mentor Municipal Center. Proposals received after the date and time specified will be returned unopened to the Bidder.

- D. **Proposal to Include All Work:** Each proposal shall include all equipment, material, supplies or services described in the Instructions to Bidders, Specifications, Proposal-Contract Form and all drawings.
- E. **Withdrawal of Proposal:** Permission will not be given to withdraw or modify any proposal after it has been deposited as provided above. Negligence on the part of a Bidder in preparing the proposal confers no right for the withdrawal of the proposal after it has been opened.
- F. **Acceptance or Rejection of Proposal:** The City reserves the right to accept any proposals within sixty (60) calendar days after the same are opened, as provided above. The City reserves the right to accept any proposals which, in its opinion, are deemed to be in the best interest of the City. The City reserves the right to reject any or all proposals.

In determining the award, each item may be considered separately, and separate contracts may be awarded on the various items, unless specified to the contrary in the Specifications.

- G. Proposal Bond or Check: Each proposal must be accompanied by a cashier's or certified check, an irrevocable letter of credit, or by a proposal bond, signed by a surety company authorized to do business in the State of Ohio, in the amount of five (5) percent of the proposal and made payable to the City of Mentor, as a guarantee that the contract will be honored in the event it is awarded to the Bidder, and as a guarantee that the Bidder to whom the contract is awarded will sign all documents necessary to formalize the contract, if any.
- H. Forfeiture of Check or Proposal Bond: If the Bidder to whom the contract is awarded shall fail to honor the contract, or fail to sign the documents necessary to formalize the contract, if any, the deposit accompanying the proposal shall thereupon be forfeited to the City for and as liquidated damages. The work may then be readvertised or awarded to the deemed second best Bidder as the City may determine.
- I. Quantities: The quantities of the work shown on the Specifications and Proposal-Contract Form are estimated by the City and will be used as the basis for comparison of the proposals only. The City reserves the right to decrease or increase any quantities and to eliminate any item(s) on the plans or proposal.
- J. Informal Proposals: Proposals may be rejected for the following reasons:
- 1) If the proposal is on a form other than that furnished by the City or if the form is altered or any part thereof detached.
 - 2) If there are any unauthorized additions, conditional or alternate proposals, or other irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
 - 3) If the Bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award. This does not exclude a proposal limiting the maximum gross amount of awards acceptable to any one Bidder at any one proposal letting, provided that the City will make any selection of awards.
 - 4) If the proposal does not contain a unit price for each pay item listed, except in the case of authorized alternate pay items or lump sum items.
4. A. Competency of Bidders: No proposal will be considered unless the Bidder submitting the same shall furnish evidence satisfactory to the City Manager that they have the necessary equipment, ability and financial resources to fulfill the conditions of the contract and Specifications. Previous experience and responsibility of the Bidders will be considered in awarding the contract. No contract will be awarded to any Bidder who is in arrears to the City upon debt or contract, or who is in default as surety or otherwise upon any obligation to the City.
- B. Disqualification of Bidders: Any of the following reasons may be considered as being sufficient for the disqualification of a Bidder and the rejection of their proposal or proposals.
- 1) More than one proposal for the same work from an individual, firm or corporation under the same or different names.
 - 2) Evidence of collusion among Bidders. Participants in such collusion will receive no recognition as Bidders for any further work of the City until any such participant shall have been reinstated as a qualified Bidder.
 - 3) Proposal prices that obviously are unbalanced.
5. WRITTEN AND ORAL EXPLANATIONS: Should a Bidder find discrepancies in, or omissions from, the drawings or Specifications, or should they be in doubt as to their meaning, they shall at once notify the City, which may send written instructions to all Bidders. The City will not be responsible for any oral instructions.
6. ADDENDUM OR MODIFICATION: Any addendum or modification issued during the time of bidding shall be covered in the proposal and in awarding a contract, such addendum or modification will become part thereof. In the event any such addendum or modification is issued by the City within 72 hours of the time set for the closing of proposals, excluding Saturdays, Sundays and legal holidays, the time for submitting proposals shall be extended one (1) week, with no further advertising of proposals.
7. TAX EXEMPTIONS: The City is exempt from federal excise and transportation taxes and Ohio State sales tax. Prices quoted should not include either federal excise or Ohio State sales tax. Tax exemption certificates covering these taxes will be furnished upon request.
- The transportation tax is not applicable on any purchase consigned to the City and no tax exemption certificate is required. If for any reason a contemplated purchase would not be tax exempt, this fact will be indicated in the Specifications, and such taxes may be included in the price or shown as a separate item in the proposal.
8. DISCRIMINATION: In hiring of employees for the performance of work under this contract or any subcontract, neither the Contractor, subcontractor, nor any person acting in their behalf shall by reason of race, creed, color, age, sex or handicap discriminate against any citizen of the State in the employment of any laborer or worker who is qualified and available to perform the work to which the employment relates.
- Neither the Contractor, subcontractor, nor any person in their behalf shall in any manner discriminate against or intimidate any employee hired for the performance of work

under this contract on account of race, creed, color, age, sex or handicap.

9. **INSURANCE:** If the Specifications indicate insurance is required, then the Contractor shall obtain and pay for the following types of insurance:

- (a) Commercial General Liability insurance with minimum limits of not less than \$1,000,000 combined single limit. Coverage is to include contractual liability, a per project general aggregate limit, primary and non-contributory other insurance provision, waiver of subrogation in favor of the City and additional insured status for the City including ongoing operations and products and completed operations. If such coverage is written on a Claims Made or Claims Made and Reported basis, (i) such coverage will have a retroactive date that is equal to or that precedes the date of the contract and be maintained for a minimum period of not less than three (3) years after the termination or expiration of the contract, (ii) may be replaced with other Claims Made or Claims Made and Reported coverage with a retroactive date that is equal to or that precedes the date of the contract and maintained for a minimum period of not less than three (3) years after the termination or expiration of the contract or (iii) may be cancelled after the termination of or expiration of the contract only if it is replaced by an extended reporting period with a duration of not less than three (3) years.
- (b) Automobile Liability insurance providing coverage for all owned, non-owned and hired automobiles with minimum limits not less than \$1,000,000 combined single limit. Coverage shall include additional insured status for the City and a waiver of subrogation for the City.
- (c) Worker's Compensation which meets all statutory minimum requirements

All policies must be written with insurance companies acceptable to the City. All policies are to provide the City with thirty (30) days advanced written notice of cancellation or non-renewal with the exception of cancellation for non-payment of premium which shall be ten (10) days. Contractor shall supply certificates of insurance evidencing the required coverage and shall furnish renewal certificates thirty (30) days prior to the renewal date. Failure of the City to request certificates does not relieve the Contractor from the obligation to maintain the required insurance.

10. **LIABILITY:** The Bidder shall defend, indemnify, and save harmless the City and its officers and agents from all claims, demands, payments, suits, actions, recoveries and judgments of every description, whether or not well founded by law, brought or recovered against it, by reason of any act or omission of said Bidder(s), their agents, subcontractors or employees, in the execution of the contract, or for the use of any patented inventions by said Bidder. A sum sufficient to cover aforesaid claims, including attorneys' fees, may be retained by the City from monies due or to become due to the

Bidder under contract, until such claims shall have been discharged.

11. **ROYALTIES AND/OR LICENSE FEES:** The Bidder shall pay all royalties and license fees. The Bidder herein agrees to assume and save the City, its officers and agents harmless from liability of any kind or nature whatsoever, arising out of the use by the City, its officers and agents of any item, appliance, apparatus or mechanism, material or service which may be furnished or installed by the Bidder under the terms of this contract, including patent or copyright infringement, and to defend the City from any and all such liabilities whether or not such claims are well founded by law.
12. **ASSIGNMENT OF CONTRACT:** The Bidder who is awarded a contract shall not assign, transfer, convey, sublet or otherwise dispose of said contract, or right, title or interest in or to the same, or any part thereof, without previous consent in writing from the City Manager, endorsed on or attached to the contract.
13. **CANCELLATION:** Should the material(s) supplied or delivered to the City under this contract fail at any time to meet the Specifications required by the contract, then in such event, the City may cancel this contract upon written notice to the Bidder.
14. **CONTROL OF WORK:** The City Manager, or his designated agent, will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the plans and Specifications; all questions as to the acceptable fulfillment of the contract on the part of the Contractor, and as to compensation.
15. **CLAIMS FOR ADJUSTMENT AND DISPUTES:** If, in any case, the Contractor deems that additional compensation is due for work or material not clearly covered in the contract or not ordered by the City Manager as extra work, as defined herein, the Contractor shall notify the City Manager in writing of their intention to make claim for such additional compensation before they begin the work on which the claim is based. If such notification is not given and the City Manager is not afforded proper facilities by the Contractor for keeping strict account of actual costs as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor, and the fact that the City Manager has kept account of the cost aforesaid, shall not in any way be construed as proving or substantiating the validity of the claim. If the claim, after consideration by the City Manager, is found to be just, it will be paid as extra work in the amount as approved by the City Manager.
16. **DURATION OF CONTRACT:** The duration of the contract shall be for the period stated in the Specifications, and shall include all material, equipment and/or services ordered or delivered during the period. All prices quoted shall be for a definite fixed period unless otherwise noted in the Specifications.

17. PURCHASES: After a contract has been signed, it shall only become operative upon delivery to the Bidder a duly signed purchase order. The City shall only be obligated under the contract to the extent of such purchase order. The City shall not become liable for any claims in the event that the total quantity of material ordered or services performed under the contract should prove to be greater or less than the estimated amount in the Specifications.

18. DELIVERY: The Bidder agrees to make deliveries of supplies and materials within a reasonable period from the time purchase orders are received, which reasonable time is estimated to be thirty (30) days.

If deliveries are not made within such period, then the City may purchase such items in the open market; and if the prices paid by the City shall be greater than the contract price, the Bidder agrees to reimburse the City for any loss or losses that the City may thereby sustain.

Delivery time for vehicles and equipment may be extended beyond thirty (30) days, provided the Bidder has noted the delivery time in the appropriate space on the Proposal-Contract Form.

19. PAYMENT OF INVOICES: Invoices will be due and payable within thirty (30) days of receipt of the invoice by the City. All invoices should be mailed to the attention of the Accounts Payable Department. Payments may be made on a basis of estimated partial completion of work or delivery, and the City may withhold a percentage of each partial payment until completion of the contract. The City may withhold a percentage of the final estimate for a specified period as a guarantee. Such a procedure for partial payments must be provided for in the Specifications.

20. CONTRACT BOND: The successful Bidder will be required to furnish the approved bond for the faithful performance of the contract in the amount of one hundred percent (100%) of the contract price. Such bond shall be that of an approved surety company or personal bond upon which the sureties are persons not interested in the contract, or, if interested, collateral security shall be furnished, all of which is to be to the satisfaction of the Law Director, including sureties.

In lieu of a performance bond the City may elect to hold the Proposal Deposit Check, submitted with the proposal, until the contract has been fulfilled. **Any deviation from the required one hundred percent (100%) figure will be noted in the Specifications.**

21. GENERAL: Contractors shall furnish all labor, equipment, materials, services and supplies necessary to complete the proposed work. All work shall be performed according to all standards of good workmanship complete in every detail. Contractors shall coordinate their work with the work of others and, upon completion, remove tools, equipment, waste and debris and leave the site in "broom-clean" condition. Contractors shall warrant all equipment, materials, services and supplies with the normal and usual warranties,

including, where applicable, warranties of merchantability and fitness for a particular purpose.

22. WAIVERABILITY: The City of Mentor reserves the right to accept any part of any proposal and reject all or parts of any and all proposals, and waive any informalities in the bidding procedure.

23. PREVAILING WAGE: Contractors must comply with ORC Chapter 4115 when applicable. It is the Contractor's responsibility to contact the City's Prevailing Wage Coordinator to determine requirements.

24. TAXES: Contractor shall pay and/or withhold all sales, consumer, use, employment and other taxes (including the City of Mentor 2% income tax) paid or withheld by Contractor in accordance with the Laws and Regulations of the United States, State of Ohio and City of Mentor which are applicable during the performance of the work.

QUESTIONS: Call the Finance Department at (440) 974-5776.

III. BUSINESS ENTITY RESOLUTION

_____, of _____
(Name of Officer) (Name of Business Entity)

an _____ Business Entity hereby certifies that the following is a true
(State where incorporated/organized if applicable)

and correct copy of a resolution duly adopted by the Board of Directors of _____,
(Business Entity Name)

on _____, _____, to wit:
(Month, Day) (Year)

“Resolved, that _____* of this Business Entity, namely
(Name of Officer)

_____, be and he/she hereby is authorized and directed to enter into any and all
(Title of Officer)

contracts, bid guaranty and performance bonds with **THE CITY OF MENTOR, OHIO**, for the purpose of

furnishing labor and/or materials as to _____
(Title of Bid)

at such price and upon such terms and conditions, including any amendments or modifications thereto, as

said _____ in his/her sole discretion shall deem best,
(Title of Officer)

and that said actions shall be binding upon the Business Entity.

“Resolved, further, that said _____* be, and he/she further is
(Name of Officer)

hereby authorized and directed to execute and deliver unto said **CITY OF MENTOR, OHIO** other
instruments which in his/her discretion he/she shall deem necessary to carry out the forgoing resolution.”

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Business
Entity (if applicable) at _____ this _____ day of _____,
and I further certify that said resolution is still in force and effect.

SECRETARY

SEAL

BER-1

*Name must agree with signature on page Bidders Acceptance to Contract

IV. BID SUBJECT TO ACCEPTANCE AS CONTRACT

Intentionally omitted, please contact Veronica Fetsko at 440-974-5776 or fetsko@cityofmentor.com.

IV. BID SUBJECT TO ACCEPTANCE AS CONTRACT (CONTINUED)

B. NOTICE OF AWARD

Whereas, _____ responded to an invitation to bid to provide _____ for the City of Mentor, Ohio, and whereas said bid by _____ was approved by the City Council as the lowest and best bid, now, therefore, the City of Mentor awards the contract subject to final acceptance below to _____ to be performed pursuant to the terms and conditions specified in the following documents (component parts):

1. Instructions to Bidders
2. Bond or Certified Check
3. Specifications: General Requirements/Contractor's Responsibilities
4. Proposal/Contract Form
5. Other

Purchasing

Date

C. VENDOR AGREEMENT

_____ hereby agrees to perform the services as bid and agrees to abide by all terms and conditions as identified. In the event of contradiction or ambiguity between the paragraphs contained in the *Instructions to Bidders* versus the other more specific paragraphs under *Specifications: General Requirements/Contractor's Responsibilities, Proposal/Contract Form, Other*, the paragraphs in the *Specifications: General Requirements/Contractor's Responsibilities, Proposal/Contract Form and Other*, shall control. And whereas, the City of Mentor intends to be bound by the contract, it will pay to _____ the sums so stated in the *Proposal/Contract Form* upon satisfactory delivery of the goods and/or performance of the service.

_____ has reviewed the above component parts of the contract documents and finds no ambiguity in the terms and conditions thereof.

Company Officer

Date

D. ACCEPTANCE BY THE CITY OF MENTOR

THE FOREGOING CONTRACT IS HEREBY ACCEPTED AS TO ALL OF THE COMPONENT PARTS AND, IN SPECIFIC, TO ITEM(S) #

Item(s) # _____

Pursuant to Ordinance _____ Passed _____

By the Council of the City of Mentor, for the period: _____

FUNDS AVAILABLE:

Finance Director _____ *Date* _____

City Manager _____ *Date* _____

APPROVED AS TO FORM:

Law Director _____ *Date* _____

ESCROW WAIVER

In accordance with a certain Contract between the City of Mentor, (hereinafter referred to as "the Owner") and _____ (hereinafter referred to as "the Contractor"), it is mutually agreed by and between the parties hereto that no escrow account will be established pursuant to Sections 153.13, 153.14 and 153.63 of the Ohio Revised Code nor shall any interest be paid on any retainage.

CITY OF MENTOR

Kenneth J. Filipiak, City Manager

COMPANY

Company President

DELINQUENT PERSONAL PROPERTY STATEMENT

_____ having been awarded a contract by the City of Mentor, hereby affirms under oath, pursuant to Ohio Revised Code Section 5719.042, that at the time the bid was submitted, my company **was / was not** charged with delinquent personal property taxes on the General Tax List of Personal Property for Lake County, Ohio.

If such charge for delinquent personal property tax exists on the General Tax List of Personal Property for Lake County, Ohio, the amount of such due and unpaid delinquent taxes, including due and unpaid penalties and interest, shall be set forth below.

This statement shall be incorporated into the Contract made between the City of Mentor and _____ and no payment shall be made with respect to any Contract unless such statement has been so incorporated as a part hereof.

Delinquent Personal Property Tax \$ _____

Penalties \$ _____

Interest \$ _____

Signed: _____
Company President

Subscribed in my presence, and sworn to before me, this _____ day of _____, 2020.

Signed: _____
(Notary Public)

V. SPECIFICATIONS FOR THE PURCHASE OF SPECIAL RESCUE UNIT

A. GENERAL REQUIREMENTS

1. Intent: The intent of these specifications is to describe a Special Services Unit for use by the Fire Departments of the City of Mentor. Vehicle must be current year manufactured model. Only bids submitted for the complete vehicle will be accepted. The City reserves the right to accept or reject any or all bids or award or reject any combination of bid items.

2. Brand or Trade Name: Brand names, where mentioned in these specifications, are not intended to be restrictive, but rather to indicate the level of quality required by the City. In any instance where a brand name is mentioned, it is assumed that the phrase “or equal” shall follow.

3. Manuals: Provide one (1) complete repair manual on a USB thumb drive, CD or online data storage device, shall be provided with the vehicles at time of delivery.

4. Warranty: Bidder shall submit written conditions and periods of warranty with the bid proposal.

5. Repairs: Bidder must have complete repair facilities and parts inventory in Ohio.

6. O.S.H.A.: Bidder shall comply with the provisions of the Occupational Safety and Health Act and Standards and Regulations issued thereunder and certify that all items conform to and comply with said standards and regulations.

7. Delivery: The successful bidder will be required to deliver the equipment within the number of days as stated on the Proposal-Contract form. Failure to do so may result in a liquidated damage penalty to the vendor of \$100.00 per day beyond the stated delivery date.

8. Title: For each vehicle awarded, the successful bidder will provide a Certificate of Title issued in the name of the City of Mentor.

9. Proposal (Bid) Bond: In accordance with Section 3G of the Instructions to Bidders, each bidder is required to furnish a bid bond in the amount of 5% of the bid amount.

10. Contract Bond: Section 20 of the Instructions to Bidders is hereby amended. A performance bond in the amount of 20% of the contract price will be required.

B. MINIMUM REQUIREMENTS

These specifications detail minimum requirements acceptable to the City of Mentor. Should the manufacturer's current specifications exceed these, they shall be considered

minimum and shall be furnished, and equipment and components included in the bid shall be stipulated. **Any additions, deletions or variations from the minimum must be stated in the space provided with the specifications. No entry in the “Bid Complies” column will be indicative of full compliance. Bidder shall stipulate components supplied in providing a complete unit.**

Any and all parts not specifically mentioned in this Section, but which are required for proper and safe operation of the vehicle shall be furnished by the bidder and shall conform in strength, quality of material and workmanship to that provided by the automotive industry in general. All items not specifically mentioned but which are standard factory items shall be furnished.

CAB CUSTOM STYLE

The cab shall be a custom, cab over engine style, with the driver and officer positions ahead of the engine and front axle. The cab shall be specifically designed and manufactured for the fire service industry. Apparatus cabs that are not manufactured by the apparatus manufacturer shall not be acceptable.

The cab shall be designed by manufacturer's Engineering to meet the unique, Heavy-duty construction specifications. All aspects of the cab will be quality checked by manufacturer's personnel.

The cab shall be of a totally enclosed full tilt design, with the interior area completely open to improve visibility and verbal communication between the occupants. Roof mounted air conditioning is not desired.

The cab shall be designed with high strength 6061-T6 Aluminum extrusions and 3/16" 5052-H32 Aluminum plate.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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CAB LOCKDOWN

The cab shall have lock down latches. Once the switch is engaged the cab latches will release allowing the cab to be tilted.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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CAB TILT SYSTEM

The cab shall be a full tilt style. An electrically powered hydraulic cab tilt system shall be provided and shall lift the cab to an angle of 45 degrees exposing engine accessories for

CENTER OF GRAVITY

The apparatus will be required to meet the vehicle stability of the applicable National Fire Protection Association (NFPA) Automotive Fire Apparatus Standard.

A calculated center of gravity shall be provided and shall be no higher than 80-percent compared to track width

BIDDER COMPLIES **YES**_____ **NO** _____

ROOF STYLE - RAISED

The cab roof design shall incorporate an angled front roof, transitioning into a rolled extrusion for a swept back design.

The roof height shall feature an 8" to 10" raised roof.

The roof of the cab shall feature structural members that defending against buckling in the event of a rollover.

The cab header shall feature dual 6061-T6 Aluminum extrusions which shall offer superior rigidity and strength.

The raised roof shall offer a crew head height area of 63-1/2" from the floor to the ceiling in the crew areas for optimum headroom.

A drip rail shall be provided along the top radius of each cab side.

BIDDER COMPLIES **YES**_____ **NO** _____

LIGHT TOWER PROVISION

The cab roof shall include reinforcement for a light tower.

BIDDER COMPLIES **YES**_____ **NO** _____

DRIVER & OFFICER SIDE - EMS COMPARTMENTS

Both sides of the cab shall feature a compartment which is designed for housing emergency medical equipment. The compartment shall be located immediately behind

the driver's seat and the interior shall measure approximately 23"wide x 36" tall x 24" deep (measured from the exterior door) comprising roughly 10-11 cubic feet.

BIDDER COMPLIES YES _____ NO _____

EMS COMPARTMENT ACCESS

The interior EMS compartment on both sides shall have an opening of approximately 18" W x 32" H. The compartments shall have a sweep out design. They shall have interior access through a hinged plexiglass door towards the rear of the cab. The hinge shall be located on the inboard side of the compartment.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT SHELF

One (1) adjustable shelf shall be installed in the interior cab compartment. The shelf shall be constructed from aluminum.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENTS INTERIOR FINISH

The interior of the EMS compartment shall be finished with the same product and color as the cab coating.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT LIGHTING

Each EMS compartment shall include one (1) 18" strip of LED lighting

BIDDER COMPLIES YES _____ NO _____

CAB DOORS

The cab shall include a total of four (4) doors, two (2) forward and two (2) rear crew doors.

BIDDER COMPLIES YES _____ NO _____

CAB STEPS

BIDDER COMPLIES YES_____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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WINDSHIELD WIPER SYSTEM

A single windshield wiper system shall be incorporated in conformance with Federal Motor Vehicle Safety Standards (FMVSS) and Society of Automotive Engineers (SAE) requirements. The system shall include two (2) large windshield wiper arms with built in washer system.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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WINDSHIELD WIPER ACTIVATION

The windshield wipers shall be activated through a switch on the driver's panel, with intermittent control that allows two speeds.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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CAB INSULATION

The cab shall be insulated from road and vehicle resonance, exterior sound and thermal intrusion.

The interior cab insulation system shall meet NFPA 1901 14.1.6 standards and ensure that no seated position within the cab exceeds 90dB. This decibel rating shall be measured with the apparatus traveling 45 mph with climate control settings off.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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ENGINE TUNNEL INSULATION

The insulation barrier shall provide an acceptable decibel level within the cab meeting or exceeding the recommendations of NFPA 1901.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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CAB UNDERBODY INSULATION

The underside of the cab shall be insulation offering reducing vibration noise and thermal effect to the interior of the cab.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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DAMPING INSULATION

The entire cab, including the ceiling and walls shall include additional insulation reducing structure borne noise from vibration, impact and resonance within the cab.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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INTERIOR FINISH

The interior trim shall be esthetically pleasing and provide superior durability and resistance against foreign objects, chemical, UV fading as well as normal wear and tear.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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CAB FLOORING

The interior flooring of the cab shall be covered with a rubberized material to provide a rugged but cosmetically pleasing surface. The covering shall provide superior durability, be resistant to skid and against foreign objects as well as normal wear and tear.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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SUN VISORS

The driver and officer seats shall feature a sun visor mounted in the header over each seating position. The sun visors shall be gray tinted plastic.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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ENGINE ENCLOSURE

The engine tunnel shall be constructed of 5052 H2 aluminum offering superior durability in addition to thermal and acoustic resistance. The enclosure shall be contoured and blended to be in an aesthetically pleasing. It shall be low profile to maximize space and provide comfort.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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CAB DASH

The cab dash shall offer heavy duty, durable construction from formed aluminum. The cab dash shall be finished with a durable coating for a rugged finish.

For improved safety cab switches and controls shall be ergonomically located within easy reach of the driver when in the seated position with seatbelts fastened.

Access panels shall be provided for ease of maintenance accessing controls, components and gauge assemblies

The officer dash shall include a flat area for optional mounting cradles or brackets for a laptop computer, mobile data terminal, map compartment or clip board

BIDDER COMPLIES YES_____ NO _____

BLACK MOUNTING PLATE FOR RADIO

One (1) black mounting plate(s) containing radio mounting shall be provided and incorporated in the modular dash console.

BIDDER COMPLIES YES_____ NO _____

CONSOLE MOUNTED SIREN

One (1) black mounting plate(s) containing mounting for a siren shall be provided and incorporated in the modular dash console.

BIDDER COMPLIES YES_____ NO _____

HVAC HEATING AND COOLING SYSTEMS

The interior cab climate control shall be comprised a system that shall include a defroster, a cab and crew heater and air conditioner for a complete HVAC system. The air conditioning system shall be comprised of compressor, condenser, and evaporators to provide consistent temperature control throughout the entire cab.

The system shall be rated as an Emergency Vehicle grade for the use in Fire and Rescue style vehicles and shall provide environmental air treatment in accordance with published SAE standards.

The HVAC system shall be tested and certified by the component manufacturer and a third-party independent certified testing laboratory, including all three systems. Documentation of test results shall be provided with the bid.

BIDDER COMPLIES **YES**_____ **NO** _____

DEFROSTING SYSTEM

To provide maximum defrost and heating performance, a minimum of a 30,000 BTU heater-defroster unit shall be provided inside the cab.

A minimum of six (6) louvers/diffusers shall be provided to direct air across windshield and door glass. Airflow should be a minimum of 350 CFM.

BIDDER COMPLIES **YES**_____ **NO** _____

HEATING SYSTEM

Delivery of a minimum of 60,000 BTU/hour of heat to the entire cab.

Heat and air circulation shall be provided to the driver and officer foot area of the cab.

Substantial air movement and heating provided to the driver and officer's position, The dash will have at least four (4) adjustable louvers to direct airflow.

Dual overhead units, with appropriate number of adjustable louvers shall be mounted above the rear facing seat positions on the driver and officer side of the cab

BIDDER COMPLIES **YES**_____ **NO** _____

CONDENSER

The cab air conditioning system shall include one (1) low profile HE-condenser.

BIDDER COMPLIES **YES**_____ **NO** _____

AUXILIARY DEFROSTER FANS

Two (2) 12-volt fans, each 6" diameter shall be integrated into the driver and officer header angled towards the windshield for improved air circulation. They shall be equipped with 3-position toggle. The positions shall be High, Low and Off.

BIDDER COMPLIES **YES**_____ **NO** _____

HEATING AND COOLING CONTROLS

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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BIDDER COMPLIES YES _____ NO _____

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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BIDDER COMPLIES YES _____ NO _____

SEAT BACK LOGO

The seat back may include the manufacturers logo. The logo shall be centered on the standard headrest of the seat back.

BIDDER COMPLIES YES _____ NO _____

DRIVER SEAT COMPARTMENT

There shall be a storage area under the driver's seat.

BIDDER COMPLIES YES _____ NO _____

ACCESS DOOR

There shall be an aluminum door cover provided for the driver and officer seat compartment.

BIDDER COMPLIES YES _____ NO _____

OFFICER SEAT

The seat shall feature 3pt ABTS (all belts to seats).

Minimum of fore/aft adjustment and shall be upholstered with heavy duty material.

The seat(s) shall have a manufactures warranty.

BIDDER COMPLIES YES _____ NO _____

SEAT MATERIAL

The seats shall be upholstered with Turnout Tuff or Dura-wear material or equal.

BIDDER COMPLIES YES _____ NO _____

SEAT BACK LOGO

The seat back may include the manufacturers logo. The logo shall be centered on the standard headrest of the seat back.

BIDDER COMPLIES YES _____ NO _____

OFFICER'S SEAT BOX STORAGE COMPARTMENT

There shall be a storage area under the officer's seat with at least 2,000 cubic inches of space with an adequate opening to access area.

BIDDER COMPLIES YES _____ NO _____

FORWARD FACING SEAT- DRIVER & OFFICER SIDE

There shall be two forward facing flip up theater seats mounted in the forward-facing outer positions. They shall be mounted to the rear wall and have a 3 point red seat belt that is attached to the rear wall of the cab, and the seat cushion shall be covered with ballistic type material. There shall be covered padding mounted on the rear wall behind seats.

BIDDER COMPLIES YES _____ NO _____

EXTERIOR CAB HANDRAILS

There shall be a handrail provided and installed, at each cab entrance. The handrails shall be constructed of type 304 stainless steel 1.25 inch diameter tubing with bright finish and knurled gripping surface. Sufficient space shall allow for a gloved hand to firmly grip the rail. Handrails shall be mounted according to manufacturer's best practices.

BIDDER COMPLIES YES _____ NO _____

FRONT GRILLE

The front grille shall be polished stainless steel. Plastic chrome plated grills shall not be acceptable.

BIDDER COMPLIES YES _____ NO _____

GRILLE LOGO

The front grille shall include the manufacturers logo.

BIDDER COMPLIES YES _____ NO _____

SIDE MARKER LIGHTS

Two (2) amber LED, side marker light assemblies shall be mounted on the side of the cab.

BIDDER COMPLIES YES_____ NO _____

CAB WARNING LIGHTS

One (1) pair of Whelen Series LED warning lights shall be installed one each side of the chassis cab. These shall be red in color and provided with a chrome flange.

BIDDER COMPLIES YES _____ NO _____

CAB FENDER CROWNS

The cab wheel wells shall include full width polished stainless-steel cab fenders to resist corrosion and enable easier cleaning maintenance.

BIDDER COMPLIES YES _____ NO _____

FRONT & REAR MUD FLAPS

The cab and chassis shall be provided with 1/4" rubber front mud flaps.

BIDDER COMPLIES YES _____ NO _____

REARVIEW MIRRORS

Lang Mekra West Coast 300 Series AERO mirrors or equal shall be provided and installed on each of the front cab doors. The mirrors shall be mounted via polished stainless-steel arms to provide a rigid mounting reducing mirror vibration.

The flat mirror shall be motorized with remote horizontal and vertical adjustment. The mirrors shall also be heated.

The convex mirrors can be manually adjustable.

BIDDER COMPLIES YES _____ NO _____

REARVIEW MIRROR REMOTE ACTIVATION

BIDDER COMPLIES YES _____ NO _____

The cab shall then be painted with the specific color designated by the customer.

BIDDER COMPLIES YES _____ NO _____

The cab shall have an undercoat applied. The under coat shall be formulated to prevent chipping, cracking and marring of painted or unpainted surfaces after exposure to high impact sand, gravel or other abrasive materials. It shall also have high corrosion resistance.

BIDDER COMPLIES YES_____ NO _____

The front axle beam shall be rated to carry a minimum of 18,000 lbs.

The axle shall be warrantied for minimum five (5) years or five hundred thousand (500,000) miles whichever comes first.

BIDDER COMPLIES YES _____ NO _____

The front axle wheel bearings shall be lubricated with oil. The oil level can be visually checked via clear inspection windows in the front axle hubs.

BIDDER COMPLIES YES _____ NO _____

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BIDDER COMPLIES **YES**_____ **NO** _____

BRAKES

The brakes shall be Arvin Meritor EX225 Disc Plus disc brakes or equal. Each disc assembly shall include: one (1) 17" vented rotor, one (1) lightweight hub, one (1) twin-piston caliper, and two (2) quick-change pads. The disc brakes shall be provided with visual wear indicators.

BIDDER COMPLIES **YES**_____ **NO** _____

STEERING COLUMN AND WHEEL

The steering column shall be located at the driver's position with a multi-position tilt and telescopic adjustment. The steering wheel should be provided with a black vinyl cover with foam padding and a horn button, self-canceling turn signal switch, four-way hazard switch and headlamp dimmer switch.

The chassis shall include dual electric 12-volt horn.

BIDDER COMPLIES **YES**_____ **NO** _____

REAR AXLE & SUSPENSION

Shall have a minimum capacity of 24,000 lbs.

5-year warranty.

BIDDER COMPLIES **YES**_____ **NO** _____

REAR SHOCK ABSORBERS

Shock absorbers shall be supplied by the suspension manufacturer and installed on the rear axle suspension.

BIDDER COMPLIES **YES**_____ **NO** _____

REAR TIRES

The rear tires shall be Goodyear "H" or equal rated tubeless radials.

BIDDER COMPLIES YES_____ NO _____

TIRE BALANCING

There shall be counter acting balancing beads used in all tires.

BIDDER COMPLIES YES_____ NO _____

WHEELS

Shall be ACCURIDE brand or equal aluminum or steel.

BIDDER COMPLIES YES_____ NO _____

WHEEL PAINT

If steel wheels, they shall be finish painted the same as the primary/lower color of the cab by the chassis manufacturer.

BIDDER COMPLIES YES_____ NO _____

WHEEL GUARDS

Shall be installed.

BIDDER COMPLIES YES_____ NO _____

VALVE STEM EXTENSION - SINGLE AXLE

To allow for easy checking and inflation of the rear inner tire it shall be equipped with a multi-layer valve stem extension.

BIDDER COMPLIES YES_____ NO _____

VEHICLE TOP SPEED

The top speed of the vehicle shall be programmed at approximately 68 MPH +/-2 MPH at governed engine RPM.

BIDDER COMPLIES YES_____ NO _____

AIR BRAKE SYSTEM

The vehicle shall be equipped front and rear with Arvin Meritor air-operated brakes meeting or exceeding design and performance requirements of FMVSS-121 and test requirements of current NFPA 1901.

A rapid build-up air brake system shall be provided, designed to meet current NFPA 1901 requirements. The system shall be designed so the vehicle can be moved within 60 seconds of startup without brake drag and being able to stop under intended operating conditions following the 60-second buildup time.

There shall not be a separate electrical air compressor or shoreline to meet this requirement.

The air brakes shall include air tanks and a reservoir system with a minimum of 4152 cubic inch of air capacity. A floor mounted dual treadle valve shall split the breaking power between front and rear systems.

A spring-brake valve shall be installed to provide a controlled service brake application during an unlikely event including primary air supply loss.

The rear axle spring brakes shall automatically apply in any situation when the air pressure falls below 35 + or – 10 PSI and shall include a mechanical means for releasing the spring brakes when necessary. An audible alarm shall designate when the system air pressure is below 60 PSI.

A four (4) sensor, four (4) modulator Anti-lock Braking System (ABS) shall be installed on the front and rear axles in order to prevent the brakes from locking or skidding while braking during hard stops or on icy or wet surfaces. This in turn shall allow the driver to maintain steering control under heavy braking and in most instances, shorten the braking distance. The electronic monitoring system shall incorporate diagonal circuitry which shall monitor wheel speed during braking through a sensor and tone ring on each wheel. A dash mounted ABS lamp shall be provided to notify the driver of a system malfunction. The ABS system shall automatically disengage the auxiliary braking system device when required. The speedometer screen shall be capable of reporting all active defaults using PID/SID and FMI standards.

Anti-lock braking system shall be provided.

The Meritor Wabco ABS system or equal shall come with a three (3) year/300,000 mile parts and labor warranty.

BIDDER COMPLIES ***YES*** _____ ***NO*** _____

PARK BRAKE

Upon application of the push-pull valve in the cab, the rear brakes will engage via mechanical spring force. This is accomplished by dual chamber rear brakes, satisfying the FMVSS parking brake requirements.

BIDDER COMPLIES YES _____ NO _____

PARK BRAKE CONTROL

A Meritor Wabco manual hand control push-pull style valve shall operate the parking brake system. The control shall be yellow in color.

The parking brake actuation valve shall be mounted on the driver's side dash within easy reach of the driver.

BIDDER COMPLIES YES_____ NO _____

AIR DRYER

The brake system shall include a Wabco System Saver 1200 Plus air dryer or equal.

BIDDER COMPLIES YES _____ NO _____

MOISTURE EJECTORS

Drain valves shall be installed on all reservoirs of the air supply system.

BIDDER COMPLIES YES _____ NO _____

AIR SUPPLY LINES

shall be installed on the chassis in accordance with the manufacturer's best practices and SAE standards.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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AIR HORN RESERVOIR

One (1) air tank shall be installed on the chassis to act as a supply tank for operating air horns.

BIDDER COMPLIES YES_____ NO _____

FRAME

The chassis frame shall be designed utilizing industry accepted engineering best practices. The frame shall be specifically designed for fire apparatus use. Manufacturer's lifetime warranty.

BIDDER COMPLIES YES_____ NO _____

TOW HOOKS – FRONT & REAR

There shall be at least (2) tow hooks attached directly to the chassis frame. The tow eyes shall resistant to corrosion and painted to match the chassis or powder coated.

BIDDER COMPLIES YES_____ NO _____

ENGINE

A Cummins Diesel L9 9.0 liter
400 H.P. at 2100 RPM.
1250-foot pounds of torque at 1400 RPM.

BIDDER COMPLIES YES_____ NO _____

AIR COMPRESSOR

The air compressor provided for the engine shall be a Wabco® capable of producing 18.7 CFM.

BIDDER COMPLIES YES_____ NO _____

AIR GOVERNOR

The governor shall be calibrated to meet FMVSS requirements. The air governor shall be integrated in the air dryer assembly.

BIDDER COMPLIES YES_____ NO _____

ENGINE FAN DRIVE

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

DIESEL EXHAUST FLUID TANK

There shall be a molded polyethylene tank for the Diesel Exhaust Fluid (DEF). The tank shall have a capacity of not less than five (5) usable gallons.

BIDDER COMPLIES YES_____ NO _____

ENGINE EXHAUST WRAP

The exhaust tubing between the engine turbo and the diesel particulate filter (DPF) shall be wrapped with a thermal cover in order to retain the necessary heat for DPF regeneration.

BIDDER COMPLIES YES_____ NO _____

DIESEL PARTICULATE DIAGNOSTIC CONTROLS

Provide DPF system status annunciation indicator lights, lights shall be installed on driver dash to alert driver when regeneration is needed and when DPF is in an active re-generation cycle.

Warning systems shall provide DEF low level warning.

Driver's dash shall be provided with two (2) controls for the Diesel particulate filter; one for manual regeneration and one for Regen "Inhibit Switch".

BIDDER COMPLIES YES_____ NO _____

ENGINE COOLING SYSTEM

The radiator and the complete cooling system shall meet or exceed NFPA, EPA and engine manufacturer cooling system requirements. The system shall be designed to keep the engine properly cooled under all conditions.

The main components of the system shall include a surge tank, a charge air cooler, recirculation shields, a shroud, a fan, and all required tubing.

The charge air cooler shall be of a cross-flow design and constructed of aluminum with extruded tanks.

An aluminum surge tank with a low coolant probe and capable of removing entrained air from the cooling system, with built in sight glass. Low coolant shall be alarmed with the check engine light.

Cooling system shall be tested and certified by the engine manufacturer

COOLANT HOSES

BIDDER COMPLIES **YES** **NO**

ENGINE COOLANT

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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ADDITIONAL COOLANT SHUT OFF VALVE

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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TRANSMISSION

The transmission shall include prognostic diagnostic capabilities. These capabilities shall include the monitoring of the fluid life, filter change indication, and transmission clutch maintenance.

BIDDER COMPLIES YES _____ NO _____

TRANSMISSION COOLING SYSTEM

The transmission cooling system shall meet all transmission manufacturer requirements.

BIDDER COMPLIES YES_____ NO _____

TRANSMISSION SHIFT SELECTOR

An Allison touch pad selector shall be provided and located on the tunnel to the right of the driver.

The shift selector shall provide an indicator on the digital display and shall alert the driver/operator when a specific maintenance function is required.

BIDDER COMPLIES YES _____ NO _____

TRANSMISSION MODE PROGRAMMING

The transmission, upon start-up, will select the fifth speed operation without the need to press the mode button.

BIDDER COMPLIES YES _____ NO _____

DRIVELINE

All drivelines shall be heavy duty metal tube and equipped with universal joints.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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FUEL SYSTEM

The fuel tank shall have a capacity of at least fifty (50) gallons. The fuel tank shall be certified and tested to meet industry standards.

A sensor to detect water in the fuel should be provided and wired to the instrument panel lamp and audible alarm.

Pick-up and return ports shall be provided for diesel generator (if required)

A secondary fuel filter should be included as approved by the engine manufacturer.

FUEL COOLER

The fuel cooler shall incorporate a fan for improved heat transfer.

ALTERNATOR

BIDDER COMPLIES YES_____ NO _____

ELECTRICAL SYSTEM

All wiring color coded and labeled as to its function. Wiring which is cross link shall have high temperature insulation.

Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload.

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BIDDER COMPLIES YES_____ NO _____

ELECTRONIC LOAD MANAGER

An electronic load management system that monitors the vehicle 12-volt electrical system, and automatically reduces the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.

BIDDER COMPLIES YES_____ NO _____

EMI/RFI PROTECTION

The apparatus shall be manufactured to incorporate the latest designs in the electrical system with components that are state of the art to insure electromagnetic interference (EMI) and radio frequency interference (RFI) emissions are suppressed at the source.

The apparatus shall have the ability to operate in typical fire and rescue situations with no adverse effects from EMI and/or RFI.

The apparatus shall utilize components that are fully protected and wiring that utilizes shielding and loop backgrounds where required to control EMI/RFI susceptibility. The apparatus shall be bonded through ground straps. Relays and solenoids that are suspect to generating spurious electromagnetic radiation are diode and/or resistor protected to prevent transient voltage spikes.

In order to prevent the radio frequency interference completely the purchaser shall be requested to provide a listing of the type, power output, and frequencies of all radio and bio medical equipment that is proposed to be used on the apparatus.

BIDDER COMPLIES YES_____ NO _____

ELECTRICAL HARNESSING INSTALLATION

To ensure rugged dependability, all wiring harnesses installed by the apparatus manufacturer will conform to SAE and NFPA specifications:

Wiring will be run in loom or conduit where exposed, and have grommets or other edge protection where wires pass through metal.

Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment will be installed utilizing the following guidelines:

All wire ends not placed into connectors will be sealed with a heat shrink end cap. Wires without a terminating connector or sealed end cap will not be allowed.

All holes made in the roof will be caulked with silicon.

Appropriate number backlit s

witches **BIDDER COMPLIES** **YES**_____ **NO** _____

MASTER WARNING SWITCH

A master switch shall be included in the main rocker switch panel. The switch shall be a rocker type, red in color and labeled “Master” for identification. The switch shall feature control over all devices wired through it. Any warning device switch left in the “ON” position shall automatically power up when the master switch is activated.

BIDDER COMPLIES **YES**_____ **NO** _____

HIGH IDLE

The rescue shall have a “high idle” switch on the dash that shall maintain an engine RPM of 1,000.

BIDDER COMPLIES **YES**_____ **NO** _____

ADDITIONAL POWER & GROUND STUDS

One (1) additional ground studs shall be provided. These shall be powered directly from the battery.

BIDDER COMPLIES **YES**_____ **NO** _____

VEHICLE DATA RECORDER

Apparatus shall be equipped with a Class1 “Vehicle Data Recorder (VDR). The VDR will function per NFPA 1901-2009 sections 4.11.

The apparatus shall be equipped with a Class1 Seat Belt Warning System” (SBW) The SBW will function per NFPA 1901 14.1.3.10 (Seat Belt Warning) using the Class1 “Seat Belt Input Module” for seat occupied and belt status information.

BIDDER COMPLIES **YES**_____ **NO** _____

SEAT BELT WARNING SYSTEM

BIDDER COMPLIES YES _____ NO _____

The instrumentation panel within the cab shall feature a gauge panel which shall include three information centers, indicator lamps, control switches, alarms, and a LCD diagnostic panel.

The instrument panel shall contain the following gauges and indicators:

- To promote safety, the following indicator lamps will be integral to the gauge assembly. The following indicator lamps shall be located on the panel:

- Particle Filter Regeneration (DPF)

BATTERIES

The single start electrical system shall include four (4) with at least 950 CCA batteries with minimums of 3800-amps.

The batteries shall feature:

185-minute reserve capacity at a 25-amp draw at 80 degrees;

4/0 dual path starter cables per SAE J541;

Heat shrink and sealant encapsulated ends on the cables;

Maintenance free.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

BATTERY COMPARTMENTS

A well ventilated battery storage compartment shall house the batteries on the officer and driver side of the chassis and shall be located so as to offer easy access to the batteries when the cab is tilted.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

BATTERY CABLES

The starting system shall include cables which shall be protected by a 275-degree F, minimum high temperature flame retardant loom.

The cables shall be in a loom to help keep out dirt, dust and debris.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

BATTERY JUMPER TERMINAL

The starting system shall include two (2) battery jumper studs.

These studs shall be located in a position of easy access. They shall have plastic covers and properly labeled positive/negative.

The studs shall allow the vehicle to be jump started, charged, or the cab to be raised in an emergency in the event of battery failure.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

ENGINE COMPARTMENT LIGHTING

LED lights shall be mounted to the engine compartment in such a fashion as to provide as much light as possible to the engine compartment area.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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INTERIOR OVERHEAD CAB LED LIGHTING

Each cab door shall include a dual red and white LED lamp. There shall be one (1) light centered over each of the Driver and Officer's seat and one centered over each crew door.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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LOWER LEVEL WARNING DEVICES

The front of the cab shall have a minimum of four (4) Whelen model M-6 (OR EQUIVALENT) LED warning lights.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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UPPER LEVEL WARNING DEVICES

The cab roof shall have one (1) Whelen Freedom IV 72" Model F4N7QLED light bar or equivalent. The light bar shall be installed as far forward as possible.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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FRONT MARKER LAMPS

The cab front shall include amber marker lamps above the windshield in accordance with the Department of Transportation requirements.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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BROW LED SCENE LIGHT

BIDDER COMPLIES YES _____ NO _____

The light shall be interlocked for activation when either a cab door is not firmly closed, or an apparatus compartment door is not closed, and the parking brake is released.

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

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BIDDER COMPLIES YES_____ NO _____

A Kussmaul Super Auto Eject 20-amp automatic disconnect device, 120 volt shore power assembly, cover, solenoid input wire, power cord, and plug shall be installed. The 12 volt solenoid shall eject the shore power cord away from vehicle path upon sensing engine start; after ejection, the weatherproof cover snaps into position over inlet.

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

- ENGINE
- STEERING GEAR
- CHASSIS STRUCTURAL INTEGRITY
- FRONT AXLE MATERIAL AND WORKMANSHIP
- REAR AXLE MATERIAL AND WORKMANSHIP
- TRANSMISSION
- APPARATUS BODY STRUCTURAL INTEGRITY
- PAINT AND CORROSION
- MANUFACTURERS WARRANTIES FOR ALL MAJOR COMPONENTS

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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BODY GENERAL SPECIFICATIONS

OVERALL HEIGHT

An overall height restriction has not been specified for this apparatus. this apparatus. One (1) Overall Length Restriction, NONE

BIDDER COMPLIES ***YES***_____ ***NO*** _____

OVERALL LENGTH

An overall length restriction has not been specified for this apparatus. One (1) Overall Width Restriction, NONE.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

OVERALL WIDTH

An overall width restriction has not been specified for this apparatus. One (1) Wheelbase Restriction, NONE.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

WHEELBASE

A wheelbase restriction has not been specified for this apparatus.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

ANGLE OF APPROACH / DEPARTURE

Shall not be less than eight (8) degrees as specified by the current edition of NFPA 1901.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

SPECIAL SERVICE EQUIPMENT ALLOWANCE

In compliance with NFPA #1901 carrying capacity standards.

BIDDER COMPLIES YES_____ NO _____

ENGINEERING BLUEPRINTS

has submitted "proposal" blueprints which are "representative" of the vehicle being proposed and these have been generated on computer-aided-design (CAD) equipment.

BIDDER COMPLIES YES_____ NO _____

PRE-CONSTRUCTION CONFERENCE

A pre-construction conference can be conducted.

BIDDER COMPLIES YES_____ NO _____

INSPECTION TRIPS

One Inspection trip for two (1) Fire Department personnel shall be made to the facility during the course of construction of the apparatus.

BIDDER COMPLIES YES_____ NO _____

ALUMINUM BODY WARRANTY - TEN YEAR

Manufacturer warrants that the body under normal use and with reasonable maintenance, be structurally sound and will remain free from corrosion perforation for a period of TEN (10) years.

BIDDER COMPLIES YES_____ NO _____

ALUMINUM SUBFRAME WARRANTY

Warrants that it will maintain such structural integrity for a period of ten (10) years of ownership or 100,000 miles, whichever comes first.

BIDDER COMPLIES YES_____ NO _____

PAINT WARRANTY TEN YEAR

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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TRAFFIC LIGHT CONTROL

One (1) Opticom Low-Profile LED high-priority traffic light emitter and control device shall be installed and mounted in the specified lightbar. The traffic emitter shall be wired thru the park brake to deactivate when the park brake is set.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

FEDERAL Q2B SIREN

There shall be a Federal Q2B-NN siren installed. The siren shall be securely mounted and activated by means of solenoid and shall include a brake.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

FOOT SWITCH, OFFICERS SIDE

A foot switch for the mechanical siren shall be provided on the officer's side.

BIDDER COMPLIES ***YES***_____ ***NO*** _____

STABILITY

The maximum voltage supplied to portable equipment shall not exceed 275 volts to ground. Higher voltage shall be permitted only when used to operate fixed wired, permanently mounted equipment on the apparatus.

BIDDER COMPLIES YES _____ NO _____

All components, equipment, and installation procedures shall conform to *NFPA 70, National Electrical Code*, except where superseded by the requirements of this chapter. Where the requirements of this chapter differ from those in *NFPA 70*, the requirements in this chapter shall apply.

BIDDER COMPLIES YES _____ NO _____

Any equipment, except a PTO-driven generator, used in an underbody or under chassis location that is subject to road spray shall be either listed as Type 4 or mounted in an enclosure that is listed as Type 4.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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The power source, at any load, shall not produce a noise level that exceeds 90 dBA in any driving compartment, crew compartment, or onboard command area with windows and doors closed or at any operator's station on the apparatus.

POWER SUPPLY

All power supply assembly conductors, including neutral and grounding conductors, shall have an equivalent ampere rating and shall be sized to carry not less than 115 percent of the ampereage of the nameplate current rating of the power source.

OVER-CURRENT PROTECTION

A main over current protection device shall be provided that is either incorporated in the power source or connected to the power source by a power supply assembly. The size of the main over current protection device shall not exceed 100 percent of the rated amperage stated on the power source specification label.

Each over current protection device shall be marked with a label to identify the function of the circuit it protects.

The panel shall be visible and located so that there is unimpeded access to the panel board controls. All panel boards shall be designed for use in their intended location. The

Where the power source is 120/240 V and 120 V loads are connected, the apparatus manufacturer or line voltage system installer shall consider load balancing to the extent that it is possible.

WIRING METHODS

- 1) Metallic or nonmetallic liquid tight flexible conduit rated at temperatures not less than 194°F (90°C) with stranded copper wire rated for wet locations and temperatures not less than 194°F (90°C);
- 2) An approved type of flexible cord rated at 600 V and at temperatures not less than 194°F (90°C).

Electrical cord or conduit shall not be attached to chassis suspension components, water or fuel lines, air or air brake lines, hydraulic lines, exhaust system components, or low voltage wiring and shall be arranged as follows:

- 1) Separated by a minimum distance of 12 in. (300 mm) from exhaust piping or shielded from such piping;
- 2) Separated from fuel lines by a minimum distance of 6 in. (150 mm).

Electrical cord or conduit shall be supported within 6 in. (150 mm) of any junction box and at a minimum of every 24 in. (600 mm) of run. Supports shall be made of nonmetallic materials or of corrosion-resistant or corrosion-protected metal. All supports shall be of a design that does not cut or abrade the conduit or cord and shall be mechanically fastened to the apparatus.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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WIRING IDENTIFICATION

Each line voltage circuit originating from the main panel board shall be identified. The wire or circuit identification either shall reference a wiring diagram or wire list or shall indicate the final termination point of the circuit.

Where pre-wiring for future power sources or devices exists, the un-terminated ends shall be marked with a label showing their wire size and intended function.

BIDDER COMPLIES YES _____ NO _____

WIRING SYSTEM COMPONENTS

Only stranded copper conductors with an insulation rated for temperatures of at least 194°F (90°C) and wet locations shall be used. Conductors in flexible cord shall be sized in accordance with Table 400.5(A) of *NFPA 70*. Conductors used in conduit shall be sized in accordance with 310.15, "Ampacities for Conductors Rated 0–2000 Volts," of *NFPA 70*. Aluminum or copper-clad aluminum conductors shall not be used.

All boxes shall conform to and be mounted in accordance with Article 314, "Outlet, Device, Pull, and Junction Boxes; Conduit Bodies; Fittings; and Manholes," of *NFPA 70*. All boxes shall be accessible using ordinary hand tools. Boxes shall not be permitted behind welded or pop-riveted panels.

The maximum number of conductors permitted in any box shall be in accordance *NFPA 70*. All wiring connections and terminations shall provide a positive mechanical and electrical connection. Connectors shall be installed in accordance with the manufacturer's instructions. Wire nuts or insulation displacement and insulation piercing connectors shall not be used.

Each switch shall indicate the position of its contact points (i.e., open or closed) and shall be rated for the continuous operation of the load being controlled. All switches shall be marked with a label indicating the function of the switch.

Circuit breakers used as switches shall be "switch rated" (SWD) or better. Switches shall simultaneously open all associated line voltage conductors.

Line voltage circuits controlled by low voltage circuits shall be wired through properly rated relays in listed enclosures that control all non-grounded current-carrying conductors.

BIDDER COMPLIES YES _____ NO _____

RECEPTACLES AND INLET DEVICES

WET AND DRY LOCATIONS

All wet location receptacle outlets and inlet devices, including those on hardwired, remote power distribution boxes, shall be of the grounding type, provided with a wet location cover, and installed in accordance with Section 406.8, "Receptacles in Damp or Wet Locations," of *NFPA 70*.

All receptacles located in a wet location shall be not less than 24 in. All receptacles located in a dry location shall be of the grounding type and shall be at least 12 in. above the interior floor height. No receptacle shall be installed in a face-up position.

The face of any wet location receptacle shall be installed in a plane from vertical to not more than 45 degrees off vertical.

BIDDER COMPLIES YES _____ NO _____

RECEPTACLE LABEL

Each receptacle shall be marked with a label indicating the nominal line voltage (120 volts or 240 volts) and the current rating in amps of the circuit. If the receptacle is DC or other than single phase, that information shall also be marked on the label.

All receptacles and electrical inlet devices shall be listed to UL 498, *Standard for Safety Attachment Plugs and Receptacles*, or other recognized performance standards. Receptacles used for DC voltages shall be rated for DC service.

BIDDER COMPLIES YES _____ NO _____

WIRING SCHEMATICS

An "As-Built" Wiring diagrams for line voltage systems shall be provided.

BIDDER COMPLIES YES _____ NO _____

120V ELECTRIC RECEPTACLE -- STRAIGHT BLADE

Four (4) 120-volt 20 amp straight blade, 3-prong duplex receptacle with spring loaded weatherproof cover shall be provided.

The electric receptacle shall be located inside the front portion of the cab.

BIDDER COMPLIES YES _____ NO _____

FLOODLIGHT - FRONT OF CAB

A floodlight shall be installed on the front center of the cab. The brow quartz floodlight(s) shall be circuit breaker protected. The circuit breaker(s) shall be used as an ON/OFF switch(es) for the floodlight(s).

BIDDER COMPLIES YES _____ NO _____

BACKUP CAMERA

One (1) chassis supplied rear camera system shall be mounted on the rear of the vehicle. All system components shall be installed by the apparatus body manufacturer.

BIDDER COMPLIES YES _____ NO _____

HAND LIGHTS

All NFPA required portable hand lights supplied by the Customer must be installed before the apparatus is placed into service.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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TAIL LIGHTS

Rear body tail lights shall be vertically mounted and located per Federal Motor Vehicle Safety Standards, FMVSS and Canadian Motor Vehicle Safety Standards CMVSS. The following lights shall be furnished;

- Two (2) Whelen Series amber LED turn lights
- Two (2) Whelen Series red LED stop/tail lights
- Two (2) Whelen Series clear LED back-up lights with clear lens

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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MIDSHIP MARKER/TURN SIGNAL

Two (2) Whelen model amber LED midship body clearance marker/turn signal lights shall be provided and installed, one (1) light on each side of the body, in forward wheel well of rear axle. Midship marker/turn lights shall be wired to the headlight circuit of the chassis.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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MARKER LIGHTS

BIDDER COMPLIES YES _____ NO _____

One (1) LED license plate light shall be installed on the rear of the body.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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There shall be cab/chassis provided ground lights installed below bumper capable of providing illumination at a minimum level of 2 fc (20 lx) on ground areas within 30 in. (800 mm) of the edge of the vehicle in areas designed for personnel to climb onto or descend from the vehicle to the ground level.

BIDDER COMPLIES YES _____ NO _____

Two (2) LED step lights with clear lens shall be installed to illuminate the step surfaces at the rear of the apparatus body.

BIDDER COMPLIES **YES** **NO**

There shall be four (4) surface mounted Scene Light(s) provided on the upper Body. Light quantity shall be divided equally per side. The light shall have at least 6,500 useable lumens each. The scene light is covered by five-year factory warranty.

Two (2) switches shall be provided, one (1) for the street side scene lights, and one (1) for the curbside scene lights.

The Lights shall be controlled at the Switch Panel in Cab.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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BIDDER COMPLIES YES_____ NO _____

BIDDER COMPLIES YES _____ NO _____

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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One (1) label shall be installed in the cab to indicate seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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There shall be two tow eyes furnished under the rear of the body and attached directly to the chassis frame rails. There shall be a reinforcement spreader bar connecting the two tow eyes.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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The chassis shall feature two heavy duty bumpers. There shall be a 12 VDC quick connect on each bumper to power winch.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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The apparatus shall have chrome or stainless-steel hub and lug nut covers on the front and single rear axles.

BIDDER COMPLIES YES _____ NO _____

There shall be a tire pressure indicator at each tire's valve stem on the vehicle that shall indicate if there is insufficient pressure in the specific tire.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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BIDDER COMPLIES YES _____ NO _____

BODY SUBFRAME

The body subframe shall be constructed from aluminum alloy. Subframe shall consist of aluminum tubes, the same width as the chassis frame rails. Welded to this tubing shall be cross members of aluminum. These cross members shall extend the full width of the body to support the compartments. Cross members shall be located at front and rear of the body, below compartment divider walls, and in front and rear of wheel well opening. Additional aluminum cross members shall be located on 16" centers, or as necessary to support walkway or heavy equipment.

BIDDER COMPLIES YES _____ NO _____

FENDERS

The rear wheel wells shall be radius cut for a streamlined appearance. A polished stainless steel fender shall be furnished at each rear wheel well opening.

BIDDER COMPLIES YES _____ NO _____

BODY DIMENSIONS

The aluminum rescue body shall be approximately twenty two-foot (22') long.

BIDDER COMPLIES YES _____ NO _____

BODY DIMENSIONS

The aluminum rescue body shall be no wider than 102".

BIDDER COMPLIES YES _____ NO _____

ROLL UP DOOR CONSTRUCTION

Eight (8) compartment doors shall be equipped with AMDOR™ (OR EQUIVALENT) brand roll-up doors.

BIDDER COMPLIES YES _____ NO _____

EZ-PULL DOWN STRAPS

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES_____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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HORIZONTAL MOUNTING OF AIR PRESSURE VESSELS/CYLINDERS

The specified air pressure vessels or cylinders shall be securely mounted in a rack in the location specified below. The mounting rack shall be installed in an adjustable manner, directly to the apparatus body or sub-structure. The units shall not be subject to damage, wear, or vibration while in the mounting system. The units shall be accessible for removal, testing, and maintenance. The following shall be installed:

Number of pressure vessels: **Six (6)**

BIDDER COMPLIES **YES**_____ **NO** _____

DOT PRESSURE CYLINDER AIR STORAGE SPECIFICATIONS

Six (6) DOT #6000 air cylinders shall be provided and installed and piped to the specified air system.

The air pressure cylinders shall be painted bright yellow and labeled "Breathing Air" with paint on the cylinder in 1" high black lettering. The new DOT cylinders shall have a stamped date of manufacture within 12 months from the shipping date of the apparatus.

BIDDER COMPLIES **YES**_____ **NO** _____

CYLINDER FILL ENCLOSURE

A fill station to refill self-contained breathing apparatus (SCBA) cylinders shall be installed on the apparatus. The fill station shall be designed to hold two (2) cylinders.

The fill station shall be built and tested by a third party to comply with the applicable NFPA 1901 standards.

The fill station shall be supplied on a welded structural steel frame and shall be fully enclosed. The fill station shall carry a twelve (12) month warranty for defects in material and workmanship.

The front-loading fill station shall totally contain the SCBA or SCUBA cylinders during the refilling process.

Two (2) fill hoses shall be located within the fill station. The fill hoses shall be equipped with a bleed valves and SCBA fill adapters of choice. CGA-346 male adapters shall be provided to anchor the fill hoses when not in use.

BIDDER COMPLIES **YES**_____ **NO** _____

BIDDER COMPLIES YES _____ NO _____

There shall be one (1) full height compartment located at the front of the apparatus body. The compartment shall be equipped with a full height natural finish roll up door.

One (1) slide-out and tilt-down tray with 90% extension rated for 250 lbs. Approximately 30" deep and width of compartment layout or door opening.

BIDDER COMPLIES YES _____ NO _____

There shall be one (1) full height transverse compartment located ahead of the rear wheels. The compartment shall be equipped with a full height natural finish roll up door.

Two (2) tool boards capable of 600lb capacity each. These will be vertical full height that have 100% extension

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are affixed in place for adjustable shelving and equipment mounting.

One (1) dual direction Slide-Master Series standard profile telescoping equipment tray(s) shall be installed that is(are) transverse. The tray assembly shall have an aluminum slide frame with sealed roller bearings rated to 1,000 pounds. The slide frame shall extend at least 70% out either side of the compartment allowing the tray to be easily accessible from outside the compartment on either side of the apparatus.

An integrated lock shall hold tray in both the "in" and "out" positions.

There shall be one (1) 400 lbs. slide-out tray(s) approximately 24" deep and as wide as the compartment layout or door opening permits.

There shall be a transverse plywood storage module for full 4' x 8' sheets of plywood without altering the size. The module shall be fabricated from 3/16" (.188) 3003H-14 aluminum alloy sheet and shall have hinged retainer doors at each end to hold plywood in place. Storage module shall hold the following sheets of plywood;

Eight (8) Mentor Fire Department supplied sheets of 4' x 8' x 3/4" sheets of plywood.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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FIXED AT TRANSITION

One (1) S.O.R. / STOKES/LITTLE Giant storage. This storage shall be across the **forward** upper area of the compartment. LITTLE GIANT STORAGE SHALL BE ACROSS THE **REARWARD** UPPER AREA OF THE COMPARTMENT

BIDDER COMPLIES YES _____ NO _____

RIGHT FRONT COMPARTMENT

There shall be one (1) full height transverse compartment located at the front of the apparatus body. The compartment shall be equipped with a full height natural finish roll up door.

COMPARTMENT DEPTH

The compartment shall be transverse to the opposite side of the truck.

ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are affixed in place for adjustable shelving and equipment mounting.

One (1) Resolve Specialty Space Saver model 100A vertical mobile filling station(s) designed for SCBA and SCUBA cylinders shall be provided. Fill station shall be capable of simultaneously filling (2) cylinders, with door safety interlocks. The fill enclosure shall meet NFPA 1901 testing certification, and shall be approx. 42.50" high (53" high with door open) x 13.00" wide x 23.00" deep and weigh 405 lbs. If a cascade air fill control panel is provided it will attach to either side of fill station or remotely.

High pressure air hose and couplings are to have a pressure rating equal to or greater than the highest pressure expected to be encountered, with a safety factor of 4 to 1.

The Resolve Space Saver fill station shall be provided with a four (4) bank, manual control cascade air fill control panel with black non-glare control panel. Panel is designed with embedded color graphics to help assure proper operation in the field. All gauges are premium glycerin filled which have a 1.5% accuracy rating. Panel includes; safety gauges, charge and bleed valves and pressure regulator for automatic SCBA filling. The panel housing swings open from the front to allow for easy access to gauges and valves in the event service is needed. A refill port for re-filling air storage with female fitting S252P with S44-2 dust cap is provided on front of panel. Panel shall be 42.50" x 9.75" x 18.00".

The fill station fill whip(s) shall terminate in a high pressure CGA-347 threaded connectors for 4,500 - 5,500 PSI air pack cylinders.

BIDDER COMPLIES YES _____ NO _____

RIGHT COMPARTMENT (AHEAD OF WHEELS)

There shall be one (1) full height transverse compartment located ahead of the rear wheels. The compartment shall be equipped with a full height natural finish roll up door.

The compartment shall be equipped with the following:

ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are affixed in place for adjustable shelving and equipment mounting.

Two (2) vertical tool mounting boards rated at least 600lbs per board. They shall be 100% pull-out style

One (1) SlideMaster MT-R Series tip-down equipment tray(s) shall be installed that is(are) approximately half the depth of the body width. The tray assembly shall have an aluminum slide frame with sealed roller bearings rated to 250 pounds.

BIDDER COMPLIES YES _____ NO _____

RIGHT OVERWHEEL COMPARTMENT

There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single natural finish roll up door.

COMPARTMENT DEPTH

The compartment shall be transverse to the opposite side of the truck.

The compartment shall be equipped with the following items:

ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are affixed in place for adjustable shelving and equipment mounting.

TIP-DOWN TRAY

One (1) SlideMaster with 100% slide-out and at least 750 lb. capacity. This tray will be approximately 46" deep. Width will depend on air cylinder mounting

BIDDER COMPLIES YES _____ NO _____

RIGHT REAR COMPARTMENT

There shall be one (1) full height compartment located behind the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door.

COMPARTMENT DEPTH

The compartment shall be transverse to the opposite side of the truck.

ADJUSTABLE SHELVING TRACKS

The compartments shall be equipped with four (4) aluminum adjustable tracks, vertically mounted, that are affixed in place for adjustable shelving and equipment mounting.

One (1) dual direction Slide-Master Series standard profile telescoping equipment tray(s) shall be installed that is(are) transverse. The tray assembly shall have an aluminum slide frame with sealed roller bearings rated to 1,000 pounds. The slide frame shall extend at least 70% out either side of the compartment allowing the tray to be easily accessible from outside the compartment on either side of the apparatus.

The rear body panels of the body shall be a smooth material, to allow for the proper application and installation of a "Chevron" stripe on the rear.

BIDDER COMPLIES YES _____ NO _____

CANOPY AWNING - 110V ELECTRIC

One (1) side body 110V electric awning shall be up to at least 20 feet long x 10 feet wide and shall be installed on the side of the body. A recessed awning is preferred. System to detect canopy motion such as wind is also preferred.

Awning color shall match upper body color

BIDDER COMPLIES YES _____ NO _____

EXTRUDED ALUMINUM RUB RAILS

Full body length polished aluminum rub rails shall be bolted in place on the lower right and left body sides. There shall be nylon spacers provided between the rub rail and the body. This shall allow wash out and replacement in the event of damage.

BIDDER COMPLIES YES _____ NO _____

FUEL PIPING AND FILL CAP

There shall be a fuel fill cap provided in the recessed area of the left side rear wheel well clearly marked, "DIESEL FUEL ONLY". The fill shall be piped to the fuel tank.

BIDDER COMPLIES YES _____ NO _____

UPPER BODY COMPARTMENTS

There shall be a forward transverse compartment measuring approximately 90.0" long x 27.0" wide x 28.5" deep. There shall be four (4) compartments parallel to the sides of the body, two (2) on each side. Each of these compartments shall be approximately 85.0" long x 28.0" wide x 28.5" deep. Each compartment shall be integral with the body construction and will not be bolted or add-on modules. The outside walls of each compartment will be double walled to prevent equipment from denting the outside painted surface.

Each compartment shall have a lift-up type compartment door hinged on the outboard side. Each door shall be fabricated from 3/16" aluminum tread plate. Each door shall have two (2) pneumatic type cylinders, one (1) at each end, attached to cast aluminum brackets

The ladder shall be wired to the door ajar warning light in cab to warn the driver that the ladder is in the down position. Ladder shall be mounted to body with stainless steel bolts.

WALKWAY EXTENSION STEP

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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GENERATOR DRIVE

MOUNTING

The generator shall be mounted on a heavily reinforced steel frame in the chassis frame rail area providing adequate road clearance, and service accessibility. The generator shall be protected from direct road spray with underside aluminum or stainless steel bolt-on protection guard.

A "PTO control" shall be located at driver's position. Generator shall be equipped with a means to prevent the unintended movement of the control device from its set position. An interlock shall prevent PTO engagement unless the parking brake is engaged.

An indicator light shall be located in the driving compartment. The light shall be energized when the PTO drive has been engaged.

BIDDER COMPLIES **YES**_____ **NO** _____

ELECTRICAL SYSTEM INSTALLATION

The line voltage electrical system shall comply with the applicable NFPA standards and shall also comply with applicable sections of the National Electric Code #70 standards. The electrical equipment installed shall be suitable for intended use and type locations (wet, dry, or underbody and chassis). The grounding and bonding shall comply to applicable sections of NFPA standards. The chassis frame rail, body sheet metal, and cab sheet metal shall be properly bonded per NFPA schematic.

BIDDER COMPLIES **YES**_____ **NO** _____

OVER CURRENT PROTECTION PANEL

Manually re-settable overcurrent devices shall be installed to protect the line voltage electrical system components. A main overcurrent protection device shall be provided that is either incorporated in the power source or is connected to the power source by a power supply assembly.

Overcurrent protection devices shall be provided for each individual circuit and shall be sized at not less than 15 amps in accordance with NEC. Each overcurrent protection device shall be marked to identify the function of the circuit it protects. The circuit breaker panel and instruments shall be located so that all circuit breakers are readily visible under normal operating conditions. The panel shall be readily visible and located so that there is unimpeded access to the panel board controls.

The chassis engine shall have a governor capable of maintaining engine speed within the limits required by the generator to meet frequency control.

BIDDER COMPLIES YES _____ NO _____

ELECTRICAL SYSTEM TESTING

All apparatus installed wiring and associated equipment shall be tested by the apparatus manufacturer in compliance to applicable NFPA standards.

BIDDER COMPLIES YES _____ NO _____

CIRCUIT BREAKER BOX

One (1) circuit breaker box for single phase voltage equipment shall be provided capable of holding twenty (20) breakers.

BIDDER COMPLIES YES _____ NO _____

CIRCUIT BREAKER BOX LOCATION

The circuit breaker box shall be installed in an outside body compartment.

BIDDER COMPLIES YES _____ NO _____

GENERATOR MONITORING PANEL

A digital meter package shall be provided to properly monitor the generator performance and load demand during operation. The electrical parameters can be viewed on a backlit LCD screen. The 15 screens are accessible via four buttons on the front panel allowing the user to scroll between various screens. The following shall be displayed full-time;

- Generator frequency in hertz
- Line 1 current in amperes
- Line 2 current in amperes
- Generator voltage in volts

In addition, an elapsed generator hours gauge shall be provided near the digital meter.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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LIGHT TOWER

The Command Light shall be covered by a five (5) year limited warranty from defects in materials and workmanship. An operation, maintenance, and parts manual shall be provided with the completed unit.

LIGHT TOWER CONSTRUCTION AND DESIGN

The light tower shall be tested to in wind conditions of 90 mph (150 kph) minimum. Other type floodlights that have not been tested to these conditions are not acceptable.

BIDDER COMPLIES YES _____ NO _____

LIGHT TOWER ELECTRICAL SYSTEM

The tower base shall have a light that illuminates the envelope of motion during any movement of the light tower mast per NFPA 1901.

Light Tower Floodlights

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BIDDER COMPLIES YES _____ NO _____

The light tower shall be electro-statically powder coated with a hammer tone gray color.

BIDDER COMPLIES YES _____ NO _____

The light tower(s) shall be operated with a hand-held 15-foot umbilical line remote control. The storage station for the remote control unit shall be equipped with a button to activate the "Auto-Park" automatic nesting feature. The remote control shall be located per the itemized compartment list and include;

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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A three-sided tree limb guard shall be provided fabricated from smooth aluminum and painted to match the upper paint color to provide protection to the specified roof mounted equipment from small tree branches.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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PORTABLE WINCH

One (1) Warn Zeon, **8,000 lb. minimum** 12 VDC electric winch shall be provided with the completed unit. Winch shall be capable of being mounted to the vehicle by inserting the 2" tube of carrier into a properly rated receiver and pinned into place for use.

Winch shall be supplied with **80' of 3/8" diameter galvanized aircraft cable** and hook assembly.

A 12' remote control shall be provided that permits the operator to stand at a safe operating distance from the cable and winch. Winch shall have a limited lifetime warranty.

BIDDER COMPLIES YES _____ NO _____

ROPE ANCHOR OR PORTABLE WINCH RECEIVERS

The completed unit shall have an integrated receiver or anchor system for use with removable rope anchor point and/or a portable electric winch, when specified.

Receivers or anchors installed at any location on the apparatus for use as removable winch anchors shall be designed and affixed to provide at least a 2.0 to 1 straight line pull no-yield safety factor over the load rating of the removable winch.

Receivers or anchors installed at any location on the apparatus for use with rope operations shall be designed and affixed to the apparatus to provide at least a 9,000 lbf (40,000 N) no-yield condition with a straight line pull.

A safety sign FAMA28 shall be located on or near each receiver or anchor stating the maximum straight line pull rating.

Front, Rear and both side Receivers shall have the following load rating:

	<u>STRAIGHT PULL</u>	<u>SAFETY FACTOR</u>
Rope Tie Off:	600 lbs.	15:1
Winch:	5,000 lbs.	2:1

BIDDER COMPLIES YES _____ NO _____

ELECTRICAL RECEPTACLE

One (1) 12 volt Warn quick disconnect electrical receptacle, shall be installed near each receiver.

BIDDER COMPLIES YES _____ NO _____

INTERIOR COMPARTMENT FINISH

The interior of the eight (8) compartments shall be unpainted and have a swirl finish.

BIDDER COMPLIES **YES** **NO**

TOUCH-UP PAINT

Touch-up paint shall be furnished with the completed truck at final delivery.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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WHEEL CHOCKS WITH MOUNTS

A pair of Zico wheel chocks shall be provided and mounted under the apparatus body with horizontal mounting brackets.

BIDDER COMPLIES **YES** **NO**

REFLECTIVE STRIPE REQUIREMENTS

All retroreflective materials shall conform to the requirements of ASTM D4956, *Standard Specification for Retroreflective Sheeting for Traffic Control*, Section 6.1.1 for Type I Sheeting.

A retroreflective stripe(s) shall be affixed to at least 50 percent of the cab and body length on each side, excluding the pump panel areas, and at least 25 percent of the width of the front of the vehicle, not including mirrors or other protrusions.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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GRAPHICS PROOF

A color graphics proof of the reflective striping layout shall be provided for approval by Mentor Fire Department prior to installation.

<i>BIDDER COMPLIES</i>	<i>YES</i>	<i>NO</i>
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REFLECTIVE STRIPE - CAB SIDE

The reflective stripe material shall be 6" wide. This reflective stripe shall be white in color.

BIDDER COMPLIES YES _____ NO _____

REFLECTIVE STRIPE - CAB FRONT

The reflective stripe material shall be 6" wide. This reflective stripe shall be white in color.

BIDDER COMPLIES YES _____ NO _____

REFLECTIVE STRIPE - CAB DOOR INTERIOR

Any door of the apparatus designed to allow persons to enter or exit the apparatus shall have at least 96 in.2 (62,000 mm2) of retroreflective material affixed to the inside of the door.

BIDDER COMPLIES YES _____ NO _____

REFLECTIVE STRIPE - BODY SIDES

The reflective stripe material shall be 6" wide.
This reflective stripe shall be white in color.

The stripe shall remain in a straight line from the front of the front of cab to the rear body.

BIDDER COMPLIES YES _____ NO _____

CHEVRON REFLECTIVE STRIPE - REAR SIDES PANELS

At least 50 percent of the rear-facing vertical surfaces, visible from the rear of the apparatus shall be equipped with retroreflective striping in a chevron pattern sloping downward and away from the centerline of the vehicle at an angle of 45 degrees. Each stripe shall be 6" width.

BIDDER COMPLIES YES _____ NO _____

NFPA REQUIRED TESTING OF ELECTRICAL SYSTEM

The apparatus shall be electrically tested upon completion of the vehicle and prior to delivery. The electrical testing, certifications, and test results shall be submitted with delivery documentation per requirements of the applicable NFPA standards. The following minimum testing shall be completed by the apparatus manufacturer:

1. Reserve capacity test:
2. Alternator performance test at idle:
3. Alternator performance test at full load:
4. Low voltage alarm test:

BIDDER COMPLIES **YES**_____ **NO** _____

NFPA REQUIRED DOCUMENTATION

The following documentation shall be provided on delivery of the apparatus:

- a. Documentation of the electrical system performance tests required above.
- b. A written load analysis, including:
 1. The nameplate rating of the alternator.
 2. The alternator rating under the conditions.
 3. Each specified component load.
 4. Individual intermittent loads.

BIDDER COMPLIES **YES**_____ **NO** _____

VI. PROPOSAL-CONTRACT FORM

The undersigned hereby proposes to furnish the City of Mentor, Ohio the following item(s) in accordance with the Specifications and upon the terms and conditions of this proposal, providing this proposal or any part hereof is accepted as a contract by the City of Mentor.

<u>ITEM #</u>	<u>DESCRIPTION</u>	<u>TOTAL PRICE</u>
1.	2020 Custom four-door cab and chassis with a 22 ft Rescue Body	\$_____

Delivery (Days After Receipt of Purchase Order) _____

Terms of Sale:_____

Warranty:_____

CONDITIONS: The Instructions to Bidders and the Specifications are a part of this contract as effectively as though they preceded the signatures of the parties. This contract is not valid until accepted and signed by the City of Mentor, Ohio.

VII. STATEMENT OF BIDDER QUALIFICATIONS

- 1) Years in business providing the goods or service requested in this bid _____
 - 2) Please list on a separate sheet(s), contracts with municipalities previously held, and now held. Please list by community name, contact person, address, phone number and scope of project (starting with the most recent).
 - 3) Is your company in satisfactory financial condition? Yes _____ No _____
 - 4) How many miles is your facility from the Mentor Municipal Center? _____
 - 5) Please list on a separate sheet(s) the equipment to be used in fulfilling this contract.
 - 6) Identify the project manager who will be assigned to this project and applicable years of experience managing comparable jobs.
-

For the following questions, on a separate sheet, please describe in full the circumstances for any Yes answer.

- 7) Has your company had any business interruptions as a result of financial conditions in the past two (2) years? Yes _____ No _____
- 8) Has your company been rejected for a public contract despite being a low bidder for any reason? Yes _____ No _____
- 9) Has your company had any claims against or a performance bond cancelled? Yes _____ No _____
- 10) Has your company paid penalties or liquidated damages imposed as a result of delay on a public project? Yes _____ No _____
- 11) Has your company been found to have committed an unfair labor practice or any other employment/labor law violation in such areas as discrimination, prevailing wage, Workers' Compensation or OSHA? Yes _____ No _____
- 12) Has your company in the last three (3) years had a municipal contract cancelled or terminated? Yes _____ No _____

VII. STATEMENT OF BIDDER QUALIFICATIONS (CONTINUED)

BIDDER NAME (print/type): _____

BIDDER ADDRESS: _____

BIDDER CONTACT: _____

BIDDER PHONE NUMBER: _____

BIDDER FAX NUMBER: _____

BIDDER E-MAIL: _____

Federal Tax Identification Number _____

State Tax Identification Number _____