

City of Mentor
BID SET

**Purchase an Aerial Mid-Mount
Ladder Truck
August 2024**

Prepared under the supervision of
Deputy Chief Ron Zak
Date July 12, 2024
Fire Department

Approved By:
Fire Chief Robert Searles
Fire Department
Date July 12, 2024

CITY OF MENTOR OFFICIALS

ADMINISTRATION

Kenneth J. Filipiak, City Manager

David W. Malinowski, Finance Director

Joseph P. Szeman, Law Director

David A. Swiger, City Engineer

Matthew Schweikert, Director of Public Works

Kenn 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

Sean P. Blake, President

John A. Krueger, Vice President

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Mark Freeman

Scott J. Marn

Ray Kirchner

Julie Schiavoni, Clerk of Council

THE CITY OF MENTOR
8500 CIVIC CENTER BOULEVARD
MENTOR, OH 44060
SPECIFICATIONS AND BID FORMS FOR:
PURCHASE an Aerial Ladder Truck

CONTENTS:

I. LEGAL NOTICEPage LN-1
II. INSTRUCTIONS TO BIDDERSPages IB-1/4
III. BUSINESS ENTITY RESOLUTIONPage BER-1
IV. BIDDERS ACCEPTANCE TO CONTRACTPages BAC-1 - 6
V. SPECIFICATIONSPage 1 - 82
VI. PROPOSAL-CONTRACT FORMPages 83
VII. STATEMENT OF BIDDER QUALIFICATIONS.....Pages 84– 85

PURCHASING OFFICE

DATE: Friday, August 9, 2024

11:00 a.m.

ALL BIDS SUBMITTED MUST INCLUDE THE REQUIRED BID DEPOSIT AND A PROPERLY EXECUTED BUSINESS ENTITY RESOLUTION (BER-1).

ALL PROPOSALS SUBMITTED MUST INCLUDE A PROPERLY EXECUTED BIDDERS ACCPTANCE TO CONTRACT (BAC-1) FORM.

I. LEGAL NOTICE

The CITY OF MENTOR will receive sealed bids at the Purchasing Office, 8500 Civic Center Blvd., Mentor, Ohio 44060, until 11:00 a.m. (local time) on August 9, 2024 for:

PURCHASE AN AERIAL MID-MOUNT LADDER TRUCK

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. Bidders shall be responsible for checking for Addenda and obtaining any from the website.

Kenneth Filipiak, City Manager

NEWS HERALD:

PUBLISH DATES:

July 19, 2024
July 26, 2024
August 2, 2024

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
fetsko@cityofmentor.com

OR

Kyle Kasky at 440-974-5770 x1509
kasky@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 _____, 2024.

Signed: _____
(Notary Public)

AFFIDAVIT
OF COMPLIANCE WITH OHIO REVISED CODE SECTION 3517.13

STATE OF OHIO

COUNTY OF LAKE

_____ being duly sworn deposes and states
as follows:

1. I am duly authorized to make the statements contained herein on behalf of _____ (“the Contracting Party”).
2. The Contracting Party is a/an (select one):
 - Individual, partnership, or other unincorporated business association (including without limitation, a professional association organized under Ohio Revised Code Chapter 1787), estate, or trust;
 - Corporation organized and existing under the laws of the State of _____;
 - Labor organization.
3. I hereby affirm that the Contracting Party and each of the individuals specified in R.C. 3517.13(I) (with respect to non-corporate entities and labor organizations) or R.C. 3517.13(J) (with respect to corporations) are in full compliance with the political contribution limitations set forth in R.C. 3517.13(I) and (J), as applicable.
4. I understand that a false representation on this certification will incur penalties pursuant to 3517.992 (R)(3).

Affiant further sayeth naught.

By: _____

Title: _____

SWORN TO BEFORE ME and subscribed in my presence this _____ day of _____, 2024.

Notary Public

My commission expires: _____

**Mentor Fire Department
Bid Specification
For
Aerial Ladder Truck**

A. GENERAL REQUIREMENTS

1. **Intent:** The intent of these specifications is to describe an Aerial Ladder Truck 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:** One (1) complete set of repair manuals on CD-ROM 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.
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.
11. No charges will be allowed for federal, state or municipal sales and excise taxes since the City of Mentor is exempt.

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 these specifications, 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.

PROPOSAL DRAWING

A general layout drawing depicting the apparatus layout and appearance shall be provided with the bid. The drawing shall consist of left side, right side, frontal and rear elevation views. Apparatus equipped with a fire pump, shall have a general layout view of the pump operators panel scaled the same as the elevation views. The drawing shall be a depiction of the actual apparatus proposed and not of a generic similar product.

BIDDER COMPLIES YES _____ NO _____

WIRING SCHEMATIC

Wiring diagrams of the apparatus shall be provided on a USB flash drive at the time of delivery.

BIDDER COMPLIES YES _____ NO _____

PRE-CONSTRUCTION CONFERENCE

After award of the contract, and prior to construction of the apparatus, a pre-construction conference shall be held at the facility of the manufacturer. A provision shall be provided in the bid price for all travel, food and lodging.

BIDDER COMPLIES YES _____ NO _____

located in the dash instrument panel to alert the operator of a malfunction. A data port shall be provided under the driver's side dash for the purpose of code reading and troubleshooting. All communication shall be provided through the J1939 data link.

BIDDER COMPLIES YES _____ NO _____

ENGINE WARRANTY

The engine shall have a five (5) year or 100,000-mile warranty and approval by Cummins Diesel for Full Engine Coverage Plan (RVF) – which is their most complete engine coverage plan, which includes EGR components installation in the chassis. There shall be no deductible for the first two years. A one-hundred-dollar deductible shall apply for service beginning the third year.

BIDDER COMPLIES YES _____ NO _____

Engine AIR INTAKE

The engine air intake and filter shall be designed in accordance with the engine manufacturer's recommendations. It shall be 99.9% tested per SAE J726. An ember separator shall be provided in the engine air intake meeting, the requirements of NFPA 1901.

An Air Restriction warning light shall be provided and located on the cab dash.

BIDDER COMPLIES YES _____ NO _____

PRIMARY FUEL FILTER/WATER SEPARATOR

- A Cummins approved fuel filter/water separator shall be remote mounted to the chassis frame rail.
- A Cummins approved fuel filter will be mounted on the driver's side of the engine.
- A 12V DC heater shall be provided for the fuel filter/water separator.

BIDDER COMPLIES YES _____ NO _____

TRANSMISSION

The chassis shall be equipped with an Allison six (6) speed automatic transmission.

The transmission shall come filled with an Allison approved Synthetic Transmission Fluid that meets the Allison TES-295 specification.

BIDDER COMPLIES YES _____ NO _____

ENGINE BRAKE

The engine shall be equipped with a Jacobs compression engine brake. An "On/Off" switch and a control for "Low/High" shall be provided on the instrument panel within easy reach of the driver.

The ABS system will automatically disengage the auxiliary braking device when required.

A pump shift interlock circuit shall be provided to prevent the engine brake from activating during pumping operations.

The brake light shall activate when the engine brake is engaged.

BIDDER COMPLIES YES _____ NO _____

TRANSMISSION COOLER

The apparatus transmission shall be equipped with a Liquid-To-Liquid remote mounted cooler with aluminum internal components.

BIDDER COMPLIES YES _____ NO _____

TRANSMISSION SHIFTER

An Allison "Touch Pad" shift selector shall be mounted to the right of the driver. The shift position indicator shall be indirectly lit for nighttime operation.

BIDDER COMPLIES YES _____ NO _____

COOLING SYSTEM

The cooling system shall be designed to keep the engine properly cooled under all conditions of road and pumping operations. The cooling system shall be designed and tested to meet or exceed the engine and transmission manufacturer's requirements, and EPA regulations.

BIDDER COMPLIES YES _____ NO _____

RADIATOR

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

The radiator shall be constructed completely of aluminum with welded side tanks. A drain port will be located at the bottom of the radiator.

The cooling system shall be filled with a 50/50 mix. The coolant makeup shall contain ethylene glycol and deionized water to prevent the coolant from freezing to a temperature of -34 degrees F.

Silicone hoses shall be provided for all engine coolant lines.

All radiator hose clamps shall be spring loaded stainless steel constant torque hose clamps for all main hose connections to prevent leaks. Shields or baffles will be provided to prevent recirculation of hot air to the inlet side of the radiator.

The cooling system shall be equipped with a surge tank. The surge tank shall house a low coolant probe and sight glass to monitor the coolant level. Low coolant shall be alarmed with the check engine light. The surge tank shall be equipped with a dual seal cap that meets the engine manufacturer’s pressure requirements, and system design requirements.

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

CHARGE AIR COOLER

The charge air cooler shall be of a crossflow design and constructed completely of aluminum with extruded tanks. The charge air cooler shall be bolted to the top of the radiator to allow a single depth core.

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

FAN

The engine cooling system shall incorporate a heavy-duty composite fan. It shall provide the highest cooling efficiently while producing the lowest amount of noise. This robust yet light-weight fan results in less wear and stress on motors and bearings.

A shroud and recirculation shield system shall be used to ensure air that has passed through the radiator is not drawn through again.

The fan tip to radiator core clearance shall be kept at a minimal distance to increase the efficiency of the fan and reduce fan blast noise.

BIDDER COMPLIES YES _____ NO _____

FAN CLUTCH

An air operated fan clutch shall be provided.

BIDDER COMPLIES YES _____ NO _____

FUEL TANK

The chassis shall be equipped with a 65-gallon fuel tank mounted at the rear of the chassis. The fuel tank shall be certified to meet FMVSS 393.67 tests. It shall also maintain engine manufacturer's recommended expansion room of 5%.

There shall be two tank baffles.

AA fuel lines will be provided as recommended by the engines manufacturer.

The bottom of the fuel tank shall contain a drain plug.

The fuel tank shall be equipped with a 2-1/4" filler neck assembly with a .5"-.75" vent located on the driver's side of the truck.

BIDDER COMPLIES YES _____ NO _____

DIESEL EXHAUST FLUID TANK

The exhaust system shall include a molded cross linked polyethylene tank. The tank shall have a capacity of 4.5 to 5 usable gallons and shall be mounted on the left side of the chassis frame.

The DEF tank fill neck shall accept only a 19mm dispensing nozzle versus the standard 22mm diesel fuel dispensing nozzle to prevent cross contamination. The DEF tank cap shall be blue in color to further prevent cross contamination.

BIDDER COMPLIES YES _____ NO _____

ALTERNATOR

A 430 ampere Delco-Remy alternator shall be provided. The alternator shall be serpentine belt driven.

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

LOW VOLTAGE ALARM

A low voltage alarm, audible and visual, shall be provided.

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

BATTERIES

The battery system shall be a single system consisting of (4-6), 12-volt Group 31 HD batteries, cranking performance of 950 CCA each with total of 3800 amp minimum.

There shall be a minimum of 185-minute reserve capacity.

The batteries shall include a one-year warranty which shall be accepted nationwide.

The batteries shall be installed in a vented battery box with a removable aluminum cover to protect the batteries from road dirt and moisture. The battery cover shall be secured with four “T” handle rubber hold downs to provide easy access for maintenance and inspection. Stainless steel hardware will be used for installation. The batteries are to be placed on dri-deck and secured with a fiberglass hold down. The batteries shall be wired directly to starter motor and alternator.

The battery cables shall be 3/0 gauge. Battery cable terminals shall be soldering dipped, color-coded and labeled on heat shrink tubing with a color-coded rubber boot protecting the terminals from corrosion.

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

BATTERY JUMPER TERMINAL

There shall be one set (two studs) of battery jumper terminals located by the battery box under the cab. The terminals shall have plastic color-coded covers. Each terminal shall be tagged to indicate positive/negative.

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

BATTERY CHARGER

An Auto Charge with remote panel 40-amp battery charger shall be provided and installed in the cab. The unit shall include a built-in touch screen, IP32 rated, and configurable for 3-step or float charging. The charger shall be wired to the 120V shoreline inlet.

BIDDER COMPLIES YES _____ NO _____

120V SHORELINE INLET & AUTO EJECT

The apparatus shall be equipped with a 20-amp 120V shoreline inlet to provide power to the battery charger from an external source. After ejection, a 180-degree weatherproof cover shall snap into position over inlet.

BIDDER COMPLIES YES _____ NO _____

120-VOLT OUTLETS WIRED TO SHORELINE INLET

Eight (8) 120-volt outlets shall be provided and wired to the shoreline inlet. The location of the outlets shall be determined during the pre-construction conference.

BIDDER COMPLIES YES _____ NO _____

SUSPENSION / TIRES / AXLE (FRONT)

- The rating shall be achieved with the Fire Service Intermittent Service Rating.
- Tires will have proper rating as designed by manufacturer for overall weight of vehicle.
- The axle shall have approved industry standard rating as designed by manufacturer for overall vehicle weight.
- The front suspension shall be of a design type utilizing industry accepted engineering best practices.

BIDDER COMPLIES YES _____ NO _____

STEER ASSIST

The steer assist provides driver assistance when turning the vehicle left or right while traveling.

BIDDER COMPLIES YES _____ NO _____

REAR AXLE

The axle shall have approved industry standard rating as designed by manufacturer for overall vehicle weight.

A locking inter-axle differential shall be provided between the two rear axles. An activation switch shall be provided on the driver's dash.

BIDDER COMPLIES YES _____ NO _____

INTER-AXLE DIFFERENTIAL LOCK

A locking inter-axle differential shall be provided between the two rear axles. An activation switch shall be provided on the driver's dash.

BIDDER COMPLIES YES _____ NO _____

SUSPENSION (REAR)

TANDEM AIR RIDE is preferred.

The rear suspension shall be an air ride suspension. This suspension shall incorporate an air spring system. The air suspension bags shall have internal rubber stops giving the ability to operate without air if the need arises. Heavy-duty shock absorbers shall be provided, inboard mounted, to dampen load forces, reduce tire hops, and improve stopping. Torque rods shall be incorporated to restrict lateral movement of the differentials and to reduce bushing and tire wear. Dual height control valves shall be provided to maintain even, balanced loads.

BIDDER COMPLIES YES _____ NO _____

REAR TIRES

Tires will have proper rating as designed by manufacturer for overall weight of vehicle.

BIDDER COMPLIES YES _____ NO _____

WHEELS

- The front and rear wheels may be painted steel or polished aluminum.
- The wheels shall be properly balanced without wheel weights.

BIDDER COMPLIES YES _____ NO _____

MUD FLAPS

Hard rubber mud flaps shall be installed behind the front and rear wheels.

BIDDER COMPLIES YES _____ NO _____

BRAKES

Manufacturers best practice considering the weight of the vehicle and stopping distances.

BIDDER COMPLIES YES _____ NO _____

AIR BRAKE SYSTEM

The vehicle shall be equipped with air-operated brakes. The system shall meet or exceed the design and performance requirements of current FMVSS-121 and test requirements of current NFPA 1901 standards.

Each wheel shall have a separate brake chamber. A dual treadle valve shall split the braking power between the front and rear systems.

All main brake lines shall be color-coded nylon type protected in high temperature rated split plastic loom. The brake hoses from frame to axle shall have spring guards on both ends to prevent wear and crimping as they move with the suspension. All fittings for brake system plumbing shall be brass.

A Bendix AD-IP air dryer shall be provided.

The air system shall be provided with a rapid build-up feature, designed to meet current NFPA 1901 requirements.

A spring actuated air release emergency/parking brake shall be provided on the rear axle.

One (1) parking brake control shall be provided and located on the engine hood next to the transmission shifter within easy reach of the driver.

Accessories plumbed from the air system shall go through a pressure protection valve and to a manifold so that if accessories fail, they shall not interfere with the air brake system.

The vehicle shall be equipped with an air-operated brake release valve located in the cab within an accessible reach to the driver.

The air brake system shall have all the air tank drain valves located in a customer specified location on the apparatus.

BIDDER COMPLIES YES _____ NO _____

AIR INLET

An air system inlet/fill connection shall be provided. The inlet shall be connected to the air brake to allow constant air feed. The location of the inlet shall be on the left-hand side of the driver's step well.

BIDDER COMPLIES YES _____ NO _____

AIR COMPRESSOR

A 120V 100 PSI air compressor shall be provided and installed in the cab. The vehicle mounted air compressor shall ensure that the air brake system is properly pressurized for immediate response of the unit. A pressure switch shall regulate operation and shall automatically sense low air pressure in the brake system and restore the proper pressure.

The unit shall have an auto drain which shall be installed on the outlet side of the air compressor and shall automatically purge water from the air discharge output. The water shall be ejected from the water separator bowl every time the compressor cycles off via a 120-volt solenoid.

The compressor shall be wired to the 120V shoreline connection.

BIDDER COMPLIES YES _____ NO _____

AIR BRAKING ABS SYSTEM

An ABS system shall be provided to improve vehicle stability and control by reducing wheel lock-up.

during braking. This braking system shall be fitted to axles and all electrical connections shall be environmentally sealed from water and weather and be vibration resistant.

The system shall constantly monitor wheel behavior during braking. Sensors on each wheel transmit wheel speed data to an electronic processor, which shall sense approaching wheel lock and instantly modulate brake pressure up to 5 times per second to prevent wheel lock-up. Each wheel shall be individually controlled. To improve field performance, the system shall be equipped with a dual circuit design. The system

ROOF DESIGN

The cab shall be of a flat roof design.

BIDDER COMPLIES *YES* _____ *NO* _____

FENDER CROWNS

Polished stainless steel front axle fenderettes with full depth radiused wheel well liners shall be provided.

BIDDER COMPLIES *YES* _____ *NO* _____

CAB INSULATION

The exterior walls, doors, and ceiling of the cab shall be insulated from the heat and cold, and to further reduce noise levels inside the cab. The cab interior sound levels shall not exceed 80 decibels at 45 mph in all cab seat positions.

BIDDER COMPLIES *YES* _____ *NO* _____

EXTERIOR GLASS

The cab windshield shall be laminated, automotive approved safety glass.

BIDDER COMPLIES *YES* _____ *NO* _____

SUN VISORS

The sun visors shall be made of dark smoke colored transparent polycarbonate. There shall be a visor located at both the driver and officer positions, recessed in a molded form for a flush finish.

BIDDER COMPLIES *YES* _____ *NO* _____

CAB STRUCTURAL INTEGRITY

The cab of the apparatus shall be designed and so attached to the vehicle as to eliminate, to the greatest possible extent, the risk of injury to the occupants in the event of an accident.

The apparatus cab shall be tested to specific load and impact tests regarding the protection of occupants of a commercial vehicle.

A test shall be conducted to evaluate the frontal impact strength of the apparatus cab to conform to the test J2420 and the “United Nations Regulation 29, Annex 3, paragraph 4, (Test A). A second test shall be conducted to evaluate the roof strength of the apparatus cab to conform to the Society Of Automotive Engineers (SAE) SAE J2422/SAE J2420 and “United Nations Regulation 29, Annex 3, paragraph 5, (Test B) and SAE J2420. The evaluation shall consist of the requirements imposed by ECE Regulation 29, Paragraph 5.

The test shall be conducted by a certified independent third-party testing institution.

A letter stating successful completion of the above test on the brand of cab being supplied shall be included in the bid. There shall be “no exception” to this requirement.

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

SEAT BELT TESTING

The seat belt anchorage system shall be tested to meet FMVSS 207 Section 4.2a and FMVSS 210 section 4.2. Testing shall be conducted by an independent third-party product evaluation company.

A copy of the certification letter shall be supplied with the bid documents.

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

CAB LOCKDOWN LATCHES

Cab lockdown latches shall be provided to prevent the cab from being tilted in the down position. Once the cab tilt switch is engaged the cab latches will release to allow the cab to be tilted.

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

CAB TILT SYSTEM

An electrically powered hydraulic cab tilt system shall be provided, exposing the engine and accessories for fluid checks and service work. The system shall be interlocked to only operate when the parking brake is set.

The lift system shall be comprised of two (2) hydraulic lift cylinders, an electrically driven hydraulic pump, and a control switch. A mechanical locking system will be provided to ensure the cab remains in the raised position

in the event of a hydraulic failure. Additionally, each of the hydraulic lift cylinders shall incorporate a check valve, and velocity fuses that will activate should a sudden drop in pressure be detected. The cab tilt controls shall be interlocked to the parking brake to ensure the cab will not move, unless the parking brake is set. The cab tilt controls will consist of a momentary raise/lower switch and a two-position cab safety lock switch.

MANUAL CAB LIFT

There shall be a manually operated hydraulic pump for tilting the cab in case the main pump should fail. Access to the pump shall be located under the left corner of the front bumper.

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

CAB DOORS

The cab doors shall be equipped with heavy-duty door latching hardware, which complies with FMVSS 206. The door latch mechanism shall utilize control cable linkage for positive operation. A rubber coated nylon web doorstop shall be provided.

All openings in the cab shall be grommeted or equipped with rubber boots to seal the cab from extraneous noise and moisture.

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

CAB STEPS

Grip strut material shall be installed on the stepping surface.

An intermediate step shall be provided, mid-way between the lower cab step, and the cab floor. The intermediate step shall be slightly inset to provide for safer ingress and egress. Diamond plate material shall be installed on the stepping surface.

All steps shall be covered with material that meets or exceeds the NFPA requirements for stepping surfaces.

There shall be one additional step under each cab door to assist with entrance and exit of the cab. The steps shall be constructed of aluminum with a grip strut stepping surface.

LED strip light shall illuminate each interior cab step. These lights shall illuminate whenever the battery switch is on, and the cab door is opened.

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

POWER WINDOWS

All four cab entry doors shall have power windows. Each door shall be individually operated, and the driver's position shall have master control over all windows. All four windows shall roll down completely.

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

SIDE WINDOWS

Fixed position side window shall be provided on each side of the cab between the forward cab area and the crew cab area. The side windows shall be held in place by an extruded rubber molding with a chrome plated decorative locking bead.

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

WINDSHIELD WIPERS

Windshield wipers will be black anodized finish two speed electric windshield wiper system. One (1) master control works the wiper, washer and intermittent wipe features. Washer bottle is a remote fill with a 3-5-quart capacity. Washer fill is located just inside of officer cab door.

Standard wiper replacements (J-Hook style) are recommended.

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

MIRRORS

Two (2) west coast style mirrors, with chrome finish, will be installed on each side of the front cab door. The main mirror shall be 4-way remote adjustable with heat. The lower section of the holder shall include a spring-loaded single detent position 20 degrees forward with easy return to operating position without refocusing.

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

ADDITIONAL MIRRORS

An additional mirror shall be provided and mounted for the purpose of viewing areas where there is limited visibility during aerial ladder set-up.

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

FRONT GRILLE

The front of the cab shall be equipped with a grille with sufficient area to allow proper airflow into the cooling system and engine compartment.

BIDDER COMPLIES *YES*____ *NO* _____

BUMPER

There shall be a 12” high double rib polished stainless-steel wrap-around bumper provided at the front of the apparatus. The sides shall be finished with diamond plate.

BIDDER COMPLIES *YES*____ *NO* _____

AIR HORNS

Two (2) air horns shall be provided. The air horns shall be installed behind perforations in the front bumper or within the front bumper.

BIDDER COMPLIES *YES*____ *NO* _____

AIR HORNS WIRED TO STEERING WHEEL

The air horns shall be wired through the steering wheel button. A selector switch shall be provided on the instrument panel to switch between functions.

A momentary switch for the air horns shall be provided on the officer’s side dash.

BIDDER COMPLIES *YES*____ *NO* _____

ELECTRONIC SIREN

One (1) Whelen 295HFSA7 electronic siren shall be installed at the cab instrument panel complete with noise canceling removable microphone. The remote-control head shall be flush mounted in a location specified by the fire department.

BIDDER COMPLIES *YES*____ *NO* _____

ELECTRONIC SIREN

One (1) 100-watt weatherproof siren speaker shall be provided and wired to the electronic siren.

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 a solenoid and shall include a brake.

The mechanical siren shall be wired through the steering wheel button. A selector switch shall be provided on the instrument panel to switch between functions.

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

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

A brake switch for the mechanical siren shall be provided in the lower command console for both the driver's and officer's position.

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

CAB EXTERIOR LIGHTING

Exterior lighting and reflectors shall meet or exceed Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements.

YES _____ ***NO*** _____

HEADLIGHTS

The front low and high beam headlights shall be FIRETECH model FT-4X6 LED, rectangular shaped, quad style installed in custom rectangular shaped stainless-steel housings on the front of the cab.

An additional pair of rectangular shaped stainless-steel housings shall be installed on the front of the cab above the headlight housings. Each housing shall accommodate forward-facing warning lights.

The interior components of the headlights shall have a chrome finish.

BIDDER COMPLIES YES _____ NO _____

FRONT TURN SIGNALS

There shall be LED rectangular amber turn signal lights mounted on or next to the headlight housings and one (1) mounted on the side of the cab.

BIDDER COMPLIES YES _____ NO _____

ICC/MARKER LIGHTS

Five (5) ICC, LED marker lights shall be integrated in the brow light mounted on the front of the cab to meet D.O.T. requirements.

BIDDER COMPLIES YES _____ NO _____

EXTERIOR CAB HANDRAILS

There shall be four (4) 24" long, handrails provided and installed at each cab entrance. Sufficient space shall allow for a gloved hand to firmly grip the rail.

There shall be a coat hook installed on the upper portion of all exterior cab handrails for hanging of coats, turnout gear, etc.

BIDDER COMPLIES YES _____ NO _____

INTERIOR CAB HANDRAILS

There shall be rubber coated grab handles provided and mounted on the interior of the cab, one each side, on the windshield post for ingress assistance.

BIDDER COMPLIES YES _____ NO _____

CAB DOOR HANDRAILS

There shall be two (2) grab handles provided and mounted, one on the inside of each rear crew door, just below the windowsill.

There shall also be two (2) grab handles provided and mounted, one on the inside of each rear crew door, just above the windowsill. The handrails shall be approximately 22" long.

BIDDER COMPLIES YES _____ NO _____

ACCESS to CREW SEAT

The exterior cab compartment shall be open to the crew cab seat compartment from both sides as this is a transverse compartment.

BIDDER COMPLIES YES _____ NO _____

DRIVER'S & OFFICERS SIDE EXTERIOR CAB COMPARTMENT

The compartment shall be approximately 38" high x 15" wide x 22.25" deep.

The compartment shall have a hinged door that is hinged at the front. The doors shall have an Austin Hardware slam catch single-point "D"-ring door closure and held open with gas struts.

The compartment shall be operated by an individual switch and illuminated with (1) LED light.

BIDDER COMPLIES YES _____ NO _____

INTERIOR DOOR PANELS

The interior of the cab entry doors shall have a brushed stainless steel scuff plate, contoured to the door, from the door windowsill down.

BIDDER COMPLIES YES _____ NO _____

CAB FLOOR COVERING

The cab interior floor shall be covered with a thick, gray rubberized material to provide a rugged but cosmetically pleasing stepping surface throughout the cab. The floor covering shall provide superior durability and resistance against foreign objects as well as normal wear and tear.

BIDDER COMPLIES YES _____ NO _____

ENGINE ENCLOSURE

An integral, formed aluminum and composite engine enclosure shall be provided. The engine enclosure shall be contoured and blended in an aesthetically pleasing manner with the interior dash and flooring of the cab. The enclosure shall be kept as low as possible, to maximize space and increase crew comfort.

The noise insulation keeps the dBA level within NFPA 1901.

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

ENGINE ENCLOSURE COVERING

The top of the engine enclosure shall be covered with a heavy duty, black polyurethane blended coating. The textured coating shall provide paramount durability and wear resistance against foreign objects and normal wear and tear as well as sound deadening and insulation. The rubberized cab floor covering shall extend up the lower exterior sides of the engine enclosure to aid in sound deadening and heat resistance.

There shall be two (2) cup holders and a storage slot measuring approximately 11"L x 4"W x 10"D recessed into the top of the center console extension between the driver and officer.

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

CHASSIS WIRING

All electrical connectors and main connectors throughout the chassis shall be treated to prevent corrosion.

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

MASTER ELECTRICAL PANEL

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

All breakers will be clearly marked.

All electrical distribution centers will be in accordance with manufacturer's best practices to be easily accessible for simplified maintenance and troubleshooting. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length.

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.

General protection circuit breakers will be a combination of automatic and manual reset breakers. When required, automotive type fuses will be utilized to protect electronic equipment. Control relays and solenoid will have a direct current rating in accordance with NFPA standard.

BIDDER COMPLIES YES _____ NO _____

INSTRUMENT PANEL

The main dash shroud, which covers the area directly in front of the driver from the doorpost to the engine hood, shall be constructed of vacuum formed ABS material with scorpion texture.

The gauges shall be of the highest quality next Generation Instrumentation System (NGI) with built-in self-diagnostics and red warning lights to alert the driver of any problems. All gauges and controls shall be backlit for night vision and identified for function. All main gauges and warning lights shall be visible to the driver through the steering wheel.

BIDDER COMPLIES YES _____ NO _____

MASTER BATTERY AND IGNITION SWITCH

The vehicle shall be equipped with a keyless ignition switch.

BIDDER COMPLIES YES _____ NO _____

DIESEL PARTICULATE FILTER CONTROLS

There shall be two (2) controls for the diesel particulate filter. One control shall be for regeneration and one control shall be to inhibit engine regeneration. These shall be located below the steering wheel in the kick panel.

BIDDER COMPLIES YES _____ NO _____

INSTRUMENTATION & CONTROLS

Instrumentation on dash panel in front of the driver:

- Tachometer/hour meter with high exhaust system regeneration temperature, and instrument malfunction indicators.
- Speedometer/odometer with built in turn signal, high beam, and re-settable trip odometer Voltmeter.
- Diesel fuel gauge.
- DEF (Diesel Exhaust Fluid) gauge.
- Engine oil pressure.
- Transmission temperature.
- Engine temperature.
- Primary air pressure.
- Secondary air pressure.

Indicators and warning lights in front of the driver:

- Parking brake engaged.
- Low air with buzzer.
- Antilock brake warning.
- Check transmission;
- Transmission temperature.
- Upper power indicator.
- Seat belt.
- Engine temperature.
- Low oil indicator.
- Low voltage indicator.
- Air filter restriction light.
- Low coolant indicator.
- High idle indicator.
- Power on indicator.
- Check engine.
- Stop engine.
- Check engine MIL lamp.
- DPF indicator.
- High exhaust temperature.
- Wait to start.

Other indicator and warning lights (if applicable):

- Differential locked.
- PTO (s) engaged.
- Auto-slip response.
- Retarder engaged.
- Retarder temperature.

- ESC indicator.
- Jacks Out.
- Jacks Down.

Controls located on main dash panel in front of the driver:

- Master power disconnect with ignition switch.
- Engine start switch.
- Headlight switch.
- Windshield wiper/washer switch.
- Differential lock switch (if applicable).
- Dimmer switch for backlighting.

Controls included in steering column:

- Horn button.
- Turn signal switch.
- Hi-beam low-beam switch.
- 4-way flasher switch.
- Tilt-telescopic steering wheel controls.

BIDDER COMPLIES

YES _____ ***NO*** _____

CENTER CONTROL CONSOLE

There shall be an ergonomically designed center control console.

Controls located in the console conveniently accessible to the driver:

- Transmission shifter.
- Pump shift control with OK TO PUMP and PUMP ENGAGED lights.
- Remote mirror control.
- Illuminated rocker switches to control high idle, Jacob’s brake, siren/horn, siren brake, master emergency, and other customer specified components.
- 12V power point (if applicable).

Controls located in the console conveniently accessible to the driver and the officer (center):

- Parking brake control with a guard to prevent accidental engagement.

Controls located in the console conveniently accessible to the officer:

- Illuminated rocker switches to control customer specified components that are easily reachable to the officer and do not allow for compromise of the driver’s view and eliminate the need for

foot switches Surface to recess siren head, radio head, or other desired items as space permits 12V power point (if applicable).

BIDDER COMPLIES YES _____ NO _____

OVERHEAD CONTROL CONSOLE

An ergonomically designed overhead console shall be provided above the driver and officer, running the full width of the cab. There shall be removable plates to house switches and other electrical items Specified by the customer at the construction meeting.

There shall be a panel located to the right of the driver that shall be designated for defroster, heat, and air conditioning controls (if specified).

The center overhead panel shall be designated for up to seven (7) door ajar indicators. Upon releasing the apparatus parking brake, one or more of these lights shall automatically illuminate (flash) when any of the following conditions occur that may cause damage if the apparatus is moved: cab or compartment door is open; ladder or equipment rack is not stowed; stabilizer system deployed; any other device has not been properly stowed.

BIDDER COMPLIES YES _____ NO _____

ENGINE WARNING SYSTEM

An engine warning system shall be provided to monitor engine conditions such as low oil pressure, high engine temperature and low coolant level. Warning indication shall include a STOP ENGINE (red) light with audible buzzer activation and a CHECK ENGINE (amber) light. Note: (Some engine configurations may also include a fluid warning light.)

BIDDER COMPLIES YES _____ NO _____

PUMP SHIFT MODULE

A pump shift module with indicating lights shall be located within easy reach of the driver. A gear lockup shall be provided to hold the transmission in direct drive for pump operation.

BIDDER COMPLIES YES _____ NO _____

PUMP INTERLOCK

While the apparatus is in pump gear the odometer shall be connected so that engine miles are tracked during pumping operations. The user can use this to track total engine hours on the unit as well as another step to verify the unit is in pump gear.

BIDDER COMPLIES YES _____ NO _____

DO NOT MOVE APPARATUS INDICATOR LIGHT and ALARM

A LED light shall be installed in the cab near the driver. The light shall illuminate when the parking brake is released, and any cab or body door is open or any other item on the apparatus is not properly stowed that may cause damage.

A "Do Not Move Apparatus" alarm shall be installed in the interior of the cab.

BIDDER COMPLIES YES _____ NO _____

MAPBOOK SLOT

A map book slot shall be installed on the officer's side of the cab.

BIDDER COMPLIES YES _____ NO _____

PROGRAMMABLE LOAD MANAGER

Load manager shall have the ability to sequence loads on and off. The load manager will be designed in accordance with manufacturer's best practices.

BIDDER COMPLIES YES _____ NO _____

HIGH IDLE

The engine shall have a "high idle" switch on the dash that shall maintain an engine RPM of 1,000. The switch shall be installed at the cab instrument panel for activation/deactivation. The "high idle" mode shall become operational only when the parking brake is on, and the truck transmission is in neutral.

BIDDER COMPLIES YES _____ NO _____

CAB ACCESSORY FUSE PANEL

A fuse panel shall be readily accessible to provide battery and ignition power. Each circuit shall be capable of 10-ampere 12volt power and total output of 50-amps. The fuse panel shall be capable of powering accessories such as handheld spotlights, radio chargers, hand lantern chargers and other miscellaneous 12-volt electrical components.

BIDDER COMPLIES YES _____ NO _____

VEHICLE DATA RECORDER

A vehicle data recorder as required by the 2009 edition of NFPA 1901 shall be installed. Vehicle data shall be sampled at the rate of 1 second per 48 hours, and 1 minute per 100 engine hours.

Free software is available to allow the fire department to collect the data as needed.

BIDDER COMPLIES YES _____ NO _____

AUXILIARY POWER POINT

A 12-volt 20-ampere auxiliary lighter socket type plug-in shall be provided in the cab.

BIDDER COMPLIES YES _____ NO _____

DUAL USB POWER POINT

A 12-volt dual port USB power point shall be provided in the cab.

BIDDER COMPLIES YES _____ NO _____

DUAL POWER POINT, USB-USBC

A 12-volt dual port USB-USBC power point shall be provided in the cab.

BIDDER COMPLIES YES _____ NO _____

LIGHTING CAB INTERIOR

Interior lighting shall be provided inside the front of the cab for passenger safety. Two (2) Whelen 6" round ceiling mounted combination red/clear LED dome lights with a push button on/off switch in the light lens.

One light shall be located over each the officer and driver’s position. The lights shall also activate from the open-door switch located in each cab doorjamb.

BIDDER COMPLIES YES _____ NO _____

LIGHTING CREW CAB INTERIOR

Interior lighting shall be provided inside the crew cab for passenger safety. Two (2) Whelen 6" round ceiling mounted combination red/clear LED dome lights with a push button on/off switch in the light lens shall be provided. The lights shall also activate from the open-door switch located in each cab doorjamb.

BIDDER COMPLIES YES _____ NO _____

DOOR LIGHTS

Whelen 500 series TIR6 model 50*03Z*R LED light shall be installed in a chrome plated bezel inside each of the four (4) lower cab doors. The lights shall be wired to flash when the ignition is on, and the cab door is open.

BIDDER COMPLIES YES _____ NO _____

HEAVY DUTY HEATER/DEFROSTER/AIR CONDITIONER

We require the heater, defroster and air conditioner meet industry standards and are of highest quality manufacturer recommends. (This roof-mounted condenser shall work at full rated capacity at an idle with no engine heat problems.)

A Cabin air filter shall also be provided.

BIDDER COMPLIES YES _____ NO _____

HEATER/DEFROSTER/AIR CONDITIONING CONTROLS

The heater/defroster/air conditioning shall be located within reach of the driver and officer. The controls shall be illuminated for easy locating in dark conditions. The controls shall be located in such a way that the driver will not be forced to turn away from the road to make climate control adjustments. Control of all heater/defroster/air conditioning functions for the entire apparatus cab shall be achieved through these controls.

BIDDER COMPLIES YES _____ NO _____

FLOORBOARD HEATING DUCT

There shall be ductwork to the floor of the cab, facing forward to provide heat for the front of cab floor area.

BIDDER COMPLIES YES _____ NO _____

DEFROSTER DIFFUSER

A defroster unit to provide temperature-controlled air to the windshield will be provided.

BIDDER COMPLIES YES _____ NO _____

TOOL MOUNTING PLATE

There shall be a 3/16" smooth aluminum plate installed on top of the heat/ air conditioning unit for use in mounting of equipment. The plate shall be coated with the same finish as the heat/air conditioning unit and shall be secured with screws for easy replacement.

BIDDER COMPLIES YES _____ NO _____

AUXILIARY DEFROSTER FAN

There shall be two (2) 12-volt fan mounted under the upper command console, one (1) inboard of console position 2, directed at the driver's side windshield and the other one (1) will be inboard of console position 5 directed at the officer's side of the windshield. The fan shall be activated by a 3-position toggle switch located at the base of the fan. The switch positions shall be High, Low and Off.

BIDDER COMPLIES YES _____ NO _____

DRIVER'S SEAT

A seat with air suspension shall be provided for the driver. The seat shall be equipped with a red 3-point shoulder harness with lap belt. The seat shall have fore/aft adjustment and shall be upholstered with heavy duty Low Seam Durawear Plus material.

BIDDER COMPLIES YES _____ NO _____

HELMET STORAGE

In accordance with NFPA 1901, 2016 edition, section 14.1.7.4.1.

BIDDER COMPLIES YES _____ NO _____

OFFICER'S SEAT

A seat with air suspension shall be provided for the officer. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

BIDDER COMPLIES YES _____ NO _____

UNDER SEAT STORAGE COMPARTMENT

There shall be an open storage area under the officer's seat, accessible from the front. The lower rear portion of the compartment shall be tapered to accommodate the wheel well and wiring chase.

BIDDER COMPLIES YES _____ NO _____

HELMET STORAGE

In accordance with NFPA 1901, 2016 edition, section 14.1.7.4.1.

BIDDER COMPLIES YES _____ NO _____

CREW SEAT – DRIVER'S SIDE, REAR FACING

One (1) SCBA fixed base seat shall be installed behind the driver. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

BIDDER COMPLIES YES _____ NO _____

HELMET STORAGE

In accordance with NFPA 1901, 2016 edition, section 14.1.7.4.1

BIDDER COMPLIES YES _____ NO _____

CREW SEAT – OFFICER’S SIDE, REAR FACING

One (1) SCBA fixed base seat shall be installed behind the officer. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

BIDDER COMPLIES YES _____ NO _____

HELMET STORAGE

In accordance with NFPA 1901, 2016 edition, section 14.1.7.4.1.

BIDDER COMPLIES YES _____ NO _____

EMS CABINET, FORWARD FACING

There shall be a locking cabinet constructed to match the interior of the cab. The cabinet dimensions shall be approximately 46" wide x 18" deep x 38" tall. The cabinet shall come complete with interior access. Strip lighting shall be provided in the cabinet. The cabinet shall be located on the back wall of the cab, mounted on the crew seat riser in place of the two forward facing crew seats.

BIDDER COMPLIES YES _____ NO _____

INTERIOR COMPARTMENT OPENING

The compartment shall come complete with a single interior access opening, and 1" nylon black webbing with black plastic buckles to cover the opening.

BIDDER COMPLIES YES _____ NO _____

ADJUSTABLE SHELVES

There shall be two (2) adjustable shelves provided and installed in the compartment. The shelves shall be fabricated of .188 aluminum plate and have two 1.5" x 1.5" x .188" aluminum angles welded to the underside of the shelf for support.

BIDDER COMPLIES YES _____ NO _____

SCBA BRACKETS

Each SCBA seat in the cab shall feature an IMMI SmartDock hands-free self-contained breathing apparatus (SCBA) storage bracket within the seat back.

The bracket shall consist of a main vertical support bracket, lower guide plate with valve retaining tabs, top claw assembly with wings, and an integral height adjustment knob. The top claw shall be adjustable for different diameters of SCBA cylinders. The head height shall be adjustable with the integrated adjustment knob for different heights of SCBA cylinders.

The bracket shall feature single-motion SCBA insertion and hands-free release when the fire fighter stands up to exit the seat. In the event of a collision, the top claws lock from inertial forces for a secure hold.

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

SEAT BELT WARNING SYSTEM

A seat belt warning system shall be provided and shall monitor each seating position. Each seat shall be supplied with a sensor that, in conjunction with the display module located on the dash, shall determine when the seat belt was fastened and if the seat is occupied. An icon shall represent that the seat is properly occupied. An audible and visual alarm shall be activated if the seat is occupied and/or the belt is not fastened in the proper sequence.

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

CREW SEAT COMPARTMENT

A compartment shall be provided under the forward-facing crew seats on the back wall of the cab. The front of the compartment shall be open and enclosed with black nylon webbing. The webbing shall be secured with plastic buckles.

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

HD STEREO

A Jensen HD AM/FM/WB/CD Bluetooth stereo shall be provided with four speakers.

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

FIRE PUMP

Fire pump shall be midship mounted. The fire pump shall be of the double suction single stage centrifugal type, carefully designed in accordance with good modern practice.

The pump shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI.

The pump body shall be horizontally split on a single plane, casing type with removable lower casing for easy removal of the entire impeller assembly including wear rings and bearings from beneath the pump without disturbing piping or the mounting of the pump in the chassis.

All moving parts in contact with water shall be of high-quality bronze or stainless steel.

Easily replaceable bronze labyrinth wear rings shall be provided.

The rated capacity of the fire pump shall be 2,000 gallons per minute in accordance with NFPA# 1901.

The pump shaft shall be rigidly supported by three bearings for a minimum deflection. One high lead bronze sleeve bearing to be located immediately adjacent to the impeller (on side opposite the drive unit). The sleeve bearing shall be lubricated by a force fed, automatic lubrication system, pressure balanced to exclude foreign material. The remaining bearings shall be heavy duty type, deep groove ball bearings in the gear box and they shall be splash lubricated.

There shall be a pump panel heater installed.

HALE QMAX-200 preferred pump due to standardization of current fleet.

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

PUMP TRANSFER CASE

The drive unit shall be designed of ample capacity for lubricating reserve and to maintain the proper operating temperature. Pump drive unit shall be of sufficient size to withstand up to 16,000 lbs. ft. torque of the engine in both road and pump operating conditions.

The gearbox drive shafts shall be heat-treated chrome nickel steel input and output shafts shall be at least 2.35" in diameter, on both the input and output shafts. They shall withstand the full torque of the engine in both road and pumpoperating conditions.

The engagement of the pump transmission shall be of such design to permit transfer of power from road to pump operation only after vehicle is completely stopped. The pump shift shall be air actuated from the cab and have both a green "Pump Engaged" light, and a green "O.K.-To-Pump" light. A third green light shall be provided on the pump operator's panel for "Throttle Ready".

The pump drive unit shall be cast and completely manufactured and tested at the pump manufacturer's factory.

BIDDER COMPLIES YES _____ NO _____

HEAT PANS

Removable heat pans will be installed under the fire pump.

BIDDER COMPLIES YES _____ NO _____

PUMP SEAL

The pump shaft shall have only one packing gland located on the inlet side of the pump. It shall be of a **mechanical seal type**.

BIDDER COMPLIES YES _____ NO _____

PUMP ANODE

A pump anode kit shall be provided and installed in the pump body. A minimum of two (2) anodes shall be installed, one (1) in the suction side and one (1) in the discharge side of the pump.

BIDDER COMPLIES YES _____ NO _____

PUMP TEST & CERTIFICATION

The pump shall be tested and certified by a third-party independent testing agency, in accordance with NFPA 1901.

BIDDER COMPLIES YES _____ NO _____

AUXILIARY COOLER

An auxiliary cooler shall be furnished to provide additional cooling to the engine under extreme pumping conditions. Water from the pump is to be piped to the coils of the heat exchanger allowing the engine fluid to be cooled as required.

BIDDER COMPLIES YES _____ NO _____

PUMP CONNECTIONS

All suction and discharge lines (except pump manifolds) 1" and larger shall be heavy-duty stainless-steel pipe. Where vibration or chassis flexing may damage or loosen piping or where a coupling is necessary for servicing, a flexible connection shall be furnished. All lines shall be drained by a master drain valve, or a separate drain provided at the connection. All individual drain lines for discharges shall be extended with a 90-degree fitting in order to drain below the chassis frame. All water carrying gauge lines shall utilize nylon tubing.

BIDDER COMPLIES YES _____ NO _____

TANK TO PUMP

The booster tank shall be connected to the intake side of the pump with a check valve. The 3" tank to pump line shall run from a bottom sump into the 3" valve. To prevent damage due to chassis flexing or vibration, a short 3" flexible rubber hose coupling shall be used to connect the tank to the intake valve.

BIDDER COMPLIES YES _____ NO _____

VALVES

All ball valves shall be an Akron Brass Heavy-Duty swing out 8000 series brass body with flow optimizing stainless steel ball, and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. The valve shall not require the lubrication of seats or any other internal waterway parts. The valve shall a 10-year warranty covered by Akron Brass.

The valve shall be controlled by an Innovative Controls push/pull handle located at the operator’s panel.

BIDDER COMPLIES YES _____ NO _____

BIDDER COMPLIES YES _____ NO _____

INLET ADAPTER

One (1) Task Force Tips #AH3ST-NX 6" NST female x 5" Storz 30-degree adapter with #A01ST 5" Storz cap and chain shall be provided for the above inlet.

BIDDER COMPLIES YES _____ NO _____

2.5" LEFT SIDE INLET

A 2.5" gated inlet valve shall be provided on the left side pump panel. The valve shall be supplied with chrome plate female swivel, plug, chain, and removable strainer. The valve shall attach directly to the suction side of the pump with the valve body behind the pump panel.

BIDDER COMPLIES YES _____ NO _____

THREAD TERMINATION

The above shall terminate with National Standard Threads.

BIDDER COMPLIES YES _____ NO _____

6" PUMP INLET

A 6" diameter suction port with 6" NST male threads shall be provided, on the right side of vehicle. The inlet shall extend through the side pump panels and come complete with removable strainer and long handle chrome-plated cap.

BIDDER COMPLIES YES _____ NO _____

TFT BALL INTAKE VALVE

There shall be one TFT ball intake valve provided with the apparatus. The inlet side shall be 6" NST female and the outlet side shall be specified by the fire department.

BIDDER COMPLIES YES _____ NO _____

INLET ADAPTER

One (1) Task Force Tips #AH3ST-NX 6" NST female x 5" Storz 30-degree adapter with #A01ST 5" Storz cap and chain shall be provided for the above inlet.

BIDDER COMPLIES YES _____ NO _____

2.5" RIGHT SIDE INLET

A 2.5" gated inlet valve shall be provided on the right-side pump panel. The valve shall be supplied with chrome plate female swivel, plug, chain, and removable strainer. The valve shall attach directly to the suction side of the pump with the valve body behind the pump panel.

The above shall terminate with National Standard Threads.

BIDDER COMPLIES YES _____ NO _____

2.5" PRESSURE GAUGES

All (4) four 2 1/2" discharges will have pressure gauges. These gauges will have a clear scratch-resistant lens, and a highly polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation, and ensure proper operation from - 40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial.

BIDDER COMPLIES YES _____ NO _____

ALL (4) 2 1/2" DISCHARGE TERMINATIONS

There will be four (4) 2 1/2" discharges, two (2) on each side of the pump.

Three (3) discharge valves shall be equipped with a 30° elbow termination that is capped and chained.

One (1) discharge with be equipped with NST female x 5" Storz adapter with #A01ST 5" Storz cap and chain.

The above shall terminate with National Standard Threads.

BIDDER COMPLIES YES _____ NO _____

CROSSLAYS

Three (3) crosslay hose beds shall be supplied as follows:

- One crosslay with 2.5" piping and 2.5" swivel with the capacity of 200' of 2.5" hose.
- Two crosslays with 2" piping and 1.5" swivel with the capacity of 200' of 1.75" hose each.
- All crosslays shall be equipped with 2" valves. The valves shall be the "drop-out" style and controlled from the pump panel with electric actuators.

BIDDER COMPLIES YES _____ NO _____

VALVE ACTUATOR

The valve shall be controlled by an Akron model 9323 electric controller located at the operator's panel. Valve position will be displayed on the LCD screen incorporated into the control head.

BIDDER COMPLIES YES _____ NO _____

2.5" PRESSURE GAUGE

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly polished stainless steel bezel pressure gauge shall be provided. The gauge shall be 2.5" in diameter with a white face, and black enhanced lettering. The gauge shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation, and ensure proper operation from -40°F to +160°F. The gauge shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauge shall display a range from 0 to 400 psi with enhanced black markings on a white dial. IC Part Number 3101747-00-01.

The above shall terminate with National Standard Threads.

BIDDER COMPLIES YES _____ NO _____

CROSSLAY COVER

A black webbing crosslay cover shall be provided to enclose the top and sides of the crosslays, capable of being secured at the top and sides.

BIDDER COMPLIES YES _____ NO _____

COVER FASTENERS

The crosslay cover shall be secured with metal snaps.

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

MASTER PUMP DRAIN

A multiport master drain valve shall be provided and plumbed to multiple locations on the main pump body. The valve assembly shall be clearly marked as the Master Drain.

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

DRAIN VALVES LIFT UP STYLE

Vertical lift up style, quarter turn style drain valves shall be provided for each suction inlet, or discharge outlet as specified. Each drain shall be clearly marked, and color coded to match the corresponding suction of discharge.

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

WATERWAY VALVE AND ACTUATOR

The waterway valve shall be an electric valve. The valve shall be located at the operator’s panel. The actuator shall be connected to both a flow sensor and a pressure sensor. The actuator shall display pressure, flow, and valve position on a full color LDC display.

Manual override capability will be provided.

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

WATERWAY DRAIN VALVE

A 1.5” waterway drain valve shall be provided and controlled with a push/pull handle.

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

PUMP PANEL LIGHTING, LED

The driver's side pump panel controls and gauges shall be illuminated by a LED light strip, controlled at the pump panel.

The officer's side pump panel shall be illuminated by a full width white TecNiq E44 LED light strip, controlled at the pump panel.

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

PUMP PANEL GAUGES AND CONTROLS

The following gauges and controls shall be provided at the pump panel:

- Two (2) certified laboratory test gauge outlets.
- Pump primer control.
- Master drain control and additional drains as needed.
- Tank-fill and pump cooler valve controls.
- Tank to pump valve control.
- Pump capacity rating plate.
- All discharge controls.
- Two (2) master pump gauges.
- Gauges on all 1-1/2" and larger discharge lines.

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

PRIMING SYSTEM

The priming pump shall be a compressed air powered, high efficiency, multistage, venturi based AirPrime System. All wetted metallic parts of the priming system are to be of brass and stainless-steel construction. The priming system shall have a five-year warranty.

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

(1) PRIMER BUTTON - MAIN SUCTION

A single panel mounted control will activate the priming pump and open the priming valve to the pump.

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

COMPRESSION FITTINGS ON AIR SYSTEM

Compression style fittings shall be provided on air lines within the pump module.

BIDDER COMPLIES YES _____ NO _____

AIR OUTLET

One (1) air chuck shall be provided adjacent to the pump operator's panel on the driver's side. The system shall tie into the accessory tank of the brake system and include an 85-psi pressure protection valve in the outlet line to prevent the brake system from losing all air.

BIDDER COMPLIES YES _____ NO _____

AIR HORN BUTTON

A push button switch shall be provided on pump operators panel to activate the air horns.

BIDDER COMPLIES YES _____ NO _____

4" MASTER GAUGES

An Innovative Controls TC Series glass-filled nylon case, a clear scratch-resistant lens, and a highly polished stainless-steel bezel pump pressure and vacuum gauges shall be provided. The gauges shall be 4" in diameter with a white face, and black enhanced lettering. The gauges shall be fully-filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40°F to +160°F. The gauges shall also include a KEM-X Socket Saver diaphragm in the stem to eliminate freeze-up and contain a low temperature instrument oil that fills and protects the socket and bourdon tube. The gauges shall display a range from -30 to 400 psi with enhanced black markings on a white dial.

BIDDER COMPLIES YES _____ NO _____

WATER TANK GAUGE

A Class1 ITL-4 Intelli-Tank water level gauge shall be provided. The gauge shall feature wide-angle viewing and ultra-bright LEDs for high visibility even in direct sunlight. Water level sensing shall be through a pressure transducer, and capable of indicating nine (9) accurate levels.

BIDDER COMPLIES YES _____ NO _____

WATER TANK

The top of the booster tank shall be fitted with removable lifting assembly designed to facilitate tank removal.

The tank shall be completely removable without disturbing or dismantling the apparatus structure.

The tank shall be delivered with a Certificate of Capacity delineating the weight empty and full and the resultant capacity based on weight. Engineering estimates for capacity calculations shall not be permitted for capacity certification. A center of gravity and weight calculation for both empty and full conditions shall be required with each tank.

The tank shall have a limited Lifetime warranty that provides warranty service for the life of the fire apparatus in which the tank is installed.

The water tank shall have a capacity of at least **300** U.S. gallons and constructed of

BIDDER COMPLIES *YES*_____ *NO* _____

APPARATUS BODY

Each compartment shall be properly vented with louvers.

Roll up doors or hinged doors offered in painted or non-painted satin finish.

BIDDER COMPLIES *YES*_____ *NO* _____

COMPARTMENTATION LEFT SIDE

There shall be a compartment below the turntable.

There shall be two to three compartments behind the rear wheels. If two compartments it is understood the widths will be equal to the three-compartment configuration.

BIDDER COMPLIES *YES*_____ *NO* _____

COMPARTMENTATION RIGHT SIDE

There shall be a compartment below the turntable.

There shall be two to three compartments behind the rear wheels. If two compartments it is understood the widths will be equal to the three-compartment configuration

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT INTERIOR - L4

The L4 compartment on the left side of the apparatus shall include the following features:

- There shall be an adjustable shelf provided and installed in the compartment.
- There shall be a vertical divider/partition provided in a compartment as specified.
- There shall be an adjustable vertical slide-out tool board with a 250 lb. capacity supplied and mounted on unistrut tracks. Extra compartment lights shall be provided and located as needed to properly illuminate the compartment.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT INTERIOR - L5

The L5 compartment on the left side of the apparatus shall include the following features:

- There shall be an adjustable shelf provided and installed in the compartment.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT INTERIOR - L6 (if applicable)

The L6 compartment on the left side of the apparatus shall include the following features:

- There shall be an adjustable shelf provided and installed in the compartment.

BIDDER COMPLIES YES _____ NO _____

500# SLIDE-MASTER TRAY

There shall be (4) slide-out trays provided and installed. The drawer shall have a distributed load capacity of 500 lbs. and be capable of extending 100% of its depth.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT INTERIOR - R2

The R2 compartment on the right side of the apparatus shall include the following features:

- There shall be an adjustable shelf provided and installed in the compartment.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT INTERIOR – R4

A swing-out tool board with 250# rating shall be provided and mounted in a compartment. The tool board shall be constructed of a 1" square aluminum tubing framework with a 3/16" aluminum mounting surface on each side. The tool board shall be adjustable within the depth of the compartment. It shall be held in the open position with a pneumatic strut and in the closed position with a positive latching mechanism.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT INTERIOR – R5

There shall be an adjustable shelf provided and installed in the compartment.

There shall be a 250 lb. capacity rollout drawer supplied and installed in a compartment. The drawer shall be approximately 3" deep and shall be mounted on adjustable tracks.

BIDDER COMPLIES YES _____ NO _____

COMPARTMENT INTERIOR – R6 (if applicable)

There shall be an adjustable shelf provided and installed in the compartment.

There shall be a vertical divider/partition provided in a compartment as specified. The top and bottom of the divider shall have a formed flange bolted to the interior of the compartment.

There shall be an adjustable vertical slide-out tool board with a 250 lb. capacity supplied and mounted on unistrut tracks. Extra compartment lights shall be provided and located as needed to properly illuminate the compartment.

BIDDER COMPLIES YES _____ NO _____

HOSE BED

The rear hose bed shall allow for quick and easy loading and unloading of hose thus preventing hose and hose couplings from being caught or tangled. The hose bed must be capable of holding 800' of 5" hose.

Hose bed flooring shall be removable slatted aluminum.

BIDDER COMPLIES YES _____ NO _____

HOSE BED COVER

Black webbing shall be provided and installed on the entire hose bed to prevent the hose from unintentional deployment. The webbing shall be secured and fastened to the rear of the hose bed.

BIDDER COMPLIES YES _____ NO _____

REAR HOSE BED COVER

Black webbing shall be provided and installed on the rear of the hose bed only prevent the hose from unintentional deployment. The webbing shall be secured and fastened to the rear of the hose bed.

BIDDER COMPLIES YES _____ NO _____

FRONT HOSEBED LIGHTING

A LED light strip shall be provided, located on the interior of the front hose bed wall.

BIDDER COMPLIES YES _____ NO _____

BODY HANDRAILS

Handrails shall be constructed of type 304 stainless steel 1.25" diameter tubing with bright finish and knurled gripping surface. Mounting flanges shall be constructed from 7 gauge, .180 thick, stainless sheet. Each grab rail shall have 90 degree returns to flanges. The ends of grab rail shall pass through the flanges and be welded to form one structural unit. The handrails shall be mounted using 1.25" SS Hex bolts, with a barrier rubber gasket at each flange. Sufficient space shall allow for a gloved hand to firmly grip the rail.

The rails shall be located in the following areas: (Note: These are in addition to those previously mentioned in the cab section):

BIDDER COMPLIES YES _____ NO _____

WHEEL LINERS

fully radiused wheel well liners with adequate support to maintain their rigidity through adverse weather conditions shall be provided.

BIDDER COMPLIES YES _____ NO _____

SCBA CYLINDER COMPARTMENTS

There shall be up to seven (7) spare breathing air cylinder compartments recessed in the rear fender wells. The interior compartment shall be constructed of a high-density polyethylene plastic.

BIDDER COMPLIES YES _____ NO _____

DOOR FINISH

The single or double SCBA compartments shall have a brushed stainless door equipped with a weather resistant flush fitting thumb latch. The interior of the door shall incorporate a rubber seal to keep the compartment free of road debris and moisture.

BIDDER COMPLIES YES _____ NO _____

GROUND LADDERS

The apparatus shall be equipped with 119' of heavy duty, box type "I" beam rail, ground ladders. The ladders shall meet the requirements of NFPA 1931 to ensure proper design and that sufficient strength is available for the service intended. The ground ladders shall be constructed of aluminum with non-welded, field replaceable rung to rail connections to simplify field repairs. Removable plated steel butt spurs shall be utilized for added strength. A full 1/2", non-rotting, poly rope shall be provided for easy ladder operation.

- Duo-Safety LADDERS
- One (1) 10 ft. folding ladder, (mounted in fly section)
- One (1) 14 ft. combination ladder
- Two (2) 16 ft. roof ladders
- One (1) 20 ft. roof ladder
- Two (2) 24 ft. 2-section extension ladders
- One (1) 35 ft. 2-section extension ladder
- The ladders shall have lifetime Warranty against manufacturing defects.

BIDDER COMPLIES YES _____ NO _____

LADDER

One (1) Little Giant ladder, Model 17 shall be provided with a range of 9' to 15'.

One of the roof ladders shall be mounted on the side of the base section of the aerial.

BIDDER COMPLIES YES _____ NO _____

LADDER ENCLOSURE

The ground ladders shall be stored within a weather resistant enclosed area on the officer's side of the hose bed area. The ladders shall be mounted on non-metallic slides so each ladder can be removed individually. All ladders shall be stored on beam if possible. A vertically hinged treadplate door shall enclose the ladders on the rear.

BIDDER COMPLIES YES _____ NO _____

LADDER CHUTE DOOR

An aluminum diamond plate door shall enclose the ladders at the rear.

BIDDER COMPLIES YES _____ NO _____

RECEIVER (Sides)

A 2" receiver shall be provided and mounted directly to the apparatus chassis, extending out of the rear sides of the body. The receiver shall be 2" x 2" heavy wall tube and solidly re-enforced. The receiver shall be rated with a maximum capacity of 5,000 lbs. The receiver shall be designed for a 2-1 straight pull capacity (10,000 lbs.).

BIDDER COMPLIES YES _____ NO _____

RECEIVER (Rear)

A 2" receiver shall be provided and mounted directly to the apparatus chassis, under the body sub frame. Receivers that mount to the body subframe shall not be acceptable. The receiver shall be 2" x 2" heavy wall tube and solidly re-enforced. The receiver shall be rated with a maximum capacity of 5,000 lbs. The receiver shall be designed for a 2-1 straight pull capacity (10,000 lbs).

BIDDER COMPLIES

YES _____ **NO** _____

BODY ELECTRIC SYSTEM

Wiring is to be color-coded and include function codes. Wiring harnesses will be routed in protective, heat resistant loom, securely and neatly installed. All breakers and relays are utilized in circuits which amp loads are substantially lower than the respective component rating thus ensuring long component life.

All external harness interfaces will be of a triple seal type connection to ensure a proper connection. The cab/chassis and the chassis/body connection points will be mounted in accessible locations. Complete chassis wiring schematics will be supplied with the apparatus.

The wiring harness contained on the chassis shall be designed to utilize wires of stranded copper or copper alloy of a gauge rated to carry 125% of maximum current for which the circuit is protected without exceeding 10% voltage drop across the circuit. The wiring shall be uniquely identified by color code or circuit function code, labeled at a minimum of every three (3) inches. The identification of the wiring shall be referenced on a wiring diagram. All wires conform to SAEJ1127 (Battery Cable), SAEJ1128 (Low Tension Primary Cable), SAEJ1560 (Low Tension Thin Wall Primary Cable).

All harnesses shall be covered with moisture resistant loom with a minimum rating of 300 Degrees Fahrenheit and a flammability rating of VW-1 as defined in UL62. The covering of jacketed cable has a minimum rating of 289-degree Fahrenheit.

All harnesses are securely installed in areas protected against heat, liquid contaminants, and damage. The harness connections and terminations use a method that provides a positive mechanical and electrical connection and are in accordance with the device manufacturer's instructions. No connections within the harness utilize wire nut, insulation displacement, or insulation piercing.

All circuits conform to SAE1292. All circuits are provided with low voltage over current protective devices. These devices are readily accessible and protected against heat in excess of component rating, mechanical damage, and water spray. Star washers are not used for ground connections.

BIDDER COMPLIES

YES _____ **NO** _____

BACK-UP ALARM

Alarm producing 87-112 db shall be installed at the rear between the frame rails. It shall operate whenever the transmission's reverse gear is selected.

BIDDER COMPLIES YES _____ NO _____

STOP/TAIL/TURN/REVERSE LIGHTS

The rear stop/tail/turn/reverse lights shall be Whelen 600 series LED. The stop/taillights shall be LED model 60BTT. The amber arrow turn signals shall be LED model 60A00TAR. The reverse lights shall be LED model 60C00WCR (maximum intensity). The bottom position of the housing shall accommodate a Whelen 600 series warning light.

BIDDER COMPLIES YES _____ NO _____

LED ICC/MARKER LIGHTS

LED type ICC/marker lights shall be provided to meet D.O.T. requirements.

BIDDER COMPLIES YES _____ NO _____

FLEXIBLE MARKER LIGHTS

A LED flexible marker light shall be mounted on the rear lower corners of the body, one each side.

BIDDER COMPLIES YES _____ NO _____

STEP LIGHTS

The pump module running board area shall be illuminated by Whelen 2G 4" diameter LED lights mounted one each side on the front of the body in chrome flanges. An LED strip lighting or individually mounted lights shall be provided at the rear of the body and at the turntable step to illuminate all stepping surfaces.

BIDDER COMPLIES YES _____ NO _____

GROUND LIGHTING

The apparatus shall be equipped with lighting capable of illumination to meet NFPA requirements. Lighting shall be provided at areas under the driver and crew riding area exits and shall be automatically activated when the exit doors are opened. The ground lights shall be Truck-lite® model #44042C LED. Lighting required in other areas such as work areas, steps and walkways shall be activated when the parking brake is applied, provided the ICC lights are on.

BIDDER COMPLIES

YES _____ **NO** _____

REAR WORK LIGHTS

Two (2) LED flood lights shall be provided. One (1) shall be mounted on each side on the upper rear of the apparatus body. The lights shall be activated by a switch inside the cab near the driver.

BIDDER COMPLIES

YES _____ **NO** _____

OPTICAL WARNING SYSTEM

The optical warning system shall be capable of two separate signaling modes during emergency operations. One mode shall signal to drivers and pedestrians that the apparatus is responding to an emergency and is calling for the right-of-way and the other mode shall signal that the apparatus is stopped and is blocking the right-of-way.

A momentary rocker switch shall be provided near the driver and labeled Master Emergency to energize all the optical warning devices provided. A secondary momentary rocker switch shall be provided near the officer. All lights shall operate at not less than the minimum flash rate per minute as specified by NFPA.

BIDDER COMPLIES

YES _____ **NO** _____

UPPER-LEVEL WARNING DEVICES

The upper level shall be divided into zones A (front), B (officer's side), C (rear) and D (driver's side).

Zone A (front) shall have one (1) Whelen Freedom IV 72" Model F4N7QLED light bar, with fourteen (14) LED modules. The light bar shall have two (2) end red LED modules, two (2) corner red LED modules, eight (8) forward-facing red LED modules and two (2) forward-facing white LED modules. The light bar shall have all clear outer lenses. The light bar shall be installed on the cab roof as far forward as possible with two (2) MK8H 5" cast aluminum risers.

BIDDER COMPLIES

YES _____ **NO** _____

OPTICOM

An LED Opticom emitter shall be provided in the light bar. The Opticom shall be wired to a switch near the driver.

BIDDER COMPLIES

YES _____ **NO** _____

LOWER-LEVEL WARNING DEVICES

The lower level shall be divided into zones A (front), B (officer's side), C (rear) and D (driver's side).

Zone A (front) shall have four (4) Whelen 600 series model 60*02F*R Super LED warning lights.

The lights shall be installed two (2) each side on the front of the cab in the warning light housings.

Zone B (officer's side) shall have four (4) Whelen 600 series model 60*02F*R Super LED warning lights.

The lights shall be installed one (1) near the front corner of the apparatus, one (1) under the turntable area, one (1) near the rear axle, and one (1) near the rear corner of the apparatus.

Zone C (rear) shall have two (2) Whelen 600 series model 60*02F*R Super LED warning lights installed one (1) each side on the lower rear of the apparatus.

Zone D (driver's side) shall have four (4) Whelen 600 series model 60*02F*R Super LED warning lights.

The lights shall be installed one (1) near the front corner of the apparatus, one (1) under the turntable area, one (1) near the rear axle, and one (1) near the rear corner of the apparatus.

BIDDER COMPLIES YES _____ NO _____

ADDITIONAL WARNING LIGHT BARS

There shall be (2) additional Whelen Freedom IV 21" LED light bars, Model F4MINI, each with five (5) LED modules. Each light bar shall have one (1) end red LED module, two (2) corner red LED modules, and two (2) forward-facing white LED modules. The light bars shall have all clear outer lenses. The light bars shall be installed on the cab roof each with two (2) MK8H 5" cast aluminum risers.

BIDDER COMPLIES YES _____ NO _____

ADDITIONAL WARNING LIGHTS

There shall be two (2) additional Whelen 600 series model 60*02F*R Super LED warning lights installed on the apparatus.

BIDDER COMPLIES YES _____ NO _____

ADDITIONAL WARNING LIGHTS

There shall be (2) additional Whelen ION T-Series TLI* LED warning lights installed on the apparatus.

BIDDER COMPLIES YES_____ NO _____

ADDITIONAL WARNING LIGHTS

Two (2) additional Whelen M9V2* LED series warning lights shall be installed on the apparatus.

BIDDER COMPLIES YES_____ NO _____

BROW MOUNTED LED SCENE LIGHT

One (1) FireTech 72" 3-piece FT-B-72-ML-3PKIT-* brow mounted LED scene lights shall be provided. The lamp head shall operate at 12 volts DC, draw 23.8 amps, and generate over 30,000 lumens of light. The light shall be mounted at the front brow of the cab and shall be controlled from a switch in the cab. All custom mounting brackets shall be supplied by OEM.

BIDDER COMPLIES YES_____ NO _____

SCENE LIGHTS

Two (2) FireTech Mini-Brow FT-MB-2.18-FT-* scene lights shall be provided. The fixture shall have two (2) rows of 18 LEDs (36 LEDs total). The overall length should be 21". The fixture shall operate from 9-32v DC, shall draw 15 amps @ 12v DC, and shall produce 19,008 equivalent lumens. The fixture will have a combination of spot and flood optics and shall be wired to a switch above the driver. The light shall be mounted using an adjustable captive rail with detachable mounting feet. The device manufacturer shall warrant the fixture against defects in materials or workmanship for the life of the apparatus.

The lights shall be mounted one (1) each side above the cab rear crew doors.

BIDDER COMPLIES YES_____ NO _____

SCENE LIGHTS

Two (2) FireTech Mini-Brow FT-MB-2.45-FT-* scene light shall be provided. The fixture shall have two (2) rows of 45 LEDs (90 LEDs total). The overall length should be 50". The fixture shall operate from 9-32v DC, shall draw 38 amps @ 12v DC, and shall produce 47,520 equivalent lumens. The fixture will have a combination of spot and flood optics and shall be wired to a switch above the driver. The light shall be mounted using an adjustable captive rail with detachable mounting feet. The device manufacturer shall warrant the fixture against defects in materials or workmanship for the life of the apparatus.

The lights shall be mounted each side of the body above the L3 and R3 compartments.

BIDDER COMPLIES YES _____ NO _____

ADDITIONAL 3-WAY SWITCHES

Four (4) additional 3-way switches shall be provided per the customer's location.

BIDDER COMPLIES YES _____ NO _____

GENERATOR

The apparatus shall be equipped with a complete electrical power generation system. A hydraulic 10.0 KW generator shall be provided and installed. The generator and wiring shall conform to present National Electric Codes as outlined in the National Fire Protection Association Standards.

BIDDER COMPLIES YES _____ NO _____

BREAKER BOX

A circuit breaker box shall be provided with eight (8) spaces for breakers which shall be provided as needed. All wiring shall be installed in liquid tight conduit.

BIDDER COMPLIES YES _____ NO _____

BREAKER PANEL

The breaker panel shall meet all requirements set forth by the National Electrical Code and NFPA guidelines.

BIDDER COMPLIES YES _____ NO _____

120-VOLT OUTLETS

Two (2) 120-volt outlets with weatherproof cover shall be provided. All 120-volt wiring shall be installed in liquid tight conduit.

BIDDER COMPLIES YES _____ NO _____

240-VOLT OUTLET

A 240-volt outlet with weatherproof cover shall be provided. All 240-volt wiring shall be installed in liquid tight conduit.

BIDDER COMPLIES YES _____ NO _____

CORD REELS

There shall be one (1) electric rewind cable reels furnished and mounted in a compartment. The reels shall come complete with 150 feet of 10/3 Seoprene Water-resistant (SOW) yellow jacketed cable. A roller assembly and HS-3 cable stop ball shall be provided.

BIDDER COMPLIES YES _____ NO _____

REEL MOUNTING

The specific mounting location shall be determined at the preconstruction conference.

BIDDER COMPLIES YES _____ NO _____

FOUR WAY RECEPTACLES

One (1) four-way receptacle boxes with light shall be provided and hard wired to the end of the cable. The box shall be securely mounted in the immediate area of the cord reel. The mounting shall be a fabricated aluminum bracket equipped with a Velcro strap to secure the box.

BIDDER COMPLIES YES _____ NO _____

SURFACE MOUNTED LED SCENE LIGHT

One (1) Fire Research Spectra SPA260-J20 surface mounted LED scene light shall be provided. The lamp head shall operate at 240 volts AC, draw 1 amp, and generate 20,000 lumens of light. The light shall be mounted on the front face of the aerial platform and shall be controlled from a switch inside the platform.

BIDDER COMPLIES YES _____ NO _____

SURFACE MOUNTED LED SCENE LIGHT

One (1) Fire Research Spectra SPA260-J20 surface mounted LED scene light shall be provided. The lamp head

shall operate at 240 volts AC, draw 1 amp, and generate 20,000 lumens of light. The light shall be mounted under the aerial platform and shall be controlled from a switch inside the platform.

BIDDER COMPLIES YES _____ NO _____

TELESCOPIC LED SCENE LIGHTS

Two (2) Fire Research Spectra SPA547-J20-ON telescopic LED scene lights shall be provided. The lamp head shall operate at 240 volts AC, draw 1 amp, and generate 20,000 lumens of light. The light shall be installed on the rear of the aerial platform and shall be controlled from a switch located on the lamp head.

BIDDER COMPLIES YES _____ NO _____

MID-MOUNT AERIAL

AERIAL LOWER MAIN FRAME ASSEMBLY

The mainframe assembly shall be mounted mid-ship on the chassis, forward of the pump and over the transmission. This shall leave the rear hose bed open for use of large diameter and regular fire hose.

BIDDER COMPLIES YES _____ NO _____

TURNTABLE BEARING

The turntable bearing shall be constructed of steel.

The diameter of the turntable bearing shall be a minimum of 47". The turntable bearing shall be able to rotate 360 degrees in either direction on a one-inch-thick steel plate.

BIDDER COMPLIES YES _____ NO _____

UPPER TURNTABLE

The turntable shall be bolted to the turntable bearing using a minimum of 36 Grade 8 bolts.

The turntable shall be equipped with two removable aluminum sections for access into the pump.

The power operated turntable shall provide continuous rotating of the aerial structure clockwise or counterclockwise, thus enabling the structure to be positioned in any segment through 360 degrees. The

rotating mechanism shall also provide sufficient power to rotate the aerial sections in any direction at any angle, fully extended, while carrying the manufacturer's rated load capacity with the waterway in operation and discharging water at the tip of the aerial fly section.

Provisions shall be made for emergency operation of the rotation system should loss of engine power occur. This shall be done through an auxiliary power unit that can provide hydraulic power to safely rotate the aerial.

The complete rotation system shall have built in relief to prevent damage from rotating the boom into buildings or from overloaded water streams. Suitable indicators, clearly visible at all times, shall be provided to facilitate correct alignment of the turntable with the bed of the boom. An automatic light shall be used to show correct alignment for bedding of the ladder from the turntable control station and the platform station.

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

LEFT LOWER TURNTABLE ACCESS LADDER

There shall be a ladder to access the turntable pedestal.

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

UPPER TURNTABLE ACCESS LADDER

A ladder shall be provided on both sides of the turntable to allow easy access to the climbing ladder. The ladder shall be constructed from heavy wall, knurled aluminum tubing 1.25" diameter. A large treadplate step shall be located at the top to act as a landing. The entire assembly shall be securely bolted to the upper turntable side plate.

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

INTERLOCK

An interlock shall be provided that prevents operation of the aerial device until the chassis spring brakes have been set and the transmission has been placed in neutral or the transmission is in the drive position with the driveline to the rear axle disengaged.

An interlock shall be provided that allows operation of the engine speed control only after the chassis spring brakes have been set and the transmission is in neutral.

provide the power required for operating the aerial. The hydraulic system shall have a minimum hydraulic reservoir for 65 gallons of special hydraulic fluid. The hydraulic fluid must be discharged through a fine mesh stainless steel strainer. Within the system, pilot operated check valves shall be incorporated so that all valves hold in their respective function(s).

The hydraulic system shall also incorporate automatic by-passes to compensate in the event the boom is forced into a building or the operator accidentally moving the control valve in the opposite direction while at full speed.

The hydraulic system shall provide coast in the lift cylinders to prevent the outrigger jack system from coming off the ground. This shall be accomplished through programmable platform controls that limit the acceleration and deceleration of the boom.

Intercooling of the hydraulic oil shall be accomplished through a built-in heat exchanger to cool oil at all times.

All hydraulic lines shall be of the double braided type, with synthetic cover, rated at 12,000-psi burst pressure or above. A PTO hour meter shall be provided to record the time when the aerial hydraulic system is engaged.

BIDDER COMPLIES YES _____ NO _____

AUXILIARY HYDRAULIC POWER

A 12-volt auxiliary pump shall be provided to supply emergency power to the hydraulic system. This system shall be operated off the truck batteries and provide limited but adequate power to operate the boom and outrigger jacks under emergency conditions.

BIDDER COMPLIES YES _____ NO _____

CONTROL PEDESTAL

There shall be an aerial control pedestal located on the turntable. The control station shall encompass three electric over hydraulic proportional lever type controllers for raising/lowering, extending/retracting, and rotating the aerial device. The control valves shall be a proportional type to allow feathering characteristics during any operation.

The turntable pedestal controls shall have manual overrides within the console useable through an access door. The lower pedestal controls shall cancel the platform controls under all conditions.

The pedestal shall have removable panels for access to the hydraulic lines, valves and electrical wiring. There shall also be a hinged cover at the top of the control station for additional access. A safety guardrail shall be provided at the turntable pedestal control station to prevent the operator from falling. The lower pedestal controls shall completely override the platform controls under all conditions and shall be grouped in a convenient manner and properly illuminated for nighttime operation. Each pedestal hydraulic control shall be equipped with electro-magnetic solenoids, which shall operate the hydraulic valves corresponding to the electrical controls mounted in the platform for aerial boom operation. The lower pedestal control station shall be situated so the operator can easily observe the platform while operating the controls.

The following additional items shall be mounted at the top of the turntable pedestal control station:

- Automatic panel light to illuminate controls for nighttime operation;
- On/Off control switch for boom lights (one light mounted on each side of the boom) ;
- Three-way switching with the Platform for optional ladder lighting;
- Three-way switching with the Platform or on/off control switch for other optional lighting;
- Three-way switching with the Platform for the rear bucket scene light;
- On/Off control foot switch for high speed control of the hydraulic system;
- Three-way switching with the Platform for “creep mode” for aerial control functions and indicator LED;
- Illuminated emergency push button to deactivate the platform controls with the turntable electric controls remaining operable;
- Low breathing air system pressure warning LED indicator;
- Pedestal control power LED indicator;
- Platform control power Led indicator;
- Intercom communication system;
- Tag displaying functions for each pedestal boom operation;
- Tag displaying rated load capacity for the platform;
- LED indicators for cab and body damage (crush zones), jacks status, rungs aligned, tower aligned, rotation interlock, light tower (if truck is equipped with a light tower);
- Audible alarm for cab or body damage (crush zones), rotation interlock stop (when short-jacked) and low breathing air;
- Interlock override button.

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

INCLINOMETER

An illuminated inclinometer shall be provided and mounted in plain view of the pedestal operator location.

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

BOOM ASSEMBLY

An elevated platform of the telescopic design shall be provided.

The sections should produce a compact retracted length, allowing the platform to be positioned in tight or confined spaces at lower degrees of elevation.

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

AERIAL SPOT LIGHTS

Two (2) spotlights shall be provided. One (1) shall be mounted on each side of the aerial base section to illuminate the aerial device for nighttime operation. The lights shall be activated by a switch at the pedestal.

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

AERIAL PLATFORM DEVICE

An aerial platform device with a minimum 100-foot vertical reach shall be provided. The height dimension shall be calculated with the boom at 80 degrees. The horizontal reach of the device shall not be less than 89 feet. The overall height of the apparatus with the aerial device in the bedded positions shall be no more than 11 feet 6 inches.

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

CLIMBING LADDER

A NFPA compliant climbing ladder with a full profile handrail starting at the turn table, and a standard handrail extending towards the platform shall be provided for a continuous escape way and accessibility to and from the platform. Each section of the ladder shall be attached to a specific boom section allowing the ladder to extend automatically at the same rate as the boom. The climbing area shall be free of cables, waterway and extension cylinders. The ladder climbing area shall be a continuous escape way free of all obstacles.

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

LOAD CAPACITIES

The following load capacities shall be established with the stabilizers at full horizontal extension and placed in

the down position. Capacities shall be based upon full extension and 360-degree rotation.

BIDDER COMPLIES YES _____ NO _____

35 MPH WIND CONDITION (DRY)

The aerial platform shall have a rated capacity of 1000 pounds at any elevation or extension. This condition shall be with "NO WATER" flowing or in the waterway.

BIDDER COMPLIES YES _____ NO _____

35 MPH WIND CONDITION (WET)

The aerial platform shall have a rated capacity of 500 pounds at any elevation or extension. This condition shall be "WITH WATER" flowing or in the waterway.

BIDDER COMPLIES YES _____ NO _____

LADDER LIGHTING SYSTEM

The climbing ladder shall be illuminated by LED lights. The lights shall be spaced along the length of the boom to provide even lighting. The lights shall be activated by one (1) switch at the turntable pedestal and one (1) switch inside the platform.

BIDDER COMPLIES YES _____ NO _____

LIFTING CYLINDERS

The raising and lowering mechanism shall consist of two hydraulic cylinders. The cylinders shall be attached to the boom assembly in a manner that requires only 50% of the lifting force.

The power operated raising and lowering cylinders shall provide movement of the ladder and platforms rapidly and smoothly without undue sway or vibration. A positive locking device shall be provided so the desired angle of elevation can be maintained indefinitely without dependence upon engine power.

As a safeguard feature, the lifting system shall be structurally and hydraulically designed and mounted to prevent rapid descent (lowering) of the aerial unit in the event of detachment, failure or hydraulic hose break. In the event of failure of any raising mechanism during operation, the gravity descent of the ladder shall be kept at a speed, which shall prevent damage to the equipment or danger to personnel. Provisions

shall be made to prevent damage at full raise and lowering. There shall be a pilot-controlled check valve on each cylinder.

BIDDER COMPLIES YES _____ NO _____

WATER SYSTEM TO THE PLATFORM

Water shall be supplied through a fitted telescopic waterway constructed of high tensile aluminum. The waterway sections shall be provided with special pack gland type seals for minimum maintenance and the seals shall be located on the inside of the telescoping waterway. Waterway seals located on the outside of the waterway shall not be acceptable due to the decreased life expectancy caused by foreign particles and bad weather conditions damaging seals.

The waterway and platform nozzles shall have the capability of flowing a maximum of 2,000 gallons per minute.

Two (2) automatic relief valves, at the top and the bottom of the waterway, shall be provided in to eliminate any damage to the waterway by pressure shock or retracting the boom with the drain valve closed.

BIDDER COMPLIES YES _____ NO _____

OUTRIGGER GROUND JACKS

The single outrigger control station shall control all outrigger operations allowing for a one-person operation and quick set-up.

Individual control valves shall be supplied for each mode of outrigger operation. There shall be a plaque located next to each control displaying the function.

A hydraulic transfer valve (diverter valve) shall be installed to direct hydraulic power to either the outrigger operations or the boom operations to prevent operation of both circuits at the same time.

Fluid capacity plate for all lubricants and filter part numbers shall be provided.

There shall be four other controls located at the outrigger control station:

- aerial interlock override push button control to allow the boom to be raised from the nested position if an outrigger is "short set".
- auxiliary hydraulic motor push button control.
- high speed / creep push button control for the hydraulic system.
- upper power/hydraulic transfer switch that turns control power on/off to the pedestal and platform.

The switch also permits hydraulic fluid flow to the pedestal control valves.

The extendable outrigger stabilizers, when fully extended, shall have a spread in accordance with the manufacturer's best practices and engineering specifications.

There shall be an audible alarm and warning light that are automatically activated when the outriggers are being deployed.

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

AERIAL JACKS ALARM

An alarm shall be audible when the aerial jacks have been deployed either in the short jack mode or in fully deployed operations.

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

OUTRIGGER SPOTLIGHTS

Two (2) Laser Cannon lights shall be provided. One shall be mounted on each side on the apparatus to illuminate the area of the outriggers at full extension. The lights shall be activated by a switch inside the cab near the driver or when the parking brake is activated.

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

OUTRIGGER PADS

Jack pads shall be provided.

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

AERIAL DEVICE TEST & CERTIFICATION

The aerial device shall be tested and certified by a third-party independent testing agency. The aerial device shall be inspected and tested in accordance with the requirements of NFPA 1911, including all nondestructive testing (NDT) prior to being subjected to the tests defined in NFPA 1901. These tests shall include a stability test, horizontal load test, and an aerial device water system test.

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

PLATFORM AND EQUIPMENT

The platform shall be completely enclosed along the floorboard to protect occupants. There shall be four doors in the platform, two in the front and two in the rear, each of which shall be provided with a suitable safety latch. All doors shall latch and open inward to avoid accidentally falling from the platform.

A total of four (4) anchor points shall be provided within the platform for the attachment of safety harnesses.

Drain openings shall be provided to prevent water accumulation in the platform.

A platform leveling system shall be provided and so designed that the platform together with its rated load shall be supported and maintained level in relation to the turntable regardless of the position of the boom or sections. As a safety feature, should a malfunction occur, there shall be an emergency manual override control to level the platform.

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

PLATFORM BOOM OR SECTION BED LOCK

An interlock system shall be provided which shall prevent action and movement of the retracted elevating platform boom or sections in their bed until the ground jacks are placed in position to stabilize the vehicle.

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

LOAD LIMITATIONS

Load instruction plates shall be located at the turntable pedestal control station and the platform control station indicating the safe load of the platform. The platform shall carry the rated load capacity indicated in the following manner: raise, extend, rotate, retract and lower without exceeding the hydraulic pressures prescribed by the manufacturer. Extensions, retraction, and elevation functions can be operated simultaneously.

THE PLATFORM SHALL BE CAPABLE OF CARRYING ITS RATED LOAD SAFELY IN ANY POSITION OF OPERATION ACCORDING TO NFPA #1901.

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

PLATFORM ACCESS LADDER

There shall be an aluminum treadplate access ladder furnished near the rear of the body to access the

platform. Each step will be illuminated for night operation.

BIDDER COMPLIES YES _____ NO _____

PLATFORM CONTROLS FOR BOOM OPERATION

The platform control station shall be on the forward wall of the platform, centered for ease in operator viewing while operating the platform. The three controls shall control the functions of raising and lowering, extension and retraction and rotation of the aerial. The placement of the controls shall conform to NFPA. The controls shall be of the electronic type. This system shall provide diagnostic functions to aid in trouble shooting as well as programmable features to control speed, acceleration and deceleration. The controls shall be lighted for nighttime operation. All electrical connections to the control panel shall be made through waterproof connections and be easily removed or replaced for service.

The following additional items shall be located at the platform control station:

- On/off control switch for light to illuminate controls for nighttime operation.
- Foot operated switch for high-speed control of the hydraulic system.
- A button to activate "creep mode" of the aerial operation.
- Slave intercom station allowing "hands free" operation of the intercom.
- A "rungs aligned for climbing" for all high-handrail aerial ladder platforms.
- On/Off control for Platform Control Power.
- Three-way switching with the Pedestal for optional ladder lighting.
- Three-way switching with the Pedestal or on/off control switch for other optional lighting.
- Three-way switching with the Pedestal for the rear bucket scene light.
- On/Off control foot switch for high-speed control of the hydraulic system.
- Three-way switching with the Platform for "creep mode" for aerial control functions and indicator LED.
- Low breathing air system pressure warning LED indicator.
- LED indicators for cab and body damage (crush zones), jacks status, rungs aligned, tower aligned, rotation interlock, light tower (if truck is equipped with a light tower).
- Audible alarm for cab or body damage (crush zones), rotation interlock stop (when short-jacked) and low breathing air.

BIDDER COMPLIES YES _____ NO _____

INCLINOMETER

An illuminated inclinometer shall be provided and mounted in plain view of the aerial platform operator.

BIDDER COMPLIES YES _____ NO _____

PLATFORM CONTROL COVER

A vinyl cover shall be provided over the control panel in the aerial platform. The cover shall be secured at the top and snaps shall be used at the bottom.

BIDDER COMPLIES YES _____ NO _____

PLATFORM SPOTLIGHT

One (1) LED spotlight shall be provided and mounted on the top rail of the platform for the use of the operator. The light shall be activated by a switch in the platform.

BIDDER COMPLIES YES _____ NO _____

120 VOLT CIRCUIT TO PLATFORM

One (1) 15-amp electrical circuit utilizing 12-gauge 3 conductor electric cable shall be provided to the tip of the ladder. The circuit shall be wired from an enclosed terminal strip below the turntable through the collector ring assembly.

One (1) (NEMA-L5-20) female, three-prong, twist lock receptacle, with environmental cover, shall be located below the aerial platform controls.

BIDDER COMPLIES YES _____ NO _____

WATER CURTAIN

A water spray system shall be provided beneath the platform and controlled by a hand operated valve inside the platform. The spray system shall provide 75 GPM of water in a 25 ft. diameter water curtain below the platform. As a safety factor, one or both turret nozzles may be directed straight down for large volumes of water directly below.

BIDDER COMPLIES YES _____ NO _____

AERIAL MONITOR NOZZLES

At least one monitor shall be equipped with a flow rating of at least 250-1250 GPM. Controls shall be located at the platform and the turntable control console.

BIDDER COMPLIES

YES _____ **NO** _____

INTERCOM

An intercom system shall be installed to furnish communications between the platform and the turntable. The intercom kit shall include three control modules, one that is hands free and two that have a push-to-talk button, three speakers, and cables. The interconnection between control modules shall require two wires. The control modules shall have an LED volume display and push-button volume control. The hands-free module shall constantly transmit to the other modules unless a push-to-talk button is pressed.

The intercom shall be designed for exterior use.

BIDDER COMPLIES

YES _____ **NO** _____

BREATHING AIR SYSTEM

A breathing air system to the platform shall be provided.

One 4500-psi DOT cylinder, with pressure regulator, relief valve, and low air warning alarm, shall be provided. The system shall terminate in the platform with easy access via two (2) quick couplings for air masks, ready to accept the customer specified air fittings.

All valves, pressure regulators and gauges shall be protected from accidental damage.

Weather resistant storage shall be provided for breathing masks in the platform.

There shall be a screw-type shutoff valve and a CGA air fitting supplied on the air system plumbing to which a refill hose can be connected. The fitting shall be installed with a stainless-steel tee. There shall be a protective dust cap installed on the air line fittings. The air storage bottle shall be refillable without disconnecting the airline plumbing.

A low air alarm, audible and visual, shall be provided.

The platform air supply cylinder shall be mounted in accordance with the manufacture's best practices.

BIDDER COMPLIES

YES _____ **NO** _____

PARAPET LADDER

There shall be a ladder assembly pivoting off the platform that permits access over parapet walls and onto roof surfaces. The ladder shall be self-storing and easily deployed and retracted using a gas spring assisted lever.

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

STOKES ARMS

There shall be two arms mounted that are designed to provide support for a full size stokes basket and victim. The arms and platform shall have six anchor points to securely tie down a basket and victim.

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

LIFTING EYE

A single lifting eye shall be attached to the fly section of the boom for the purpose of hoisting a stokes basket. When a stokes basket is suspended from the eye, the basket shall be able to be reached by an attendant in the platform. Capacity of the eye shall be 800 lb. and any weight suspended from it shall be subtracted from the rated capacity of the platform.

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

CORROSION REDUCTION POLICY

It is understood that fire apparatus will operate in harsh environments. Industry standard corrosion protection with industry standard paint protection shall be provided.

Frame Rails

The chassis frame rails shall be coated, or the frame shall be of galvanized construction.

Fasteners

In any area that a stainless-steel screw or bolt head is to come in contact with aluminum, galvanized or steel, painted or non-painted, the fastener shall have the underside of the head pre-coated with nylon. The nylon coating shall act as a barrier between the fastener head and the metal or painted surface.

Screw or bolt taped into the metal shall be pre-coated with a Threadlocker type material pre-applied on the threads.

When bolting together stainless steel the pan-head bolts with nylon coating under the head, a stainless washer with a rubber backing, and a Stover flange nut to secure the bolt, shall be utilized.

When mounting aluminum components such as a step to the apparatus body, stainless steel washers with rubber backing shall be used. All mounted components shall utilize barrier material between the two surfaces.

Whenever possible, holes shall be pre-drilled and taped when mounting components such as lights, steps, and handrails prior to the paint process to reduce the corrosion opportunity. If a hole must be drilled into a previously painted surface, the paint barrier around the hole shall be re-established and a flange-type nutsert with a gasket under the flange shall be used.

When possible, the use of stainless trim screws shall be minimized. Structural tape and or adhesive shall be used where possible for mounting trim to the body or cab.

If a pre-treated screw or bolt is not available, hand applied Dynatex Boltlocker or Theadlocker shall be placed on the threads of the screw, bolt or nutsert. This will help seal threads from moisture and help prevent the fasteners from loosening. If lubricant is used when tapping the hole, the hole will be cleaned of lubricant and the shavings before applying.

Barrier Tape

Barrier tape shall be used on the backsides of all lights, trim pieces, or other components when bolting them to the apparatus; also, when attaching stainless steel over an aluminum surface or when attaching aluminum treadplate to the stainless steel. All instances of dis-similar metals contacting each other require the addition of barrier tape between the metals where contact is made.

Before applying the tape, all metal surfaces shall be clean from oil or dirt.

Gaskets

Gaskets shall be used under all snaps, loops and fasteners for such items as for hose bed covers. The paint seal shall be re-established around the mounting hole edges after drilling.

Rollup Doors

1 3/4" X 1/16" barrier tape shall be used on the frame opening to act as barrier between the aluminum door rail and the painted door opening surface.

Hinged Doors

Barrier tape shall be applied to the painted surface of the body and on the painted hinge side of the door.

Painting Steel

All surfaces shall be cleaned with solvent, primed, and then sprayed with a topcoat. After bolts are tightened to the proper torque, bolts shall be touched up with primer or cold galvanizing coating.

Mounting Emergency Lights and Options

All emergency lights, accessory mountings, power eject covers, and 110 outlet boxes mounted to the body should be mounted with pre-coated Threadlocker and nylon under the head screws or bolts to minimize corrosion between dissimilar metals.

Electrical Grounding

Grounding shall be in accordance with manufacturers best practice.

Proper grounding will help eliminate grounding problems and will reduce the possibility for electrolysis and corrosion to occur, as a result of impressed current be presented to the chassis. All electrical connection points shall be sprayed with electrical sealer as necessary.

BIDDER COMPLIES

*YES*_____ *NO* _____

PAINTING

The apparatus shall undergo extensive pre-paint preparation. All cab and body trim parts are to be removed prior to painting. All appliance-mounting holes are to be drilled and de-burred prior to painting. This allows mounting holes to be primed and painted. Before prime and finish coats are applied, the complete apparatus shall be properly prepared and treated to permit the best possible adhesion of the primer and finish coats.

All materials used in the paint process shall be of the of the highest quality available. Modern methods shall be employed to assure the finest finish surface possible. All priming, surfacing and painting shall be done in a modern down draft or cross flow paint facility. Experienced personnel trained by the paint manufacturer shall perform all paint application to provide the highest quality and most enduring paint finish available. Both aluminum and steel surfaces to be painted shall be primed with a two (2)-component primer which is compatible with the finish coat. The apparatus shall be finish painted with a polyurethane base/clear system.

The following paint process shall be utilized:

Surface Preparation:

- Wash surface thoroughly with mild detergent.
- Clean and de-grease.
- Sand and feather edge.
- Remove sanding dust with a cleaner compatible with polyurethane base coat/clear coat final finish.

Substrate treatment:

- Use a Metal Conditioner followed with a Conversion Coating product.

Priming:

- Use a priming pretreatment.
- Use a self-etching primer.
- Use Prime N Seal sealer compatible with polyurethane base coat.

Color Coat:

- Apply polyurethane base coat.

Clear coat:

- Apply polyurethane clear coat.

BIDDER COMPLIES

YES _____ ***NO*** _____

TWO-TONE CAB PAINT

- The cab exterior surfaces shall be two (2) colors.
- The paint break line shall be at the bottom of the windshield.

BIDDER COMPLIES

YES _____ ***NO*** _____

PAINTED FRAME AND LOWER AERIAL COMPONENTS

The frame rails, rear drop, fuel beam, outriggers, sway bars, and lower aerial components shall be painted glossy black.

BIDDER COMPLIES

YES _____ ***NO*** _____

TEXTURED FRAME RAIL COATING

The area of the frame rails where the pump module shall be located. Shall be applied with a textured coating that matches the frame rail color.

BIDDER COMPLIES

YES _____ ***NO*** _____

TURNTABLE PAINT

The turntable, side plates and lift cylinders shall be painted the same color as the apparatus.

BIDDER COMPLIES YES _____ NO _____

ADDITIONAL PAINT PACKAGE

The ladder sheave beams, extension cylinder shall be painted the same color as the apparatus.

BIDDER COMPLIES YES _____ NO _____

AIR CONDITIONING CONDENSER

The air conditioning condenser shall be painted to match the cab roof.

BIDDER COMPLIES YES _____ NO _____

CHEVRON STRIPING, REAR BODY OUTBOARD, ORAFOL REFLEXITE

The apparatus shall have 6" red and yellow reflective Chevron style striping affixed to the outboard rear body panels. The striping will be set in a manner to have the effect of an inverted "V" shape. The stripe will travel low to high from the outside to the inside.

BIDDER COMPLIES YES _____ NO _____

CHEVRON STRIPING, REAR PLATFORM OUTBOARD, ORAFOL REFLEXITE

In addition to the outboard rear body panels, the rear platform outboard panels shall also be covered with 6" red and yellow reflective Chevron style striping.

BIDDER COMPLIES YES _____ NO _____

BOOM SIGN

A boom sign, approximately 115" x 12", shall be provided on each side of the boom. The background of the boom sign shall be painted primary truck color.

BIDDER COMPLIES YES _____ NO _____

MISCELLANEOUS EQUIPMENT FURNISHED

- 1-pt. touch-up paint.
- A bag of stainless-steel nuts and bolts, as used in the construction of the apparatus.

BIDDER COMPLIES YES _____ NO _____

WHEEL CHOCKS

Two (2) Ziamatic #SAC-44 folding wheel chocks shall be provided. The wheel chocks shall be stored in the rear ladder access area.

BIDDER COMPLIES YES _____ NO _____

PIKE POLE STORAGE

Three (3) storage tubes shall be recessed each side of the rear compartment for pike pole storage. A clip shall be installed near each tube to secure the head of a standard pike pole.

BIDDER COMPLIES YES _____ NO _____

OPERATION AND SERVICE MANUALS

Complete "Operation and Service" manuals shall be supplied on two (2) USB flash drives with the completed apparatus. Service manual instructions shall include service, maintenance and troubleshooting for major and minor components of the truck. The apparatus manufacturer shall supply part numbers for major components (i.e., Engine, Axles, Transmission, Pump, etc.). A table of contents, hydraulic, air brake and overall apparatus wiring schematics shall be included.

A video demonstration on the operation of the truck shall be supplied on the flash drive.

BIDDER COMPLIES YES _____ NO _____

DELIVERY

The custom-built fire apparatus shall be driven from the manufacturing facility to the community by a factory trained delivery engineer who shall thoroughly demonstrate the complete apparatus operation and maintenance to the fire department designated personnel.

BIDDER COMPLIES YES _____ NO _____

DEALER PREP/INSPECTION

The apparatus dealer responsible for the sale of the apparatus shall perform a pre-delivery inspection of the apparatus prior to the customer taking possession of the vehicle. This inspection allows for the dealer to record all applicable part and serial numbers for the apparatus so that service and parts can be easily facilitated during the service life of the vehicle. This inspection also allows for a second quality control check, prior to the apparatus being placed in service.

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

WARRANTIES

The following warranties shall be supplied. See warranty documents for complete coverage details of each warranty provided. The apparatus shall be warranted to be free from mechanical defects in workmanship for a period of five (5) year. The apparatus shall be covered for parts and labor costs associated with repairs for a period one (1) year.

Life-time warranty on the frame.

- Ten (10) year cab structural warranty.
- Ten (10) body structural warranty.
- Ten (10) year warranty on paint.
- Two (2) year aerial mechanical warranty.
- Thirty (30) year aerial structural warranty.
- Two (2) year camera warranty.
- Five (5) year transmission warranty.

The OEM warranties shall be applied for all major components.

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

MANUFACTURING AND LOCATIONS

The apparatus will be manufactured in facilities wholly owned and operated by the company. A complete stock of service parts, and service shall be provided. The company shall maintain parts and service for a minimum period of twenty (20) years on each apparatus model manufactured.

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

GRAPHICS PACKAGE

A lettering and striping package that closely resembles the fire department's current apparatus shall be provided and installed.

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.	2024 Aerial Fire Apparatus Equipped with Aerial Ladder.	\$ _____

Delivery (Days After Receipt of Purchase Order) _____

Terms of Sale: _____

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 _____