

BID NUMBER: 0095

BID TITLE: FIRE ENGINE

BID ENVELOPE/PACKAGE CONTAINING BID:

Bids MUST be received in a sealed envelope/package with the bid number, company name and opening date clearly marked. Failure to comply may result in rejection of your entire bid. Late bids, e-mailed bids and faxed bids will not be considered nor returned. Union County will not be responsible for any lost or misdirected mail.



**UNION COUNTY FINANCE DEPARTMENT
300 MAIN STREET
MAYNARDVILLE, TN 37807
ccook@unioncountyttn.org
(865) 686-5040 Phone
(865) 329-7428 Fax**



**Bid documents must be completed in ink or typed, signed in ink,
and free from alterations, erasures or mark-throughs.**

Invitation to Bid

Project Number: 14004

Owner: Union County

The Union County Department of Finance is hereby soliciting sealed bids for the following items: **BID 0095 – FIRE ENGINE** under the Community Development Block Grant program. This project is funded under a grant contract with the State of Tennessee. Separate sealed bids will be accepted until **March 16, 2021 at 1:00 p.m.** at which time they will be opened and read aloud. All bids must be inclusive of all delivery and handling charges. Union County reserves the right to reject any and all bids. Bid must be effective for 90 days after bid opening date. Further, the county reserves the right to contact the successful bidder for one full calendar year from award date to determine if successful bidder is willing to provide the same materials or services at the original bid price. All bidders submitting bids are required to present **ALL** the required vendor information, defined in the project specifications, as accompanying information to their bid submittal, regardless if these documents have been submitted in previous solicitations, for their bid submitted to be considered a valid bid. For specifications and more information contact Carrie Cook, ccook@unioncountyttn.org.

Please send sealed bid to Union County Finance Department, Attn: Carrie Cook, 300 Main Street, Maynardville, TN 37807. All bid envelopes must be noted on outside of envelope as bid for 2020 Community Development Block Grant, Union County Fire Protection Project.

SECTION 1 - GENERAL TERMS AND CONDITIONS

1.1 ALTERATIONS OR AMENDMENTS: Alterations, amendments, changes, modifications or additions to this solicitation shall not be binding on Union County without prior written approval.

1.2 NO CONTACT POLICY: After vendor receives a copy of this bid, any contact initiated by any vendor with any Union County representative, other than the Finance Department, concerning this invitation for bid is prohibited and agreements made thereto will not be considered binding on Union County. Any such unauthorized contact may cause the disqualification of the bidder from this procurement transaction.

1.3 QUESTIONS: Any questions concerning the bid document must be submitted to ccook@unioncountyttn.org no less than ninety-six (96) hours before bid opening date.

1.4 BID STAMP: The bid/time stamp in the Union County Finance office will be the time of record.

1.5 TAXES: Union County is not liable for Federal excise or State sales tax. Tax exemption certificates will be provided upon request.

1.6 CONFLICT OF INTEREST: If requested by the Director of Finance, vendors must complete and submit a “Conflict of Interest Affidavit Statement” prior to contract award, see T.C.A. 5-14-114 and T. C. A. 12-4-101.

1.7 NON-COLLUSION: Vendors, by submitting a signed bid, certify that the accompanying bid is not the result of, or affected by, any unlawful act of collusion with any other person or company engaged in the same line of business or commerce, or any other fraudulent act punishable under Tennessee or United States law.

1.8 NON-DISCRIMINATION: Vendors, during the performance of this contract, will not discriminate against any employee or applicant for employment because of race, religion, sex, national origin or disability except where religion, sex, national origin or disability is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor.

1.9 SAME AS OR EQUIVALENT TO: Vendors are to bid as specified herein or propose an approved equal. Determination of equality is solely Union County’s responsibility. The designated brands are for reference purpose only, not a statement of preference. When an alternate manufacturer, brand, model or make is bid, Union County will determine if the item bid does meet or exceed the items as specified. If the bidder does not indicate that an alternate manufacturer, brand, model or make is being bid, it is understood that the item(s) bid are the same manufacturer, brand, model or make as was requested in the Invitation to Bid. Comparable products of other manufacturers will be considered if proof of comparability is contained in the bid. It shall be the responsibility of the vendors, including vendors whose product is referenced to furnish upon request catalog pages, brochures or other data as will provide an adequate basis for determining the quality and functional capabilities of the product offered. Failure to provide this data may be considered valid justification for rejection of bid.

1.10 MULTIPLE BIDS/AWARDS: Union County will consider multiple bids that meet specifications. Bid awards may include multiple approved vendors and the list of approved vendors may be added to or deleted from at any time.

1.11 STATE OF TENNESSEE CONTRACTORS’ LICENSE LAW (T.C.A. 62-6-119 b): No bid will be opened or considered for which the total cost of the project is twenty-five thousand dollars (\$25,000) or more, unless the outside of the sealed bid envelope/package containing the bid provides the following information: the Company Name, the Contractor’s license number, license classification, the date of the license expiration and that part of each license classification applying to the bid. In addition, each heating ventilation or air conditioning, plumbing and electrical subcontractor’s license number, date of the license expiration and that part of each classification applying to the bid if the value of the work is \$25,000 or greater, must be notated. If the value of either the contractor or the subcontractor’s work is less than \$25,000, the bid envelope/package containing the bid is to be notated with the phrase “Contractor or Subcontractor’s Bid is Less than \$25,000” after each appropriate heading. In the case of joint ventures, each party submitting the bid must provide this information. If no subcontractors are being used, the outside of the envelope/package containing the bid must state, “No Subcontractors are being used on this project.”

1.12 ACCEPTANCE: Vendors shall hold their price firm and subject to acceptance by Union County for a minimum period of sixty (60) working days from the date of the bid opening, unless otherwise indicated in their bid. to be supplied, their conformity with specifications, their suitability to the requirements of Union County and the delivery terms. Any or all bids may be rejected for good cause.

1.13 BID AWARDS: Bids will be awarded to the **lowest and best** bidder, taking into consideration the qualities of the articles to be supplied, their conformity with specifications, their suitability to the requirements of Union County and the delivery terms. Union County also reserves the right to not award this bid.

1.14 PROTEST: Any vendor wishing to protest the bid award shall notify in writing the Union County Director of Finance, 300 Main Street, Maynardville TN 37807. No protest will be accepted, except those protests made in writing and received within (10) ten calendar days of the bid award. Protests must be in writing and envelopes/package containing protest must be clearly marked with bid number and words "BID PROTEST". The Director of Finance, in conjunction with the Finance Committee, and with the advice and counsel of the County Attorney, shall review and make a final decision as to any bid protest. Appeals shall be filed in the Circuit or Chancery Courts of Union County within sixty (60) days of the final decision. **VENDORS PLEASE NOTE: UNION COUNTY WILL NOT STOP THE PURCHASE PROCESS. THE PURCHASE MAY BE COMPLETED OR THE PROJECT MAY BE RE-BID WHILE THE PROTEST PROCEDURE IS STILL IN OPERATION. IF A RE-BID IS MADE, THE PROTESTING VENDOR SHOULD SUBMIT A NEW BID. OTHERWISE, THEY WILL BE WITHOUT A BID ON THE RE-BID. FURTHER, THE RE-BIDDING WILL NOT END THE APPEALS PROCESS. IT WILL CONTINUE UNTIL A FINAL DECISION IS REACHED OR THE COMPLAINANT WITHDRAWS THE APPEAL.**

1.15 DELIVERY: Bid pricing is to include complete supply and delivery to Union County, Tennessee. Delivery time for equipment is 270 days. Vendors are to state the delivery time in the bid. Union County requires that vendors deliver all products "free on board" to final destination unless indicated otherwise in their bid, reference Terms & Conditions section 2.4.

1.16 PROOF OF FINANCIAL AND BUSINESS CAPABILITY: Bidders must, upon the request of Union County, provide satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of these specifications. Union County will make the final determination as to the bidder's ability.

1.17 VENDOR'S DEFAULT: Union County reserves the right, in case of vendor default, to procure the articles or services from other sources and hold the defaulting vendor responsible for any excess costs occasioned thereby.

1.18 DUPLICATE COPIES: Union County requires that all vendors submit one original and one exact copy of their bids, including brochures; unless additional copies are requested in bid specifications.

1.19 RESTRICTIVE OR AMBIGUOUS SPECIFICATIONS: It is the responsibility of the bidder to review the entire Invitation to Bid document and to notify the Finance Department if the Invitation to Bid is formulated in a manner that would unnecessarily restrict competition or if it is ambiguous in what is being requested. The Director of Finance must receive questions regarding the specifications or bid procedures not less than seventy-two (72) hours prior to the time set for the bid opening.

1.20 TERMINATION: Union County reserves the right to terminate this contract in whole or in part with thirty (30) days written notification to the contractor. In the event of termination, the County shall not be liable for any costs other than the cost of services performed and materials delivered and accepted prior to termination date.

1.21 OSHA SAFETY: The Contractor is responsible for training their employees in Safety and Health Regulations for the job, assuring compliance with Tennessee Occupational Safety and Health regulations and any other Regulatory Agency.

1.22 PERFORMANCE BOND: A standard surety or performance bond or an irrevocable letter of credit in favor of Union County Government at a federally insured financial institution will be required to be submitted upon award of the bid, if indicated in section four, item six insurance requirement checklist.

1.23 BACKGROUND CHECKS: Contractors shall comply with Public Chapter 587 of 2007, as codified in Tennessee Code Annotated Section 49-5-413, which requires all contractors to facilitate a criminal history records check conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation for each employee prior to permitting the employee to have contact with students or enter school grounds when students are present.

1.24 AWARD RESULTS: As soon as practicable after proposal or bid evaluations, interested parties may request results by logging into Vendor Registry or by contacting ccook@unioncountyttn.org. Individual notices are normally not mailed or e-mailed except to the successful vendor.

1.25 PRICE INCREASE/DELIVERY CHARGES: Request for price or delivery charge increases must be received in writing 30-days prior to implementation. The Union County Director of Finance will review requests and make a determination to continue or cancel services.

1.26 INDEMNIFICATION/HOLD HARMLESS: Contractor shall indemnify, defend, save and hold harmless Union County and, its officers, agents and employees from all suits, claims, actions or damages of any nature brought because of, arising out of, or due to breach of the agreement by Contractor, its subcontractors, suppliers, agents, or employees or due to any negligent act or occurrence or any omission or commission of Contractor, its subcontractors, suppliers, agents or employees.

1.27 DECLARATIVE STATEMENT: Any statement or words (i.e.: must, shall, will, etc) are declarative statements and the proposer must comply with the condition. Failure to comply with any such condition may result in their bid being non-responsive and disqualified.

1.28 WAIVING OF INFORMALITIES: Union County reserves the right to waive minor informalities or technicalities when it is in the best interest of Union County.

1.29 APPROPRIATION: In the event no funds are appropriated by Union County for the goods or services in any fiscal year or insufficient funds exist to purchase the goods or services, then the Contract shall expire upon the expenditure of previously appropriated funds or the end of the current fiscal year, whichever occurs first, with no further obligations owed to or by either party.

1.30 ASSIGNMENT: Contractor shall not assign or sub-contract this agreement, its obligations or rights hereunder to any party, company, partnership, incorporation or person without the prior written specific consent of Union County.

1.31 QUANTITIES: Union County does not guarantee quantities to be purchased off this bid.

1.32 UNIT PRICE: Unit price for each unit bid shall be shown and such price shall include packing unless otherwise specified. A total shall be entered in the amount column of the pricing page for each item bid. In case of discrepancy between any unit price and an extended price, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.

1.33 MODIFICATION OR WITHDRAWAL OF BIDS: When it is certain that a mistake has been made in the preparation of the bid, a request will be made to the bidder to confirm the bid. Provisions must be made so that mistakes can be taken care of and the ambiguity resolved satisfactorily. Bids may be modified or withdrawn by written notice received in the Finance Department prior to the time and date set for the bid opening. The changes or withdrawal of the bids should be in writing and signed by an official of the company. The envelope containing the modification should clearly state "modification to bid: Either the entire bid or a particular item may be withdrawn or modified in this manner.

1.34 PRE-BID CONFERENCES: Attendance at Pre-Bid Meeting is strongly encouraged. When deemed necessary, a Mandatory Pre-Bid Meeting will be held. In this case, a company representative MUST be in attendance and sign the Pre-Bid sign-in sheet in order to be awarded the bid.

1.35 ADDENDUM: Union County Government reserves the right to amend this solicitation by addendum. Addendum will be emailed up to 48 hours in advance of the bid/proposals due date and time. It is the bidder's responsibility to check for addendum. If in the County's opinion revisions are of such a magnitude, the deadline for this solicitation may be extended in an addendum. In addition, addendum can change specifications, reply sheets, and times and dates for pre-bid meetings as well as due dates/deadlines for questions and bids/proposals.

BID NUMBER: 0095
BID TITLE: FIRE ENGINE

SECTION 4. INSURANCE REQUIREMENT CHECKLIST

The bidder awarded this bid or contract will maintain, at their expense adequate insurance coverage to protect them from claims arising under the Worker’s Compensation Act, any and all claims for bodily injury and property damage to the Bidder and to Union County Government while delivery and service are being done. A certificate of insurance must be on file in the Purchasing Department before work may begin and must be maintained until work is completed.

Only the items marked with an “X” are applicable to this bid and or contract.

- | | | |
|----|---|---|
| 1. | Workers Compensation
Employers Liability | Statutory limits
100,000/100,000/500,000 |
| 2. | <input checked="" type="checkbox"/> Commercial General Liability | \$1,000,000 per occurrence
\$2,000,000 aggregate |
| | <input checked="" type="checkbox"/> Occurrence Form Only | |
| | <input checked="" type="checkbox"/> Include Premises Liability | |
| | <input checked="" type="checkbox"/> Include Contractual | |
| | <input checked="" type="checkbox"/> Include XCU | |
| | <input checked="" type="checkbox"/> Include Products and Completed Operations | |
| | <input checked="" type="checkbox"/> Include Personal Injury | |
| | <input checked="" type="checkbox"/> Include Independent Contractors | |
| | Include Vendors Liability | |
| | Include Professional or E&O Liability | |
| 3. | Business Auto | \$1,000,000 |
| | Include Garage Liability | \$1,000,000 |
| | Include Garage Keepers Liability | |
| | Copy of Valid Driver’s License | |
| | Copy of Current Motor Vehicle Record | |
| | Copy of Current Auto Liability Declarations Page | |
| 4. | Crime Coverages | |
| | Employee Dishonesty | |
| | Employee Dishonesty Bond | |
| 5. | Property Coverages | |
| | Builders Risk | |
| | Inland Marine | |
| | Transportation | |
| 6. | Performance Bond Required – A <u>One Hundred Percent (100%)</u> performance or an irrevocable letter of credit in favor of Union County Government at a federally insured financial institution. <u>MUST</u> be submitted before a purchase order is issued. | |

Certificate Holder Shall Be: Union County Government, Maynardville, Tennessee, and shall show the bid number and title. Union County Government shall be named as an additional insured on all policies except worker’s compensation and auto. Insurance carrier ratings shall have a Best’s rating of A-VII or better, or its equivalent. Cancellation clause on certificate should strike out “endeavor to” and include a 30-day notice of cancellation where applicable. Any deviations from the above requirements must be disclosed to the Union County Purchasing Agent. Any liability deductibles or exclusions must also be disclosed. Exceptions can be granted if applicable.

Bidders Statement and Certification

I understand the insurance requirements of these specifications and will comply in full within **21 (twenty-one) calendar days** if awarded this bid and or contract. I agree to furnish the county with proof of insurance for the entire term of the bid and or contract.

Vendor Name

Authorized Signature

Bid Representative Name (Please Print)

Date

INFORMATION FOR BIDDERS

1. Receipt and Opening of Bids:

Union County (herein called the "Owner"), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the finance department and then at said office publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to Carrie Cook, 300 Main Street, Maynardville, TN. 37807 and designated as bid for 2020 Community Development Block Grant, Union County Fire Protection Project.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 90 days after the actual date of the opening thereof.

2. Preparation of Bid:

Each bid must be submitted on the prescribed form and accompanied by Certification of Bidder Regarding Debarment. All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures, and the foregoing Certification must be fully completed and executed when submitted.

It is the intent of these specifications to cover our bid for furnishing and delivery to the purchaser of a complete NFPA 1901 compliant apparatus as it pertains to the specific type of apparatus equipped as hereinafter specified. With a view to obtaining the best results and the most acceptable apparatus for service in the fire department, these specifications cover the general requirements as to the type of construction, together with certain details as to finish, equipment, and appliances with which the successful bidder must conform. Minor details of construction and materials where not otherwise specified are left to the discretion of the contractor, who will be solely responsible for the design and construction of all features.

3. Responsibility of Bidder:

To closely evaluate all bids and determine the responsiveness to the customer request. Each proposal must be submitted in the same order as the customer specification for ease of comparison. Each item must have a check mark in the appropriate column indicating compliance. Those items that are different by brand, model number (when applicable), and operational performance must be clearly defined and listed separately on a document clearly identified as "Clarifications and Substitutions". Vendors failing to comply with this request are subject to immediate rejection without further cause. (NO EXCEPTIONS)

All equipment in the bid must meet or exceed the OWNERS specifications and must meet all applicable State and Federal regulations.

BIDDER must assure that any bid will be good and may not be withdrawn for period of 90 calendar days from the date of the bid opening.

Equipment must be able to be delivered within 340 calendar days and accepted by the vendor and the County. Delivery of all equipment will be made to the prescribed location determined by the Mayor or their representative.

All bidders submitting bids are required to present the required vendor information as accompanying information to their bid submittal, regardless if these documents have been submitted in previous solicitation. All of these items must be included with this bid submittal in order for the bid submitted to be considered a valid bid.

- a. Debarment Certification (Form Attached)
- b. Iran Divestment Act (Form Attached)

All bidders must submit their full name, address and a contact person and phone number with bid.

4. Responsibility of the Owner:

The OWNER reserves the right to reject any and all bids.

The OWNER may not negotiate with any one Bidder to reduce or alter the stated bid.

Should the bids have to be thrown out for whatever reason, a mini-rebid will be held with the parties that submitted original bids, unless only one bid is received and the State requires additional bids.

The OWNER agrees to provide written NOTICE of AWARD OF BID within 15 calendar days of the date of the bid opening.

5. Method of Bidding:

Bids must be submitted in a sealed envelope, bearing on the outside the name and address of the BIDDER and words "BID FOR 2020 CDBG Union County FIRE PROTECTION.

If forwarded by mail, the sealed envelope must be enclosed in another envelope addressed to:

Carrie Cook
Union County Finance Department
300 Main Street
Maynardville, TN. 37807

6. Qualification of Bidder:

The Owner may make such investigations as he/she deems necessary to determine the ability of the bidder to provide the equipment being requested and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the owner that such bidder is properly qualified to carry out the obligations of the contract to provide the material within a timely fashion. Conditional bids will not be accepted.

7. Bid Security:

No bid bond or certified check will be required for the submittal of the bid.

8. Addenda and Interpretations:

No interpretation of the meaning of the specifications or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be in writing addressed to Carrie Cook, Union County Finance Department, 300 Main Street, Maynardville, TN. 37807 and to be given consideration must be received at least five days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, or emailed to all prospective bidders (at the respective addresses furnished for such purposes, not later than two days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents.

9. Laws and Regulations:

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over the project shall apply to the contract throughout and they will be deemed to be included in the contract the same as though herein written out in full.

10. Method of Award – Lowest Qualified Bidder:

After receiving bids and determining the amount of funds estimated by the OWNER as available to finance the contract, the OWNER will award the contract to the lowest responsible bidder. The lowest most responsive bidder will be determined upon the basis of the lowest base bid or lowest base bid combined with alternates (additive or deductive). If the contract is to be awarded based on the owner's base bid with alternates, alternates will be accepted in the numerical order in which they are listed in the Form of Bid.

11. Obligation of Bidder:

At the time of the opening of bids each bidder will be presumed to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his/her bid.

CERTIFICATION OF BIDDER REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

INSTRUCTIONS

This certification is required pursuant to 24.CFR Section 24.510(b). It shall be completed, signed and submitted as part of the bid proposal.

1. By signing and submitting this proposal, the prospective lower-tier participant certifies that neither it, its principals nor affiliates, is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Further, the Participant provides the certification set out below:
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that an erroneous certification was rendered, in addition to other remedies available to the Federal Government, the Department or agency with which this transaction originated may pursue available remedies.
3. Further, the Participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the Participant learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. By submitting this proposal, it is agreed that should the proposed covered transaction be entered into, the Participant will not knowingly enter into any lower-tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the agency with which this transaction originated.
5. It is further agreed that by submitting this proposal, the Participant will include this Certification, without modification, in all lower-tier covered transactions and in all solicitations for lower-tier covered transactions.

Contractor Name and Title _____ Date _____

Signature _____ Address _____

City _____ State _____ Zip _____

NON-CERTIFICATION:

As the prospective lower-tier participant, I am unable to certify to statements in this Certification as explained in the attachment to this proposal.

Contractor Name and Title _____ Date _____

Signature _____ Address _____

City _____ State _____ Zip _____

The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

This form must be submitted to the State with the bid tabulations.

IRAN DIVESTMENT ACT

In compliance with the Iran Divestment Act (State of Tennessee 2016, Public Chapter No. 817), which became effective on July 1, 2016, certification is required of all bidders on contracts over \$1,000.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party hereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

I affirm, under the penalties of perjury, this statement to be true and correct.

Date

Signature of Bidder

Company

A bid shall not be considered for award nor shall award be made where the foregoing certification has been complied with; provided, however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. The City/County of may award a bid to a bidder who cannot make the certification, on case-by-case basis, if:

1. The investment activities in Iran were made before July 1, 2016, the investment activities in Iran have not been expanded or reviewed on or after July 1, 2016, and the person has adopted, publicized, and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or

2. The City/County of makes a determination that the goods or services are necessary for the City/County of to perform its functions and that, absent such an exemption, the political subdivision will be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

BID NUMBER: 0091

BID TITLE: FIRE ENGINE

BID FOR UNIT PRICE CONTRACTS

Place: Union County Finance Department

Date: _____

Project Number: 14004, Bid 0091

Proposal of _____ (hereinafter called "Bidder" a corporation, organized and existing under the law as of the State of _____,

Partnership, or an individual doing business as _____.

To Union County (hereinafter called "Owner")

Personage:

The Bidder, in compliance with your invitation for bids for the purchase of a Pumper and equipment, having examined the specifications with related documents. These prices are to cover all expenses incurred in performing the work required under the bid documents.

Bidder acknowledges receipt of the following addendum:

Bid Preparation

Bids will be marked and indicated for each section submitted. Bids will be sealed, and specified date of opening will be determined.

Bidder agrees to provide all the equipment described in the specifications for the following unit price: Equal to or Equivalent applies to all of the items below.

Item	Description	Quantity	Unit Price (Each)	Total
Fire Engine	New or Demo	One (1)		
Grand Total				

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The bidder agrees that this bid shall be good and may not be withdrawn for a period of 90 days after the scheduled closing time for receiving bids.

Respectfully submitted:

By: _____

Title

Seal – if bid is by a corporation.

NORTHEAST UNION FIRE DEPARTMENT - PUMPER-TANKER BID SPECIFICATIONS

RE-MOUNTING Bidder Complies: YES ____ NO ____

The body shall be designed, manufactured and installed on the chassis to allow for complete removal for future re-mounting onto another chassis.

APPARATUS WARRANTY Bidder Complies: YES ____ NO ____

The finished apparatus shall carry full product warranty as it is provided by the individual component manufacturers. The following minimum warranties shall be included as listed below:

- Overall Apparatus - 1 Year Full Warranty
- Extreme Duty Body Perforation - 10 Year Warranty
- Extreme Duty Sub-Structure Perforation - 20 Year Warranty
- Paint and Finish - 7 Year Warranty
- ROM Roll Door Mechanical Warranty - 7 Year Warranty
- ROM Roll Door Electrical Warranty - 7 Year Warranty
- Chassis - New Factory Warranty
- Whelen or equivalent Electrical, Lights, Wiring - 5 Year Warranty
- Misc. Components - Individual Manufacturer Warranties Shall Apply

PRE-BUILD MEETING Bidder Complies: YES ____ NO ____

There shall be a pre-build meeting held between factory personnel and representatives of the Fire Department to finalize details prior to the start of fabrication. This meeting shall be held in person at the factory or through a teleconference at the discretion of the department. To assist with overall project costs, there are no travel expenses included in the cost of this proposal.

PERIODIC APPARATUS INSPECTIONS Bidder Complies: YES ____ NO ____

At any time during the build process, representatives of the department are always encouraged to visit the factory at any time during business hours to check-in on the progress of their new custom-built apparatus.

A factory representative will always be on site to give updates and let department members see their truck as it is being built.

Appointments are never necessary for these periodic visits, but for safety reasons we do ask that you arrive wearing appropriate clothing to enter the fabrication areas.

Eye protection and additional safety equipment will be provided as needed.

PROGRESS PICTURES Bidder Complies: YES ____ NO ____

Each week the factory's website shall be updated with "IN PROGRESS" pictures of all apparatus currently in production.

This allows any department members the opportunity to check-in on their new apparatus each week regardless of their location or work schedule.

FINAL INSPECTION VISIT Bidder Complies: YES ____ NO ____

Prior to the delivery process of the new apparatus, representatives from the Department will be able to perform a final inspection while the vehicle is still at the factory. This visit shall be at the discretion of the department.

Following the final inspection visit, the vehicle will be available for delivery.

To assist with overall project costs, there are no travel expenses included in the cost of this proposal.

APPARATUS DELIVERY Bidder Complies: YES ____ NO ____

The department shall take delivery of the finished apparatus at the factory following the final inspection visit unless other arrangements are made prior to contract signing. To ensure a proper break-in period on the engine, transmission and driveline components, the apparatus shall be driven home under its own power.

MANUALS AND SERVICE INFORMATION Bidder Complies: YES ____ NO ____

The apparatus manufacturer shall supply, at time of delivery, one (1) full set of operational and maintenance manuals covering the apparatus and components as it is being delivered. A permanent plate shall be mounted in the driver's compartment which specifies the quantity and type of fluid required on the apparatus including engine oil, engine coolant, transmission, pump transmission lubricant, pump primer oil (if applicable), chassis tire pressures, and drive axle lubricant.

GENERAL CONSTRUCTION Bidder Complies: YES ____ NO ____

The apparatus shall be designed with due consideration to distribution of load between the front and rear axles, so that all specified equipment and a full complement of personnel will be carried without injury to the apparatus. Weight balance and distribution shall be in accordance with the recommendations of NFPA 1901.

The apparatus shall be designed so that the operator could perform all recommended daily maintenance checks easily without the need for hand tools.

Apparatus components that interfere with repair or removal of other major components must be attached with fasteners (cap, screws, nuts, etc.) so that the components can be removed and installed with normal hand tools. These components must not be welded or otherwise permanently secured into place. The GAWR and GVWR of the chassis shall be adequate to carry the fully equipped apparatus including unequipped personnel weight and a miscellaneous equipment allowance per NFPA criteria. It shall be the responsibility of the purchaser to provide the contractor with the weight of equipment to be carried if it is more than the allowance as set forth by NFPA.

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

The apparatus shall be so designed that the various parts are readily accessible for lubrication, inspection, adjustment, and repair. Where special tools manufactured or designed by the contractor and are required to provide routine service on any component of the apparatus built or supplied by the contractor, such tools shall be provided with the apparatus.

QUALITY Bidder Complies: YES ____ NO ____

Workmanship and materials provided shall be of a quality unsurpassed for this apparatus.

All components requiring regular maintenance, lubrication and visual inspections shall be readily accessible.

This fire apparatus shall be designed and manufactured for ease of operation and the highest level of safety available.

All aluminum welding shall follow American Welding Society and ANSI D1.2-2003 requirements for structural welding of aluminum.

All sheet metal welding shall follow American Welding Society B2.1-2000 requirements for structural welding of sheet metal. Flux core arc welding to use alloy rods, type 7000, American welding Society standards A5.20-E70T1.

Employees classified as welders are tested and certified to meet the American Welding Society codes upon hire and every three (3) years thereafter.

PERFORMANCE TESTS AND REQUIREMENTS Bidder Complies: YES ____ NO ____

A road test shall be conducted with the apparatus fully loaded and a continuous run of ten (10) miles or more shall be made under all driving conditions, during which time the apparatus shall show no loss of power or overheating.

The transmission drive shaft or shafts, and rear axle shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus. Vehicle shall adhere to the following parameters:

- The apparatus, when fully equipped and loaded, shall have not less than 25 percent or more than 50 percent of the weight on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle.
- The apparatus shall be capable of accelerating to 35 mph from a standing start within 25 seconds on a level concrete highway without exceeding the maximum governed rpm of the engine.
- The service brakes shall be capable of stopping a fully loaded vehicle in 35 feet at 20 mph on a level concrete highway. The air brake system shall conform to Federal Motor Vehicle Safety Standards (FMVSS) 121.
- The apparatus, fully loaded, shall be capable of obtaining a speed of 60 mph on a level concrete highway with the engine not exceeding the governed rpm (full load).

FAILURE TO MEET TEST Bidder Complies: YES ____ NO ____

In the event the apparatus fails to meet the test requirements of these specifications on the first trial, second trials may be made at the option of the bidder within 30 days of the date of the first trial.

Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for rejection.

Failure to comply with changes to conform to any clause of the specifications, within 30 days after notice is given to the bidder of such changes, shall also be cause for rejection of the apparatus.

MINIMUM INSURANCE REQUIREMENTS Bidder Complies: YES ____ NO ____

The apparatus manufacturer shall defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

COMMERCIAL GENERAL LIABILITY INSURANCE

During the performance of the contract and for three (3) years following acceptance of the product, the apparatus manufacturer shall keep in force at least the following minimum limits of commercial general liability insurance:

- Each Occurrence: \$1,000,000
- Products/Completed Operations Aggregate: \$2,000,000
- Personal and Advertising Injury: \$1,000,000
- General Aggregate: \$2,000,000

COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

During the performance of the contract, the apparatus manufacturer shall keep in force at least the following minimum limits of commercial automobile liability insurance:

- Each Accident Combined Single Limit: \$1,000,000

UMBRELLA/EXCESS LIABILITY INSURANCE

During the performance of the contract and for three (3) years following acceptance of the product, the apparatus manufacturer shall keep in force at least the following minimum limits of umbrella liability insurance:

- Aggregate: \$5,000,000
- Each Occurrence: \$5,000,000

CERTIFICATION OF NFPA 1901 COMPLIANCE Bidder Complies: YES ____ NO ____

As per NFPA 1901, the purchaser shall assume the responsibility of determining, prior to the purchase of the apparatus, which will be responsible for ensuring that all aspects of NFPA 1901-2016 are met. The manufacturer shall be responsible for providing or performing only the items requested by the purchaser in the documents provided to the manufacturer by the purchaser. Written certification shall be provided by the manufacturer stating that the delivered apparatus complies with the NFPA 1901-2016 Standard. If the purchaser has elected to provide, perform, outsource and/or contract with a third party, any item required by NFPA 1901-2016 (per the previous paragraph), the manufacturer shall provide, upon delivery, a "Statement of Exceptions" per Chapter 4 of NFPA 1901. This "Statement of Exceptions" shall include the following:

1. A separate specification of the section of the NFPA Standard for which the apparatus is lacking compliance.
2. A description of the aspect of the apparatus that is not compliant.
3. A description of the further changes or modifications to the delivered apparatus which must be completed to achieve full compliance.
4. An identification of the entity that will be responsible for making the necessary post-delivery changes or modifications to the apparatus to achieve full compliance with the applicable standard.

The responsibility shall rest with the purchaser to ensure that the apparatus not be placed into active emergency service until fully compliant with NFPA 1901.

FLUID CAPACITY LABEL Bidder Complies: YES ____ NO ____

A permanent plate shall be mounted in the driver's compartment specifying the quantity and type of the following fluids used in the apparatus (if applicable) for normal maintenance:

1. Engine Oil.
2. Engine Coolant.
3. Transmission Fluid.
4. Pump Transmission Fluid.

5. Pump Primer Fluid (if applicable).
6. Drive Axle Fluid.
7. Air Conditioning Refrigerant.
8. Air Conditioning Lubrication Oil.
9. Power Steering Fluid.
10. Cab Tilt Mechanism Fluid (if applicable).
11. Transfer Case Fluid.
12. Equipment Rack Fluid (if applicable).
13. Generator System Lubricant.
14. Front and Rear Tire Pressures.

VEHICLE INFORMATION LABEL Bidder Complies: YES ___ NO ___

There shall be a travel clearance warning label located in the chassis cab in easy view of the driver.

The travel clearance warning label to include the following information:

- Overall travel clearance height in feet and inches.
- Overall travel clearance width in feet and inches.

OCCUPANCY LABEL Bidder Complies: YES ___ NO ___

A permanent plate or label stating the maximum number of personnel allowed to ride on the apparatus at any one time shall be provided and installed in clear view of the driver.

The label shall state “**VEHICLE MAXIMUM SEATING CAPACITY IS TWO (2)**” The label shall be visible from each seated position.

SEATED AND BELTED LABEL Bidder Complies: YES ___ NO ___

Permanent plate or label shall be provided stating “**OCCUPANTS MUST BE SEATED AND BELTED WHEN APPARATUS IS IN MOTION**”.

The label shall be visible from each seated position.

DO NOT RIDE LABEL Bidder Complies: YES ___ NO ___

A permanent plate or label shall be attached to the appropriate areas of the apparatus stating that riding on the rear step or any exterior position on the apparatus is prohibited.

DO NOT WEAR HELMET LABEL Bidder Complies: YES ___ NO ___

Permanent plate or label shall be provided stating “**DO NOT WEAR HELMET WHILE SEATED**”.

The label shall be visible from each seated position.

CHASSIS SPECIFICATIONS Bidder Complies: YES ____ NO ____

2021 KENWORTH T-370 CAB AND CHASSIS or Equivalent

MISSION: Fire Truck Service Application – Heavy Duty

DIMENSIONS: Wheelbase: 205", CA: 138", Axle to Frame: 75"

Engine: Cummins {Paccar PX-9} EPA 10 or equivalent, 380 HP @ 2000

RPM FAN DRIVE {Horton} or equivalent Direct Drive Type, Two

Speed RADIATOR, 1,000 Square Inches with Surge Tank

Federal Emissions Compliant:

AIR CLEANER Single Element

Engine Shutdown System Exempt Vehicles,

Complies with California Clean Air Regulations

OBD COMPLIANCE (On Board Diagnostics)

TRANSMISSION: {Allison 3000EVS} 5th Generation Controls or equivalent; Close Ratio, 6-Speed; With Overdrive, Includes Oil Level Sensor, With Provision for PTO OIL COOLER,

AUTO TRANSMISSION

TRANSMISSION SHIFT CONTROL {Allison} or equivalent Push-Button Type; for Allison 3000 & 4000 Trans or equivalent

SHIFT CONTROL PARAMETERS Allison S-1 Performance or equivalent

Programming in Primary and Allison or equivalent Fixed Programming in

Secondary TRANSMISSION OIL Synthetic

ALLISON or equivalent SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS)

Automatic Neutral Feature Rear Transmission Support System Installed

FRONT AXLE: Wide Track, I-Beam Type, 14,600-lb Capacity

Spring Suspension w/ Shock Absorbers: 14,600-lb Capacity Air Brake Package

REAR AXLE: Single Reduction, 30,000-lb Capacity Gear Ratio: 5.38

Spring Suspension: 30,000-lb Capacity Air Brake Package w/ Locking Feature {Park}

CAB: Conventional

CAB INTERIOR TRIM: Deluxe – Silver/Gray Instrument Panel

SEATBELT WARNING DEVICE Seat Belt Switches and Seat Sensors for all Belted Positions

VEHICLE DATA RECORDER

BUCKET SEAT, DRIVER {National} NFPA Compliant, Air Suspension,

High Back with Integral Headrest, Lumbar Support, 2 Position Front

Cushion Adjust, 6 to 23 Degree Back Angle Adjust, Dual Arm Rests, 3- Point Restraint

BUCKET SEAT, PASSENGER {National} NFPA Compliant, High Back

With Integral Headrest, Toolbox Seat Base, Dual Arm Rests, 3-Point Restraints

GRAB HANDLE {NFPA COMPLIANT} Each Side

MIRRORS Rectangular, 7.00" x 16.00", 8.00" Convex Both Sides,

Breakaway Type, Heated Heads Thermostatically Controlled, Power Both Sides, Bright Finish Heads & Brackets

SEAT BELTS All Red

AIR CONDITIONER With Integral Heater & Defroster

INSTRUMENT PANEL GAUGE CLUSTER {English Measurements}

DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

WINDOW, PS POWER and Power Door Locks, Left and Right Doors

SELF CANCELLING TURN SIGNALS with Dimmer Switch
FUEL TANK: 56 Gallon Aluminum Tank
DEF TANK: 11 Gallon Tank - Polished Stainless-Steel Cover

FRONT TIRES: (2) 12R22.5
FRONT WHEELS: WHEELS, FRONT DISC; 22.5" Aluminum, 10-Stud Hub Piloted,
Flanged Nut
REAR TIRES: (4) 12R22.5
REAR WHEELS: WHEELS, REAR DISC; 22.5" Aluminum, 10-Stud Hub Piloted,
Flanged Nut - Outer Positions

CHASSIS MODEL: 2021 Model T-370 or equivalent

FRONT TOW HOOKS: TOW HOOK, FRONT (2) Frame Mounted Receivers
{Removable Insert Hooks}
FRAME RAILS: FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.625" x
3.50" x 0.312"
FRONT BUMPER: BUMPER, FRONT Full Width, Aerodynamic, Chrome
Plated Steel
BRAKE SYSTEM: BRAKE SYSTEM, AIR Dual System for Straight Truck Applications
AIR DRYER Standard
DRAIN VALVE Manual
AIR BRAKE ABS {Bendix or Equivalent Antilock Brake System} Full Vehicle Wheel
Control System with Electronic Stability Control Programming Spring Actuated
Parking Brake
AIR COMPRESSOR: AIR COMPRESSOR 18.7 CFM Capacity
STEERING WHEEL 4-Spoke, 18" Diam., Black STEERING
COLUMN Tilting and Telescoping
ENGINE EXHAUST: EXHAUST SYSTEM Single Horizontal, Aftertreatment Device,
Frame Mounted Right Side, for Use with Long Tail Pipes
ENGINE BRAKE: ENGINE TURBO EXHAUST BRAKE
ELECTRICAL SYSTEM: ELECTRICAL SYSTEM 12-Volt, Standard
Equipment CIGAR LIGHTER Includes Ash Cup
ALTERNATOR {Leece-Neville} or equivalent Brush Type; 12 Volt 320 Amp. Capacity, Pad
Mount
DATA RECORDER: DATA RECORDER Includes Display
BATTERIES: BATTERY BOX
BATTERY SYSTEM {Paccar} or equivalent Maintenance-Free, (2) 12-Volt 1400CCA
BATTERY DISCONNECT SWITCH Lever Operated (CAB)
STARTER STARTING MOTOR 12 Volt
INDICATOR LAMPS: INDICATOR, LOW COOLANT LEVEL
INDICATOR, BATTERY WARNING Green BATTERY ON Indicator,
Mounted on Left Side of Instrument Panel, to be Used with Battery Disconnect
Switch
CIRCUIT BREAKERS: CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III
with Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses
FRONT GRILL: GRILLE Stationary, Chrome / Polished

GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System
FRONT HOOD: FRONT END Tilting, Fiberglass
CAB PAINT: PAINT Base Coat/Clear Coat, Single Color: Candy Apple (Fire) Red

MASTER BATTERY DISCONNECT Bidder Complies: YES ___ NO ___

A master battery disconnect switch shall be provided, mounted within easy reach of the driver when seated.

The switch shall be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.

The batteries shall be connected directly to the starter solenoid.

The alternator shall be wired directly to the batteries through the ammeter shunt if one is provided, and not through the master load disconnect switch.

AIR HORNS Bidder Complies: YES ___ NO ___

There shall be a set of dual stutter-tone emergency vehicle air horns provided with the apparatus.

The horns shall be activated by dual lanyards located in the cab.

The mounting location of the horns shall be on each side of the cab hood.

MAXIMUM TOP SPEED Bidder Complies: YES ___ NO ___

The maximum top speed of this apparatus shall be determined using the following NFPA 1901 Chapter 4 criteria:

- If the combined water tank and foam agent tank capacities on the fire apparatus exceed 1,250 gallons, or the GVWR of the vehicle is over 50,000- lb, the maximum top speed of the apparatus shall not exceed 60 MPH.

HUB AND LUG NUT COVERS Bidder Complies: YES ___ NO ___

There shall be a set of chrome hub and lug nut covers provided and installed on each outer wheel of the chassis.

MUD FLAPS Bidder Complies: YES ___ NO ___ Mud flaps shall be installed behind the front and rear wheels of the apparatus.

ANTI-LOCK BRAKE SYSTEM Bidder Complies: YES ____ NO ____

The vehicle shall be equipped with an anti-lock braking system. The ABS shall provide anti-lock braking control on both the front and rear wheels. It is to be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel is to be monitored by the system. When any wheel begins to lockup, a signal is to be sent to the control unit. This control unit then shall reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system shall eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

VEHICLE ROLLOVER STABILITY Bidder Complies: YES ____ NO ____

The apparatus chassis shall be equipped with an electronic stability control system and shall be certified to NFPA 1901 Rollover Stability requirements.

VEHICLE DATA RECORDER (VDR) Bidder Complies: YES ____ NO ____ The apparatus shall be equipped with an on-board Vehicle Data Recorder (VDR).

The recorder shall be capable of recording the following data, in this order, at a minimum of once per second:

- Vehicle speed (MPH).
- Acceleration (from speedometer) (MPH/Sec)
- Deceleration (from speedometer) (MPH/Sec)
- Engine speed (RPM)
- Engine throttle position (% of throttle)
- ABS event (on/off)
- Seat occupied status (occupied yes/no by position)
- Seat belt status (buckled yes/no by position)
- Master optical warning device switch (on/off)
- Time (24 hour)
- Date (year/month/day)

The data shall be stored at the sampling rate in a 48-hour loop.

The system shall have sufficient memory to record 100 engine hours with of minute-by-minute summary data showing the data listed above.

When the memory capacity is reached, the system shall erase the oldest data first.

All data stored in the VDR shall be password protected, up loadable by the user to their computer and importable to into a data management software package that shall be available from the manufacturer.

The software shall be both "Windows" and "Apple" compatible.

The software shall produce the following formatted reports from the uploaded data:

- Daily log for the time the engine is running for a given date (minute by minute output of all values).
- Weekly summary (maximum values each hour for each day of the week).
- Monthly summary (maximum values each day for each day of the month)

SEATBELT WARNING SYSTEM Bidder Complies: YES ___ NO ___ The apparatus shall be equipped with red seatbelts and a seatbelt warning system.

The system shall consist of an audible warning device that can be heard at all seating positions that are designed to be occupied while the vehicle is in motion as well as a visual display visible to the driver showing each seating position.

The warning system shall be activated anytime the parking brake is released or the automatic transmission is not in park

The system shall display seating position lights as follows:

- Green (buckled/senses occupant)
- Red (buckled/no occupant)
- Red (unbuckled/senses occupant)
- Dark (unbuckled/no occupant)

TIRE PRESSURE VISUAL INDICATOR Bidder Complies: YES ___ NO ___ Valve stem mounted visual indicators shall be provided on each tire. The indicators shall identify the following conditions:

ALL GREEN. - Tire is properly inflated.

HALF GREEN/HALF RED - Tire is approximately 10% under inflated

ALL RED - Tire is 20% or more under inflated.

ENGINE EXHAUST Bidder Complies: YES ___ NO ___

The exhaust pipe from the engine shall not be modified from the design configuration that was provided from the chassis manufacturer to meet all EPA requirements.

Exhaust shall run horizontal and terminate on the right side of the apparatus. Shielding shall be provided between the apparatus body and the exhaust pipe if necessary, to deflect heat away from the body.

TOW HOOKS - FRONT & REAR Bidder Complies: YES ___ NO ___ There shall be front and rear tow hooks provided on the finished apparatus.

The front tow hooks shall be provided as standard equipment from the chassis manufacturer.

The rear tow plates shall be fabricated from HD structural steel and shall have a minimum 1.25" eye. The plates shall be located below the rear step bumper.

CAB ACCESS STEPS Bidder Complies: YES ___ NO ___

The cab access steps shall be provided by the chassis manufacturer. The steps shall be a two (2) step design fabricated from bright aluminum grip strut. The step assembly shall provide a positive gripping surface for stepping and shall not interfere with the ability to inspect the chassis batteries or re-fuel the apparatus.

SEAT BELT WEB LENGTH Bidder Complies: YES ___ NO ___

The chassis seat belt web length as supplied by the commercial chassis manufacturer shall be compliant to NFPA 14.1.3.2 and 14.1.3.3.

SEAT BELT COLOR - ORANGE Bidder Complies: YES ___ NO ___

All seating positions in the cab shall have extended length orange seat belts to meet the recommendations of NFPA 1901.

OPEN COMPARTMENT DOOR LIGHT Bidder Complies: YES ___ NO ___

An "open door" indicator light shall be provided inside the cab, in clear view of the driver, to warn of an open compartment door.

KUSSMAUL or Equivalent AIR & BATTERY MAINTAINER Bidder Complies: YES ___ NO ___

There shall be a Kussmaul or equivalent 1000 pump plus air and battery maintainer provided and installed on the finished apparatus.

The system shall maintain a charge in the apparatus batteries and air tanks while connected to the station 110-volt shoreline through the Kussmaul or equivalent Super Auto-Eject receptacle.

There shall be a NEMA 5-20 plug end provided with the apparatus on delivery for customer installation to the station shoreline.

COMMUNICATIONS PRE-WIRE Bidder Complies: YES ___ NO ___

The following communications related items shall have a pre-wire provision supplied and installed:

- Coax Cable and Antenna Base
- Radio Power Source

The two-way communications equipment shall be supplied and installed by the department to ensure compatibility with existing equipment unless otherwise specified.

BODY ELECTRICAL Bidder Complies: YES ____ NO ____

All 12-volt electrical equipment installed by the apparatus manufacturer shall conform to modern automotive practices.

All wiring shall be high temperature crosslink type. Wiring shall be run in loom or conduit where exposed and have grommets where wire passes through sheet metal.

Wiring shall be individually color coded to identify function.

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

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

- All holes made in the roof shall be caulked with silicon. Rope caulk is not acceptable. Large fender washers, liberally caulked, shall be used when fastening equipment to the underside of the cab roof.
- Any electrical component that is installed in an exposed area shall be mounted in a manner that shall not allow moisture to accumulate in it. Exposed area shall be defined as any location outside of the cab or body.
 - Electrical components designed to be removed for maintenance shall not be fastened with nuts and bolts. Metal screws shall be used in mounting these devices. Also, a coil of wire shall be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.
- Corrosion preventative compound shall be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections shall require this compound in the plug to prevent corrosion and for easy separation (of the plug).
 - All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.
- All electrical terminals in exposed areas shall have silicon (1890) applied completely over the metal portion of the terminal. All emergency light switches shall be mounted on a separate panel installed in the cab. A master warning light switch and individual switches to be provided to allow pre-selection of emergency lights. The light switches shall be

"rocker" type with an internal indicator light to show when switch is energized. All switches shall be properly identified and mounted in a removable panel for ease in servicing. Identification of the switches shall be done by either printing or etching on the switch panel. The switches and identification shall be illuminated.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, shall be furnished.

Rear identification lights shall be recessed mounted for protection.

Lights and wiring mounted in the rear bulkheads shall be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

EXTERIOR LIGHTING Bidder Complies: YES ___ NO ___

Exterior lighting shall meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at time of proposal.

Front headlights shall be halogen type and comply with all FMVSS requirements.

Five (5) LED clearance and marker lights shall be installed across the leading edge of the cab.

REAR FMVSS LIGHTING Bidder Complies: YES ___ NO ___

There shall be three (3) LED lights installed as identification lights located at the center rear of the apparatus.

There shall be two (2) LED lights installed at the side rear of the apparatus used as clearance lights located at the rear of the apparatus.

There shall be two (2) LED lights installed on each side at rear of the apparatus. There shall be four (4) red reflectors installed as applicable around the body.

STOP, TAIL AND TURN LIGHTS Bidder Complies: YES ___ NO ___ All FMVSS

or DOT lighting shall be supplied and installed on the apparatus.

These light modules shall be installed outboard of the rear compartment door on the lower portion of the apparatus body.

The fixture shall incorporate taillights, stop lights, turn signals, four-way hazard flashers and back-up lights.

DOT marker and clearance lighting shall be installed in appropriate areas around the entire body.

The taillights modules shall be as follows:

- Whelen or equivalent - C6 - 6" x 4" SUPER LED - Red Tail/Stop Lights
- Whelen or equivalent - C6 - 6" x 4" SUPER LED - Amber Arrow Turn Signals - Whelen or equivalent - C6 - 6" x 4" SUPER LED - Clear Back-up Lights

DOOR OPEN HAZARD LIGHT Bidder Complies: YES ___ NO ___

There shall be a flashing red light located on the cab dash in clear view of the driver. This light shall be illuminated automatically whenever any passenger or equipment compartment door is open.

The light shall be marked "Do Not Move Apparatus When Light Is On".

LICENSE PLATE LIGHT Bidder Complies: YES ___ NO ___

There shall be one (1) license plate mount provided and mounted at the rear of the apparatus.

There shall be a white LED light with deflector installed to illuminate the license plate.

BACKUP ALARM Bidder Complies: YES ___ NO ___ One (1) backup alarm shall be provided and installed on the apparatus.

The 97db backup alarm shall automatically activate when the apparatus transmission is placed into reverse.

The backup alarm shall exceed all NFPA1901 and SAE J994 Type D requirements and testing.

SIDE STATIONARY SCENE LIGHTS Bidder Complies: YES ___ NO ___

There shall be four (4) Whelen 600 Series or equivalent 4"x6" SUPER LED stationary scene lights mounted in the following locations:

- Two (2) Left Body
- Two (2) Right Body

The lights shall be switched on in the cab of the apparatus to operate the left or right.

REAR STATIONARY SCENE (DECK) LIGHTS Bidder Complies: YES ___ NO ___

There shall be two (2) Maxxima or equivalent 4"x6" LED rear scene (deck) lights mounted in the following locations:

- Two (2) Rear Body

The lights shall be switched on in the cab and shall automatically illuminate when the chassis transmission is placed in reverse gear.

WARNING LIGHTS Bidder Complies: YES ____ NO ____

An all new Whelen or equivalent warning light package is included and shall be installed on the finished apparatus.

All flashing lights shall be colored appropriately to match the department's lighting colors.

All lights shall be flush mounted on the cab and body with chrome trim bezels.

VISUAL WARNING ZONES Bidder Complies: YES ____ NO ____

The apparatus shall be divided into warning zones as recommended by NFPA 1901- 2009. The upper and lower zones shall correspond to the apparatus as follows:

- Zone "A": Front
- Zone "B": Right Side
- Zone "C": Rear
- Zone "D": Left Side

VISUAL WARNING MODES Bidder Complies: YES ____ NO ____

The use of the apparatus warning lights shall be broken into two separate modes of use.

The permissible colors or combination of colors in each zone for each signaling mode (for fire departments) shall be as follows:

- Calling for Right-of-Way
 - Red - Any Zone
 - Yellow - Any Zone Except A
 - White - Any Zone Except C
- Blocking Right-of-Way
 - Red - Any Zone
 - Yellow - Any Zone
 - White - Not Permitted

VISUAL WARNING MODE SWITCHING Bidder Complies: YES ____ NO ____

The ability to switch between warning modes shall be provided on the apparatus.

There shall be a sensor that detects the position of the parking brake and changes modes as follows:

- Parking Brake Engaged: "Blocking Right of Way Mode"
- Parking Brake Not-Engaged: "Calling for Right of Way"

Switching between the two visual warning system modes shall require no action by the operator other than setting the chassis parking brake.

ZONE A UPPER WARNING LIGHTING Bidder Complies: YES ___ NO ___

One (1) Whelen or equivalent NFPA Justice SUPER LED light bar shall be mounted on the top of the cab roof.

The light bar shall be 56" in length with clear lenses and be populated on the front and sides with red flashing LED light modules.

ZONE A LOWER WARNING LIGHTING – FRONT Bidder Complies: YES ___ NO ___

Two (2) Whelen C6 series or equivalent, 6"x4", SUPER LED warning lights shall be provided and mounted on the apparatus.

A chrome bezel shall be provided around the lights

Two colored lights shall be mounted in the front grill area.

ZONE B UPPER WARNING LIGHTING – LEFT Bidder Complies: YES ___ NO ___

This lighting in this zone shall be covered by the cab light bar and the rear LED beacons.

ZONE B LOWER WARNING LIGHTING – RIGHT Bidder Complies: YES ___ NO ___

Two (2) Whelen C7 series or equivalent, 7"x3", SUPER LED warning lights shall be provided and mounted on the apparatus.

A chrome bezel shall be provided around the lights.

One colored light shall be mounted as low and as far forward on the apparatus cab as possible and one colored light shall be mounted as low as possible in the rear wheel well area.

ZONE C UPPER WARNING LIGHTING – REAR Bidder Complies: YES ___ NO ___

Two (2) Whelen L31 or equivalent SUPER LED beacon warning lights shall be provided and mounted on the apparatus.

Two colored lights shall be mounted as high as possible on the rear of the apparatus body.

ZONE C LOWER WARNING LIGHTING – REAR Bidder Complies: YES ___ NO ___

Two (2) Whelen C6 series or equivalent, 6"x4", SUPER LED warning lights shall be provided and mounted on the apparatus.

A chrome bezel shall be provided around the lights.

Two colored lights shall be mounted as low as possible on the rear of each side of the apparatus body.

ZONE D UPPER WARNING LIGHTING – LEFT Bidder Complies: YES ___ NO ___

This lighting in this zone shall be covered by the cab light bar and the rear LED beacons.

ZONE D LOWER WARNING LIGHTING – LEFT Bidder Complies: YES ___ NO ___

Two (2) Whelen C7 series or equivalent, 7"x3", SUPER LED warning lights shall be provided and mounted on the apparatus.

A chrome bezel shall be provided around the lights.

One colored light shall be mounted as low and as far forward on the apparatus cab as possible and one colored light shall be mounted as low as possible in the rear wheel well area.

ELECTRONIC SIREN Bidder Complies: YES ___ NO ___

There shall be one (1) Whelen 295 or equivalent electronic warning siren system shall be provided and installed in the finished apparatus.

The siren shall be capable of producing 100 watts of power and shall be flush mounted in the cab center console.

There shall be a siren speaker provided and installed in the front bumper area capable of producing 100 watts.

FEDERAL "Q" or equivalent SIREN Bidder Complies: YES ___ NO ___

There shall be a Federal "Q" or equivalent siren provided and recessed into the front bumper. It will be wired into the chassis 12-volt electrical system.

It will have a brake switch located on the console and shall be operated by two (2) foot switches mounted in the cab floors.

NOTE: The foot switches shall be wired through the master warning disconnect switch.

CUSTOM CENTER CONSOLE Bidder Complies: YES ___ NO ___

There shall be a custom fabricated aluminum console provided and installed in the front center of the apparatus cab.

The console shall contain the siren, lighting switches, cup holders and storage compartment as space allows based on other selected options.

The console shall be finished with a black Zolatone or equivalent spatter coating.

The console shall take the place of the center front seat section and be as large as possible to fit in the usable space provided.

ROCKER SWITCH PANEL Bidder Complies: YES ___ NO ___

There shall be a custom designed rocker switch panel provided and installed on the cab center console.

The panel shall be designed specifically to control operation of this exact truck. The switch covers shall be color coded and shall illuminate

when activated. A universal switch panel shall not be used.

CAB PERIMETER SCENE LIGHTS Bidder Complies: YES ___ NO ___ There shall be a weatherproof LED light provided for each side of the cab. Lighting shall be designed to provide illumination on areas under the driver and officer riding area exits, which shall be activated automatically when the exit doors are opened and by the same means as the body perimeter lights.

BODY PERIMETER GROUND LIGHTS Bidder Complies: YES ___ NO ___ There shall be a total of six (6) LED weatherproof lights provided on the apparatus.

Two (2) lights shall be provided under the side body area, two (2) lights shall be provided under the pump panel running boards and two (2) lights shall be provided under the rear step bumper.

The perimeter scene lights shall be activated automatically when the parking brake is applied.

STEP LIGHTS Bidder Complies: YES ___ NO ___

Step lights shall be provided as applicable on the apparatus to satisfy all NFPA 1901 requirements.

14' EXTREME DUTY BODY - HIGH/LOW SIDE Bidder Complies: YES ___ NO ___

This high/low side apparatus body shall be built using a design that incorporates the sub-frame, tank cradle, compartments, and outer body shell into one solid, integrated module.

This method of construction shall be utilized as it is a far superior design for overall strength, durability and longevity when compared to designs utilizing modular construction methods.

The sub-frame and tank cradle shall be constructed of 3" x 3" x 1/4" wall (6061 extruded) crush resistant aluminum tubing spaced on a maximum of 15" centers to allow for the proper amount of flexion without the possibility of forming cracks.

The body support system shall not utilize inferior strength angle and different metals that will lead to corrosion.

The inner and outer surfaces of the body shall be constructed of 3/16" thick, 5052 smooth aluminum plate to allow for the proper amount of flexion without the possibility of forming cracks.

Portions of the body that shall utilize aluminum diamond plate material for protective surfaces, non-skid surfaces or for cosmetic coverings shall be formed using .125" and .187" aluminum diamond plate material. This material will be added to enhance the appearance and for protection of certain body

areas of the apparatus as described above and shall not be utilized as a structural component of the body.

All components of this apparatus utilizing aluminum shall be constructed of formed, welded, bolted, or extruded products.

All corners and edges shall be finished to produce a smooth, symmetrical, and rounded surface.

All aluminum diamond plate coverings shall be polished aluminum with a non-slip embossed design on all stepping surfaces.

The body shall be designed and manufactured with integrated aluminum channel reinforcement for rigidity.

All body parts and attachments shall be fastened with rust resistant fasteners to preclude loosening of bolts and screws and/or the cracking of welded joints. The body shall be reinforced as necessary with additional material where hose reels, steps, mounting brackets, hose troughs, ladder brackets, etc. are attached.

The body shall be an all welded and bolted structure positioned in a jig device to ensure proper positioning and accuracy of welds during the fabrication process.

All components shall be constructed to allow for the removal of any component for service and/or repair.

The body and components thereof shall be permanently and securely attached to the frame of the chassis.

A corrosion, chemical, and water-resistant coating shall be provided in areas where metals are in contact with the substructure.

All welds shall be cleaned of any weld residue prior to coating or when presenting a natural finish to present a clean appearance on all surfaces.

All seams shall be sealed with body sealer to prevent seepage of moisture into the covered area.

EXTREME DUTY SUB-FRAME Bidder Complies: YES ____ NO ____

The all-aluminum integrated body and sub-frame shall assure strength, durability, and longevity to provide years of uninterrupted service.

The support system shall consist of individual assemblies fastened together utilizing a jig system for precision welding to insure sturdiness with proper dimensions and minimal distortion.

The Sub-Frame shall be constructed of 3"x3" x.25" 6061, crush resistant, extruded square aluminum tubing running parallel to the chassis frame rails and underneath the full length of the rear.

The 6061 grade of aluminum tubing allows for the minimal and proper level of flexion during operation to prevent the formation of cracks.

This Sub-Frame design is the heaviest duty in the industry and shall be

welded on maximum of 15" centers.

The Sub-Frame shall be bolted to the chassis frame rails with grade 8, 5/8" U-Bolts incorporating shear plates and rubber (anti-vibration) isolation pads as necessary.

AGGRESSIVE WALKING SURFACES Bidder Complies: YES ___ NO ___

All exterior surfaces designated as stepping, standing, and walking areas shall comply with the required average slip resistance of the current NFPA standards.

These areas shall incorporate grip-strut or embossed diamond tread aluminum.

BODY FINISH Bidder Complies: YES ___ NO ___

The complete outer surface of the body shall be constructed of 3/16", 5052 alloy, flat aluminum plate which shall provide superior quality and strength that will allow for the proper amount of flexion without the possibility of forming cracks. This outer surface shall provide an even and durable appearance that shall be finish painted to match the color of the chassis cab.

COMPARTMENT FINISH Bidder Complies: YES ___ NO ___

The inner surfaces (compartments) of the body shall be constructed of 3/16", 5052 alloy, smooth aluminum plate which shall provide superior quality and strength that will allow for the proper amount of flexion without the possibility of forming cracks. This inner compartment surfaces shall be finished with a light gray Zolatone or equivalent spatter coating to provide an even appearance and durable surface.

RUB RAIL Bidder Complies: YES ___ NO ___

A lower rub rail shall be bolted at the bottom of the body, using nylon spacers between the metal surfaces, along each side of the body.

This two-piece rail shall extend the entire length of the body except between the wheel well openings.

The rub rail shall have a satin finish for durability and to provide an even appearance.

This trim shall be bolted in place for easy removal and replacement if they ever become damaged.

18" REAR STEP BUMPER Bidder Complies: YES ___ NO ___

At the lower trailing edge of the body, a polished aluminum diamond tread step bumper shall be installed.

This step shall be supported using a welded aluminum extrusion and shall

extend approximately of 18” rearward from the body and 98” across the body.

FENDERETTES Bidder Complies: YES ___ NO ___ Polished aluminum fender trim shall be installed around both rear wheel openings. The fenderettes shall have a neoprene welt installed between the trim and the body. This trim shall be bolted in place for easy removal and replacement if they ever become damaged.

WHEEL WELL LINER Bidder Complies: YES ___ NO ___ Wheel well liners made of .080” 3003 aluminum, shall be installed to follow the inside radius of the wheel well opening to prevent excessive road debris from being distributed along the underside of the chassis and body.

MUD FLAPS Bidder Complies: YES ___ NO ___ There shall be heavy duty rubber mud flaps installed directly behind the rear dual wheels of the chassis. These mud flaps shall be of a commercial automotive quality and meet or exceed DOT requirements for dual wheel trucks. There shall also be a set of factory mud flaps located behind the front axle.

FOLDING ACCESS STEPS Bidder Complies: YES ___ NO ___ There shall be a total of three (3) NFPA approved folding steps provided and installed in the following locations:
- Three (3) Folding Steps on the officer Side Front of Body
Each step shall have a static load rating of 500-lbs.

COMPARTMENT LOUVERS Bidder Complies: YES ___ NO ___ Louvered panels shall be installed into each into compartment to aid in ventilation. The louvers shall be turned in such a way to prevent unwanted water from entering the compartments.

STORAGE COMPARTMENTS Bidder Complies: YES ___ NO ___ The compartments shall be constructed of formed and welded 3/16”, 5052 formed aluminum plate and shall allow for the proper amount of flexion without the possibility of forming cracks. Each compartment shall be finished with a durable Zolatone or equivalent spatter coating. If customer should request, compartment finish can be left with a natural finish or be sanded to a satin finish. All compartments shall incorporate a sweep out design on the lowest horizontal surfaces. All compartment dimensions are as accurate as possible at the time of the

proposal, however, the actual sizes may vary as much as +/- 2" to accommodate certain chassis features and/or department requested options.

ROLL-UP COMPARTMENT DOORS - SATIN Bidder Complies: YES ____ NO ____

Generation IV roll-up compartment doors shall be manufactured and assembled in the United States by R-O-M Corporation or equivalent.

Doors shall be front roll.

There shall be an aluminum drip rail incorporated into the door track and installed above each compartment door with a non-abrasive seal (or) there shall be a brush seal.

The doors shall have a satin aluminum finish.

Magnetic door-ajar system must be integrated in lift bar handle and the retainer block to signal open door. No mechanical switches interior to the compartment shall be used.

Every slat must have interlocking end shoes to prevent slat from moving side to side and binding the door.

Between each slat must be a co-extruded PVC inner seal to prevent metal-to-metal contact and to repel moisture. This inner seal is not visible to detract from appearance of door.

Slats are to have interlocking joints with a folding locking flange to provide security and prevent penetration by sharp objects.

Slats are to be double-wall extrusion 1.366" high by .315" thick. Exterior surface is to be flat and interior surface concave to prevent equipment from interfering with door.

Latch system to be full width Aluminum one-piece lift bar, two-point exterior latch, operable by one hand. Two-inch-wide finger pull will be integrated into the bottom rail extrusion for easy one hand opening and closing.

Clip system that connects the curtain slats to the operator drum which allows easy tension adjustments without tools.

Each roll-up door shall have a four-inch diameter counterbalance operator drum to assist in lifting the door and assist in the prevention of accidental closure.

The compartment lighting system shall be integrated into the roll-up door track. There shall be one full height compartment lights per door that will illuminate when the compartment door is opened.

Door tracks shall be a one-piece aluminum extrusion that has an attaching the flange and finishing flange incorporated into its design.

Drip rail will have specially designed seal that prevents the seal from scratching the door. Bottom rail to have "V" shaped seal to prevent water and debris from entering the compartment and shall have a rubber seal installed at the outside edge to prevent moisture from entering the storage area.

Bottom rail extrusion must have smooth back to prevent loose equipment from jamming the door.

ROLL-UP DOOR FINISH - SATIN Bidder Complies: YES ___ NO ___ The roll-up doors on the apparatus shall have a satin aluminum exterior finish.

COMPARTMENT FLOOR TILES Bidder Complies: YES ___ NO ___

As standard equipment each compartment shall have black interlocking rubberized tiles (Turtle Tile) cut and installed in such a manner to provide a cushion to cargo and protect the floor of the compartment.

The tiles shall be readily removed, without the use of tools, for cleaning.

ROM COMPARTMENT LIGHTING Bidder Complies: YES ___ NO ___

There shall be five (5) compartments equipped with LED compartment lights.

The lights shall be mounted vertically along the side door frame to extend the full height of the door.

There shall be one (1) light located in the side door track of each compartment. Opening the compartment door shall automatically turn the compartment lighting on.

COMPARTMENT LIGHT SWITCHES Bidder Complies: YES ___ NO ___

Each compartment door shall have a magnetic style reed indicator switch. Each switch shall be hermetically sealed and rated to exceed 10,000,000 cycles.

The reed shall be potted in the contact housing with polyurethane and the housings shall be molded fire-retardant ABS plastic.

The contact and magnetic housing shall snap-lock in the body material, one on the body and one in the door.

Each roll up door shall have an integral door open indicator magnet in the lift bar and if the bar is not properly closed, it shall activate the "Door Open" light in the cab.

The compartment lights shall function automatically when the door is opened.

LEFT COMPARTMENT - L1 Bidder Complies: YES ___ NO ___

Immediately behind the pump on the driver side of the body shall be a full height side compartment with the following approximate dimensions:

- 58" high X 63" wide

The approximate door opening shall be:

- 52" high X 60" wide

The compartment depth shall be as follows:

- 25" lower depth

- 13" upper depth

LEFT COMPARTMENT - L2 Bidder Complies: YES ___ NO ___

Immediately behind compartment L1 on the driver side of the body, over the rear wheel well, shall be a high-side compartment with the following approximate dimensions:

- 24" high X 57" wide

The approximate door opening shall be:

- 20" high X 48" wide

The compartment depth shall be as follows:

- 13" deep

LEFT COMPARTMENT - L3 Bidder Complies: YES ___ NO ___

Immediately behind compartment L2 on the driver side of the body, behind the rear wheel well, shall be a full height compartment with the following approximate dimensions:

- 58" high X 40" wide

The approximate door opening shall be:

- 52" high X 37" wide

The compartment depth shall be as follows:

- 25" lower depth
- 13" upper depth

RIGHT COMPARTMENT - R1 Bidder Complies: YES ___ NO ___

Immediately behind the pump on the officer side of the body shall be a low-side compartment with the following approximate dimensions:

- 30" high X 63" wide

The approximate door opening shall be:

- 24" high X 60" wide

The compartment depth shall be as follows:

- 25" deep

RIGHT COMPARTMENT - R2 Bidder Complies: YES ___ NO ___

Immediately behind the rear wheels on the officer side of the body shall be a low-side compartment with the following approximate dimensions:

- 30" high X 40" wide

The approximate door opening shall be:

- 24" high X 37" wide

The compartment depth shall be as follows:

- 25" lower depth

BREATHING AIR CYLINDER STORAGE Bidder Complies: YES ____ NO ____

There shall be a total of four (4) storage compartments located in the rear wheel well area of the apparatus body to store breathing air cylinders. Each compartment shall be constructed to hold one (1) cylinder in a poly tube with a cast aluminum door, rubber seal and latch system. The tube shall contain a drain hole to shed unwanted moisture that may accumulate from condensation.

HALE or equivalent 1,250 GPM SIDE MOUNT PUMP Bidder Complies: YES __ No__

The new fire pump shall be manufactured by Hale Products or equivalent and shall comply with all applicable requirements of the latest edition of NFPA 1901 "Standard for Automotive Fire Apparatus" published by the National Fire Protection Association.

The side mounted pump compartment shall be custom fabricated to fit the exact chassis and body configuration for this apparatus.

The pump and pump compartment shall be mounted independently from the chassis and body.

PUMP PERFORMANCE – 1,250 U.S. GPM. Bidder Complies: YES ____ NO ____

The pump shall be a Hale DSD-1250 or equivalent single stage centrifugal fire rated pump with a rated capacity of 1,250 United States gallons per minute from draft through either or both side master suction connections.

The pump shall be mounted inside a custom fabricated compartment between the cab and body and shall deliver the percentage of rated discharge pressures as indicated below:

- 100 percent of rated capacity at 150 pounds net pressure
- 70 percent of rated capacity at 200 pounds net pressure
- 50 percent of rated capacity at 250 pounds net pressure

PUMP WARRANTY Bidder Complies: YES ____ NO ____

The Hale pump or equivalent shall have a 5 year warranty against defective materials in the manufacturing process.

NFPA COMPLIANT PUMP Bidder Complies: YES ____ NO ____

The fire pump and related plumbing on the specified apparatus shall be installed in accordance with applicable NFPA 1901 guidelines at the time the contract was placed.

FIRE PUMP CONSTRUCTION Bidder Complies: YES ____ NO ____

The pump shall be driven by the chassis drive line from the chassis transmission through a mid-ship pump gear case and shall be free from objectionable pulsation and vibration under all normal operating conditions. The entire pump shall be hydrostatically tested to a minimum pressure of 600-PSI.

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

All moving parts in contact with water shall be of high-quality bronze or stainless steel. Pumps utilizing castings made of lower tensile strength cast iron are not acceptable.

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

The pump shaft shall be rigidly supported by bearings for minimum deflection. The bearings shall be heavy-duty, deep groove style bearings in the gearbox, and they shall be splash lubricated.

The pump impeller shall be of hard, fine grain bronze with a mixed flow design; accurately machined, hand ground, and individually balanced.

The vanes of the impeller intake eyes shall be hand ground and polished to a sharp edge and shall be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

The pump shaft shall be fabricated of heat-treated, electric furnace, corrosion resistant stainless steel, and shall be super finished under the shaft seal.

PUMP GEARBOX Bidder Complies: YES ____ NO ____

The gear box shall be completely manufactured and tested at the pump manufacturer's facility.

The pump gearbox shall be of sufficient size to withstand up to 16,000 ft. lbs. of torque from the engine in both road and pump operating conditions.

The gearbox shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.

The gearbox shall withstand the full torque of the engine in pump operating conditions. All gears (drive and pump) shall be of highest quality heat treated steel.

Bores shall be ground to size and the gear teeth shall be crown shaven, and hardened for smooth, quiet running, and a higher load carrying capability.

An accurately cut spur design shall be provided to eliminate all possible end thrust.

The pump gear ratio shall be selected by the apparatus manufacturer to give the maximum performance with the engine and transmission selected.

PUMP COMPARTMENT CONSTRUCTION Bidder Complies: YES ____ NO ____

The exterior panels of the pump compartment shall be constructed using only 304 marine grade stainless steel fabricated sheeting with a #4 annealed and polished finish on all exterior surfaces.

The pump compartment shall not require any finish painting.

The framework of the pump compartment shall be constructed of heavy wall aluminum tubing and shall be integrated design to tie together all components of the pump compartment.

SIDE MOUNT PUMP MODULE Bidder Complies: YES ____ NO ____

A pump operator's side mounted control panel shall be provided.

It shall be assembled and mounted independently from both the chassis and the body to allow sufficient flexing and prevent component fatigue.

A side operator's control surface, the width of the module shall be provided at the left side of the module.

The module shall be constructed using square aluminum tubing.

The welded ends of the tubing shall be chamfered prior to welding and shall be ground smooth.

MECHANICAL SEAL Bidder Complies: YES ____ NO ____

The pump shaft shall be equipped with a single mechanical type seal on the suction (inboard) side of the pump.

The mechanical seal shall be a minimum of two inches in diameter and shall be spring loaded, maintenance free and self-adjusting.

The mechanical seal shall construct of a carbon sealing ring, stainless steel coil spring, Viton or equivalent rubber cup, and a tungsten carbide seat with Teflon or equivalent backup seal.

TOTAL PRESSURE GOVERNOR SYSTEM (TPG) Bidder Complies: YES ___ NO ___

Class 1 Total Pressure Governor (TPG) and monitoring display kit shall be installed. The kit shall include the control module, pressure sensor(s), and cables. The following continuous displays shall be provided:

- CHECK ENGINE and STOP ENGINE warning lights
- Engine RPM
- Engine OIL PRESSURE
- Engine TEMPERATURE
- BATTERY VOLTAGE

- PSI / RPM setting; shown on a dot matrix message display
- PSI and RPM mode LEDs
- THROTTLE READY LED

A dot-matrix message display shall show diagnostic and warning messages as they occur.

It shall show monitored apparatus information, stored data, and program options when selected by the operator.

The program shall store the accumulated operating hours for the pump and engine, previous incident hours, and current incident hours in a non-volatile memory.

Stored elapsed hours shall be displayed at the push of a button.

The governor shall operate in two control modes, pressure, and RPM.

No discharge pressure or engine RPM variation shall occur when switching between modes.

Push-button controls shall adjust pressure or RPM settings by using the two UP/DOWN arrow keys.

A throttle ready LED shall light when the interlock signal is recognized.

The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator.

In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase.

Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

INTAKE RELIEF VALVE Bidder Complies: YES ____ NO ____

An intake relief/dump valve shall be provided on the intake side of the pump to relieve excess incoming pressure.

The system shall be designed to self-restore to a non-relieving position when excessive pressure is no longer present.

The pressure adjustment range shall be from 50 psi to 200 psi.

The relief system shall be adjustable with a common type box end wrench.

The pressure setting shall be preset by the apparatus manufacturer at a 125-PSI position.

The surplus water shall discharge to the atmosphere at a location away from the pump operator's position.

AIR PUMP SHIFT Bidder Complies: YES ____ NO ____

Pump shift engagement shall be made by activation of a cab mounted switch

control.

Two (2) indicator lights shall be provided adjacent to the pump shift inside the cab. One (1) green light shall indicate the pump shift has been completed and be labeled "pump engaged". The second green light shall indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light shall be labeled "OK to pump".

Another green indicator light shall be installed adjacent to the hand throttle on the pump panel and indicate either the pump is engaged, and the road transmission is in pump gear, or the road transmission is in neutral and the pump is not engaged. This indicator light shall be labeled "Warning: Do not open throttle unless light is on".

PUMP PRIMING SYSTEM Bidder Complies: YES ___ NO ___

A Hale or equivalent PVG 12 volt pump priming system shall be provided and installed on the fire pump.

The priming pump shall be an electrically driven, positive displacement vane type conforming to requirements outlined in NFPA 1901.

A single priming control shall both open the priming valve and start the priming motor.

The primer shall be capable of taking suction and discharging water with a lift of 10 feet in not more than 30 seconds with the pump dry and using 20 feet of appropriately sized hard suction hose with strainer.

The system shall develop a vacuum of 22 inches at an altitude of up to 2,000 feet above sea level.

The vacuum test shall be performed with a capped 20 foot length of hard suction hose, developing a vacuum of at least 20 inches with a drop not exceeding 10 inches in 5 minutes.

The priming system shall be "oil less" type and shall require no lubrication.

TRANSMISSION LOCK-UP Bidder Complies: YES ___ NO ___

The direct gear transmission lock-up for the fire pump operation shall engage automatically when the pump shift control, in the cab, is activated.

PUMP CERTIFICATION TESTING Bidder Complies: YES ___ NO ___

The fire pump, as it is installed on the apparatus, shall receive a full certification test prior to final delivery. Documentation of the test results shall be provided with the apparatus in the delivery packet.

PUMP CERTIFICATION PLATE Bidder Complies: YES ___ NO ___

A permanently affixed plate shall be installed at the pump operator's position that will provide the rated discharge and pressures together with speed of the engine as determined by the certification test.

MANIFOLD DRAIN VALVE Bidder Complies: YES ___ NO ___

The pump shall have a manifold type drain valve assembly consisting of a stainless-steel plunger in a bronze body with multiple ports.

The control for the valve shall be on the left side along the bottom of the panel and above the side running board.

BLEEDER/DRAIN VALVES - LIFT STYLE Bidder Complies: YES ___ NO ___

A 3/4" quarter turn lift-style bleeder/drain ball valve shall be provided for each discharge and auxiliary intake.

A hose shall be connected to the valve that will direct water below the apparatus and away from the immediate pump operator's location.

LEFT AND RIGHT SIDE MASTER INTAKE Bidder Complies: YES ___ NO ___

A 6.0" master intake shall be provided on both sides of the apparatus. The intakes shall have a 6.0" male NST connection.

The intake shall have a removable screen constructed of a material that will provide cathodic protection and prevent the entry of large objects into the pump.

LEFT AND RIGHT SIDE MASTER INTAKE CAPS Bidder Complies: YES ___ NO ___

A 6.0" female NST long handle chrome cap shall be provided on both side master intakes.

3.0" TANK TO PUMP Bidder Complies: YES ___ NO ___

A 3.0" tank to pump line shall be provided between the tank and the pump. The tank valve shall be an Akron or equivalent Brass full flow 3.0" valve with control mounted on the pump operator's panel.

The piping and valve arrangement shall be capable of flowing a minimum of 500 U.S. gallons per minute to the pump from the booster tank.

This flow shall be maintained for 80% of the certified tank capacity with the apparatus positioned on level ground.

Connection from the valve to the tank shall be made by using a non-collapsible flexible rubber hose.

2.0" TANK RECIRCULATION VALVE Bidder Complies: YES ___ NO ___

There shall be a 2.0" tank recirculation valve and plumbing provided and installed. The controls shall be actuated by a push/pull type lever control. This control for the Akron or equivalent Brass valve shall be located on the pump operator's panel.

PLUMBING AND PLUMBING WARRANTY Bidder Complies: YES ___ NO ___

All suction, discharge and auxiliary plumbing installed before or after the cast pump manifolds shall be constructed of stainless-steel pipe, brass or stainless steel fittings and high pressure reinforced flex plumbing.

The stainless steel, brass and flex plumbing shall be warranted to be free from corrosion perforation for a period of 5 years following the delivery of the apparatus.

AKRON or equivalent BRASS BALL VALVE WARRANTY Bidder Complies: Y_ N_

The Akron or equivalent Brass ball valves shall be covered under warranty for a period of ten (10) years against defects in design and the manufacturing process.

The warranty shall be offered by Akron or equivalent Brass.

2.5" LEFT SIDE AUXILIARY INTAKE Bidder Complies: YES ___ NO ___

One (1) 2.5" auxiliary intake shall be provided on the left side of the pump compartment.

The Akron or equivalent Brass valve shall be controlled from the left side pump panel.

A 2.5" chrome plated female National Standard Thread swivel connection with screen shall be provided on the left side 2.5" intake with chrome plated male NST intake plug and chrome plated chain.

LEFT 2.5" DISCHARGES Bidder Complies: YES ___ NO ___

Two (2) 2.5" discharges shall be provided on the left side of the apparatus.

The Akron or equivalent Brass valves shall be manually controlled from the pump operator's position.

A 2.5" chrome plated NST discharge cap and discharge elbow shall be provided on the right side 2.5" discharges with a chrome plated chain.

RIGHT 2.5" DISCHARGES Bidder Complies: YES ___ NO ___

Two (2) 2.5" discharges shall be provided on the right side of the apparatus.

The Akron or equivalent Brass valves shall be manually controlled from the pump operator's position.

A 2.5" chrome plated NST discharge cap and discharge elbow shall be provided

on the right side 2.5" discharges with a chrome plated chain.

DECK GUN RISER Bidder Complies: YES ____ NO ____

A 3.00" deluge riser shall be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping shall be installed securely so no movement develops when the line is charged.

The riser shall be controlled at the pump operator's panel and shall terminate with a 3.0" NPT fitting suitable for installation of a deck gun.

1.5" CROSSLAY PRE-CONNECTS Bidder Complies: YES ____ NO ____

There shall be two (2) 1.5" pre-connected crosslay beds provided and located on top of the apparatus pump module.

The cross lay compartments shall be constructed of aluminum plate with a satin (DA) finish applied to the inside surfaces.

Each cross lay shall be plumbed with high pressure hose from the discharge manifold to an Akron or equivalent Brass ball valve.

Two (2) separate discharge valves shall be utilized to control the 1.5" crosslay hose beds and shall be manually controlled from the pump operator's position.

There shall be two (2) swivel elbows with 1.5" male NST hose thread connections provided in the crosslay hose beds. The swivels shall be mounted in a position to prevent hose "pinching" at the hose thread connection.

CROSSLAY CAPACITY - 200 FEET Bidder Complies: YES ____ NO ____

The 1.5" crosslays shall have the capacity to hold 200 feet of 1.75" fire hose and nozzle.

2.5" DEADLAY HOSE STORAGE Bidder Complies: YES ____ NO ____

There shall be one (1) 2.5" deadlay located on top of the pump module behind the pre connected 1.5" crosslays.

The deadlay shall have the capacity to hold up to 100' of 2.5" hose.

SIDE PANELS -- STAINLESS STEEL Bidder Complies: YES ____ NO ____

The pump compartment shall have left, and right-side pump panels installed. The panels shall be constructed of brushed stainless-steel sheeting. The side pump panels shall be removable for routine service and repair.

PUMP PANEL LABELS Bidder Complies: YES ____ NO ____

All pump controls, inlets and outlets shall have proper labels applied to identify its function.

These labels shall be designed and manufactured to withstand the specified apparatus service environment.

The verbiage label bezel assemblies shall include a chrome plated panel mount bezel with durable easy to read UV resistant polycarbonate inserts featuring the specified verbiage and color coding.

The UV resistant polycarbonate verbiage and color inserts shall be sub-surface screen printed to eliminate the possibility of wear and protect the inks from fading.

PUMP PANEL LIGHTS AND SHIELD Bidder Complies: YES ___ NO ___

One (1) stainless steel light shield assembly shall be provided along the full width of the side mount operator's panel.

There shall be two (2) lights provided inside the pump compartment area. A separate switch on the operator's panel shall be provided to activate the lights.

RUNNING BOARDS Bidder Complies: YES ___ NO ___

Running boards shall be installed on each side of the pump compartment module.

The running boards shall be constructed of 1/8" embossed fire apparatus bright aluminum tread plate.

Each shall extend the full width of the side mounted module.

The aluminum tread plate shall meet recommendations for slip resistant surfaces. The running boards shall be attached to a frame mounted outrigger support structure.

Each running board shall have a minimum 2" downward bend on the front and side faces for superior strength.

PUMP GAUGES Bidder Complies: YES ___ NO ___

All gauges shall be manufactured by Hale or equivalent Products (Class 1). They shall be liquid filled to keep the dial from pulsating and also to prevent condensation from forming inside the gauges.

The master suction (inlet) gauge provided shall be from -30 to 400 PSI. Each individual discharge gauge provided shall be from 0 to 400 PSI. Two (2) 4.5" master gauges (Suction & Pressure). One (1) 2.5" discharge gauge for each 1.5" or larger discharge.

WATER LEVEL GAUGE Bidder Complies: YES ___ NO ___

A Class 1 (Hale) ITL-40 or equivalent electronic water level gauge shall be provided on the operator's panel that registers water level by

means of graduated LED lights.

The lights shall be a durable, ultra-bright LED design that registers water level in the on-board apparatus booster tank.

To further alert the pump operator, the lights shall flash sequentially when the water tank is empty.

The level measurement shall be based on the sensing of head pressure of the fluid in the tank.

The display shall be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design shall provide complete protection from water and environmental elements.

An industrial pressure transducer shall be mounted to the outside of the tank.

The field calibratable display measures head pressure to accurately show the tank level.

ENGINE COOLER Bidder Complies: YES ___ NO ___

An auxiliary heat exchanger shall be provided for added engine cooling during pump operation.

The auxiliary engine cooler shall be mounted directly behind the radiator tank and use water from the fire pump during pumping operation.

The radiator plumbing shall include a drain cock for coolant evacuation.

The control valve for the heat exchanger shall be located on the pump operator's panel and shall be a Class 1 quarter turn ball valve with chrome plated handle with an "Engine Cooler" identification tag recessed into the face of the handle.

PUMP COOLER Bidder Complies: YES ___ NO ___

The pump shall have a bypass cooler line installed from the discharge side of the pump to the water tank to cool the pump during sustained periods of operation when water is not being discharged.

The pump cooler control valve, located on the pump operator's panel, shall be a Class 1 quarter turn ball valve with chrome plated handle with "Pump Cooler" identification tag recessed into the face of the handle.

TEST PORTS Bidder Complies: YES ___ NO ___

Two (2) chrome test plugs shall be mounted on the pump operator's panel for testing of vacuum and pressure during the performance test.

"T" STYLE BOOSTER TANK - 1,800 GALLONS Bidder Complies: YES ___ NO ___

The "T" style wet-side booster tank shall have a capacity of 1,800 US gallons of water and shall be constructed to meet NFPA 1901 recommendation.

The tank shall be designed and fabricated to meet the exact specifications of this apparatus and shall be certified for the required capacity, hydro-tested and/or electronically tested, and will include a limited lifetime warranty.

The tank shall be constructed of virgin material that is a stress-relieved, UV stabilized, high-impact copolymer polypropylene that is black in color.

Material thickness, joint design, welding processes, baffles, and support design shall be determined by APR engineering based on DVS and/or AWS standards and shall be designed to meeting and/or exceeding NFPA 1901 standards as well as proprietary standards developed by APR.

The tank shall be equipped with a combination pipe vent/overflow and manual fill tower with lid. The tower shall be located on the front portion of the tank and shall have a removable copolymer screen.

The tank covers shall incorporate a minimum of (2) lifting lugs consisting of 2" copolymer dowels. The lifting lugs are intended only for use when the tank is empty. The dowels shall be drilled and tapped to accommodate lifting eyes with a minimum safety factor of 3 to 1. The lifting dowels shall be welded to the internal partitions and extend through the covers to assist in minimizing cover flex during normal operation.

Unless otherwise specified there shall be one standard sump per tank. The tank shall have a suction fitting of the internal draw type and will incorporate a dip tube (when required), and an anti-swirl plate positioned to minimize the formation of vortices. The sump shall have a drain on the bottom if applicable. Direct fill and tank refill fittings shall be rated at 150 PSI and are not to be used as steps or supports of any type.

The tank baffling system shall be designed to allow for customer specified flow rates and prevention of severe liquid load shifting during transport. All baffles are designed to meet and/or exceed NFPA 1901 standards.

Foam cells (if applicable) shall be fabricated according to customer specifications for capacity, location, and fitting requirements. Foam cells shall include a manual fill tower hinged lid with gasket, closure latch, pressure/vacuum valve and removable screen. Information on the foam cell shall be detailed in other sections of the proposal if applicable.

Additional tank equipment (if applicable) shall include storage tunnels, storage compartments, hose trays, hose beds, hose reel mounting platforms, ladder mounting platforms and miscellaneous housings that shall all be built to meet the exact specifications of this apparatus. Information on additional tank equipment shall be detailed in other sections of the proposal if applicable.

TANK COLOR Bidder Complies: YES ___ NO ___

The visible portions of the tank shall be finish painted red to match the body paint code.

TOP MOUNTED HOSE BED Bidder Complies: YES ___ NO ___

A hose bed 14" deep X 160" long X 66" wide shall be located on the top of the apparatus tank.

Access shall be gained from the rear of the apparatus.

This hose bed shall have a capacity to carry a full complement of supply hose.

HOSE BED FLOORING Bidder Complies: YES ___ NO ___

The hose bed shall be an integral part of the tank and shall be constructed out of contoured polypropylene.

The contours of the hose bed shall allow air flow around the bottom of the hose load.

HOSEBED COVER Bidder Complies: YES ___ NO ___ The hose bed shall have a 22 oz heavy-duty vinyl cover.

This cover shall have bungee cords with aluminum hooks across the front and down each side.

A flap shall be provided at the rear and held in place with (2) bungee hooks.

HOSE BED ACCESS LADDER Bidder Complies: YES ___ NO ___

There shall be a rear mounted NFPA approved hose bed access ladder provided and installed to access the top portion of the apparatus hose bed.

The ladder shall be permanently attached to the apparatus body and tank.

The non-slip ladder shall have a static load rating of at least 500 pounds and meet all NFPA recommendations.

TANK ENGINEERING Bidder Complies: YES ___ NO ___ There shall be a final approval drawing from the tank engineer prior to construction.

LIFETIME TANK WARRANTY Bidder Complies: YES ___ NO ___

The tank shall carry a lifetime warranty against defect for as long as you own the apparatus.

The warranty is offered by the tank manufacturer.

NEWTON or equivalent 10" DUMP VALVE - ELECTRIC Bidder Complies: YES ___ NO ___

The apparatus shall be equipped with a rear 10" Newton or equivalent straight dump valve that enable water shuttle and dump operations to take place without the need to leave the cab.

The entire assembly shall be finish painted red to match the color of the cab and body.

DIRECT REAR FILL CONNECTIONS Bidder Complies: YES ___ NO ___

There shall be two (2) 2.5" direct fills located at the rear of the apparatus body.

The connections shall utilize a 2.5" Akron or equivalent Brass valve that shall be exposed on the exterior of the apparatus body.

The valve shall remain its natural finish for even appearance and durability.

DUMP TANK STORAGE Bidder Complies: YES ___ NO ___

There shall be a slide-in dump tank storage rack provided and installed on the finished apparatus.

The rack shall be located on the passenger side of the apparatus above the low-side body compartment.

HARD SUCTION STORAGE TUNNEL Bidder Complies: YES ___ NO ___

There shall be a hard suction storage tunnel provided and installed through the tank on the finished apparatus.

The tunnel shall be capable of holding up to two (2) 10' sections of hard suction hose.

The tunnel shall be mounted through the tank and there shall be a hinged door at the rear of this compartment to retain the hoses.

LADDER STORAGE Bidder Complies: YES ___ NO ___

There shall be a set of cast aluminum ladder brackets mounted on the officer side of the apparatus above the dump tank storage rack.

The brackets shall hold (1) 24-foot extension ladder and (1) 14 foot roof ladder.

BODY PAINT - BASE COAT/CLEAR COAT Bidder Complies: YES ___ NO ___

After the apparatus body has been fully assembled and all mounting holes, etc. have been punched, machined, or drilled, the apparatus shall be fully disassembled for the paint process.

The apparatus body shall not be mounted on the chassis during the paint process.

All seams or flanges on the apparatus body shall be caulked or properly sealed to prevent moisture accumulation in flanged areas.

PAINT PROCESS Bidder Complies: YES ___ NO ___

The apparatus body paint procedure shall consist of an eight (8) step finishing

process as follows:

1. Manual Surface Preparation: All exposed metal surfaces on the apparatus exterior shall be thoroughly cleaned. All imperfections on the exterior metal surface shall be removed or filled prior to the priming process. All exposed metal shall be thoroughly abraded using a dual orbital air power sander.
2. Cleaning and Treatment: All surfaces shall be chemically cleaned per manufacturer specification to ensure proper adhesion.
3. Self-etching Primer Application: Acid etching primer shall be applied to the bare metal per manufacturer specification.
4. Primer/Surfacer Application: Sherwin-Williams or equivalent urethane primer/surfacer shall be applied to the acid etching primer.
5. Dual Orbital Sanding: The primer/surfacer shall be thoroughly sanded to a superior smooth surface.
6. Cleaning: After sanding in step #5, all surfaces shall be chemically cleaned again per manufacturer specifications. The surface to be painted shall be clean of all oil, grease, and dirt to ensure proper adhesion.
7. Primer Sealer Application: Sherwin-Williams or equivalent urethane primer/sealer shall be applied over the thoroughly sanded and cleaned primer/surfacer as per bulletin DFT-054.
8. Topcoat Application: Two coats of Sherwin-Williams or equivalent basecoat color two component polyurethane paint shall be applied to the primer sealer. The base color shall be followed by two coats of Sherwin-Williams or equivalent two component polyurethane clearcoat finish.

PAINT - ENVIRONMENTAL IMPACT Bidder Complies: YES ____ NO ____

The apparatus shall meet or exceeds all current state regulations concerning paint operations.

Pollution control shall include measures to protect the atmosphere, water, and soil. Controls shall include the following conditions:

- Topcoats and primers must be chrome and lead free.
- Metal treatment chemicals must be chrome free. The wastewater generated in the metal treatment process must be treated to remove any other heavy metals.
- Particulate emissions from painting operations must be collected by a dry filter or water wash process.
- Solvents used in clean-up operations must be collected, sent off-site for distillation, and returned for reuse.

Additionally, the finished apparatus shall not be manufactured with or contain products that have ozone depleting substances.

Contractor shall, upon demand, present evidence that his manufacturing facility meets the above conditions and that it is in compliance with his State EPA rules and regulations.

PAIN CHASSIS FRAME ASSEMBLY Bidder Complies: YES ___ NO ___

The chassis frame assembly shall be painted black by the chassis manufacturer. It shall remain the commercial grade finish as provided.

COMPARTMENT INTERIOR PAINT Bidder Complies: YES ___ NO ___

The interior of all equipment compartments shall be painted with gray Zolatone or equivalent spatter type paint.

REFLECTIVE BAND Bidder Complies: YES ___ NO ___

A 6.00" reflective band shall be provided along the sides of the chassis cab and apparatus body.

CHEVRON STRIPING, REAR Bidder Complies: YES ___ NO ___

There shall be alternating chevron striping located on the rear-facing vertical surface of the apparatus.

The rear surface excluding the rear compartment door shall be covered. The colors shall be red and fluorescent yellow green. Each stripe shall be 6.00" in width.

This shall meet the requirements of NFPA 1901, 2009 edition, which states that 50% of the rear surface shall be covered with chevron striping.

REFLECTIVE STRIPE, CAB DOORS Bidder Complies: YES ___ NO ___

A reflective stripe shall be provided on the interior of each cab door. This stripe shall be a minimum of 96.00 square inches and shall meet the NFPA 1901 requirement.

LETTERING AND LOGO Bidder Complies: YES ___ NO ___

The lettering shall be totally encapsulated between a layer of clear protective UV resistant vinyl.

Up to sixty (60) vinyl letters per side, 3.00" high with outline and shade shall be provided.

Department logo on each front door shall be provided as standard.

GRAPHICS APPROVAL Bidder Complies: YES ___ NO ___

The department shall approve the final graphics layout and design prior to application on the finished apparatus.

EQUIPMENT Bidder Complies: YES ___ NO ___

The following equipment items shall be provided with the finished apparatus:

- (1) Husky or equivalent 2,100 Gallon Aluminum Frame Dump Tank

- (1) Duo-Safety or equivalent 24' Extension Ladder
- (1) Duo-Safety or equivalent 14' Roof Ladder
- (2) 6.0" NST RL Hard Suction Hoses - Clear PVC Construction - (1) TFT Crossfire or equivalent Deck Gun with Stacked Tips and Truck Mounting Adapter - (1) TFT M-R1000-NJ Deck Gun Fog Nozzle - 2.5" Inlet - 1,000 GPM - (1) Kocheck or equivalent 6.0" Low Level Strainer with Jet Siphon
- (8) Firequip or equivalent 1.5" DJ Attack Hose - 50' Sections - White
- (24) Firequip or equivalent 2.5" DJ Attack-Supply Hose - 50' Sections - White - (2) Firequip or equivalent 2.5" DJ Attack-Supply Hose - 25' Sections - White - (3) 1.5" Crestar SF-125 Selectable Flow Nozzles
- (2) 2.5" Double Male Adapters
- (2) 2.5" Double Female Adapters
- (1) 2.5" NSTM Mounting Plate
- (1) 2.5" NSTF Mounting Plate
- (2) Kocheck or equivalent Hydrant Spanner Combo Sets
- (2) Streamlight or equivalent Fire Vulcan 180 Hand Lights w/ Charger Base
- (1) 20-lb Dry Chemical Fire Extinguisher with Mounting Bracket - (1) 2.5 Gallon Pressurized Water Extinguisher with Mounting Bracket - (4) BA3-14000 Mounting Brackets with NFPA Straps

MISCELANEOUS FASTNERS Bidder Complies: YES ____ NO ____

There shall be a bag of miscellaneous sizes of screws, bolts, nuts and bolts that were used in the manufacturing of the apparatus.

PAYMENT Bidder Complies: YES ____ NO ____

There are no pre-payment requirements for this project and no performance bonds shall be required.

The finished apparatus shall be paid for in full at time of final delivery and acceptance by the department.

PURCHASER'S RESPONSIBILITY Bidder Complies: YES ____ NO ____

The purchaser shall be responsible for any NFPA recommended equipment not specifically detailed in the proposal.

These specifications are as complete, accurate and up to date as possible; however, it is the purchaser's responsibility for the safe, legal operation and maintenance of this apparatus and equipment.

