



Sullivan County Purchasing
3411 Hwy 126, Suite 201
Blountville, TN 37617
423-323-6400

Kristinia Davis, Purchasing Agent
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2017 CUSTOM PUMPER FIRE FIGHTING APPARATUS

RFP # 421VFD2016(AM)

DATE TO OPEN:

OCTOBER 18, 2016

2:00 PM

OFFICE OF THE SULLIVAN COUNTY PURCHASING AGENT
3411 HIGHWAY 126 – SUITE 201
BLOUNTVILLE, TN 37617-0569

KRISTINIA DAVIS
PURCHASING AGENT

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REQUEST FOR PROPOSAL

RFP Name / Number: 2017 Custom Pumper / # 421VFD2016(AM)
Department: 421 Volunteer Fire Department
Due Date / Time: Tuesday, October 18, 2016 / 2:00 p.m.
Bid Location / Mail Address: Sullivan County Purchasing Department, Kristinia Davis, Purchasing Agent
3411 Hwy 126 - Suite 201, Blountville, TN 37617
Bid Contact / Telephone: Alan Mahaffey (423) 323-6404; alan.mahaffey@sullivancountyttn.gov

The Sullivan County Purchasing Department is soliciting this Request for Proposal (RFP) regarding the purchase of a **2017 CUSTOM PUMPER FIRE FIGHTING APPARATUS** to be operated by the **421 VOLUNTEER FIRE DEPARTMENT**. Sealed proposals are desired from reputable manufacturers of Automotive Fire/Rescue Apparatus in accordance with the attached specifications.

All RFPs and required enclosures shall be presented, signed and delivered to the Sullivan County Purchasing Department (address denoted above) no later than **TUESDAY, OCTOBER 18, 2016 @ 2:00 P.M. LATE RESPONSES WILL NOT BE CONSIDERED!** Sullivan County is not responsible for delays in mail deliveries or courier services.

RFP must be presented in a **sealed** envelope, **clearly identifying RFP # 421VFD2016(AM) on the outside.** Telephone, fax or e-mail responses are not acceptable!

All responses to this RFP **must be submitted in duplicate.** Any exception to this requirement may disqualify responding vendor from award consideration.

All RFPs offered must be in strict conformance to the language, specifications, requirements, terms and conditions as stated herein. This RFP must be completed in totality and signed by an authorized agent of the responding company. Any erasures, strike overs and/or changes to prices written in numerals should be initialed by the responding vendor. Any exception to this requirement will disqualify responding vendor from award consideration.

It is the responsibility of each responding vendor to ascertain that all requirements are satisfied. It will be assumed that the vendor has made investigations to be fully informed as to the extent and character of the requirements. Failure to submit a RFP which conforms to the specified content and format requirements will be sufficient cause to disqualify vendor. Additionally, material deficient or incomplete response to the RFP requirements will be cause to disqualify vendor.

If a responding vendor represents more than one fire apparatus company, vendor shall offer only the superior unit that meets and/or exceeds specifications herein. Each responding vendor shall only submit one proposal. Multiple offers from the same vendor will not be acceptable.

During the evaluation period, bidders may be asked to further clarify their proposals or answer questions that may arise during the evaluation of bid. It is the responsibility of the vendor to make clarifications, in writing, on the fire apparatus manufacturer's letterhead and signed by the President and/or General Manager of the manufacturing

company. These written clarifications must be received within seventy two (72) hours of when they were requested by the Sullivan County Purchasing Agent. Failure to respond within the allowed time period could deem the bid proposal unresponsive and cause for rejection.

The Sullivan County Purchasing Agent has the right to accept or reject any/all proposals and to waive any informalities or irregularities and/or to reject a bid from any responding vendor who, in the judgment of the purchasing agent, is not in a position to perform the contract, and/or to reject a bid based on unacceptable provisions of a responding vendor's contract. Sullivan County, on behalf of the Warrior's Path Volunteer Fire Department does not obligate itself to accept the lowest and/or any bid. If all responses should be deemed unacceptable, the purchasing agent shall prepare a written determination outlining the nature of such rejection. Should another RFP be prepared, all rejected responses shall remain closed to public inspection until the evaluation of new RFP responses is completed.

Sullivan County, its officers, agents and employees shall be held harmless from liability from any claims, damages and actions of any nature rising from the use of any materials furnished by the responding firm, provided that such liability is not attributable to negligence on the part of the using agency or failure of the using agency to use the materials in the manner outlined.

Any remedies in the vendor's response, including agreement, license agreement, terms, conditions, literature, etc. that may be considered an agreement to waive the legal rights of the citizens of Sullivan County shall be considered cause for rejection.

By submission of this RFP, the vendor certifies total compliance with Title VI and Title VII of the Civil Rights Act of 1964, as amended, and all regulations promulgated thereof.

Failure of Sullivan County to enumerate any federal, state or county regulation in its entirety within this RFP is not cause for the vendor to exclude same.

RFP responses received by the purchasing agent will be tabulated and submitted to the Warrior's Path Volunteer Fire Department for evaluations prior to final selection and award.

CONTACT FOR QUESTIONS REGARDING THE BID PROCESS:

ALAN MAHAFFEY @ 423-323-6404

alan.mahaffey@sullivancountyttn.gov

OR

kris.davis@sullivancountyttn.gov

COLOR CODED

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ALL RFP'S MUST BE SUBMITTED IN COLOR-CODED FORMAT OR TABS MAY BE USED
CLEARLY IDENTIFYING THE FOLLOWING.

VENDOR'S DUPLICATE COPY MAY BE PRINTED ON WHITE PAPER.

REQUEST FOR PROPOSAL	YELLOW
TERMS AND CONDITIONS (GENERAL PROCUREMENT-SULLIVAN COUNTY)	BLUE
COST ANALYSIS	PINK
SPECIFICATIONS/COMPLIANCE	WHITE
EXHIBITS SECTION	LIME

GENERAL PROCUREMENT TERMS AND CONDITIONS FORM #GPTC1004-14

REQUIREMENTS

1. Any applicant wishing to be considered as an active trade reference for Sullivan County shall complete a "ACTIVE TRADE REGISTRATION FORM" and verify acceptance of the "GENERAL PROCUREMENT TERMS AND CONDITIONS" by signing, dating and submitting to the Sullivan County Purchasing Agent.

If requested by the Sullivan County Purchasing Agent, applicant shall submit any information, including (but not limited to) portfolios of previous projects, bid bonds, performance/payment bonds, personal references listing, financial reports, certificates of insurance, copies of licenses/permits/certifications and/or any other significant data necessary to establish and/or maintain an active trade reference status.

NOTE: It is the responsibility of each applicant/trade reference to update and communicate, in written form to the Sullivan County Purchasing Agent, any changes, additions, deletions or alterations to the information initially provided on the "Active Trade Registration Form".

2. Any applicant who wishes to do business with Sullivan County shall agree to comply with the Sullivan County General Procurement Terms and Conditions listed herein and including all other related instructions, documents, data, etc. pertaining to the procurement of commodities and/or services.

3. All priced proposals, bids and/or priced quotes must be offered in strict conformance to all language, specifications, requirements, terms and conditions as solicited. Written priced proposals, bids and/or priced quotes must be presented in exact format as solicited. Written priced proposals, bids and/or priced quotes must be completed in totality and signed by an authorized agent of the responding trade reference. Any erasures, strike overs and/or changes to prices written in numerals shall be initialed by the representative of the responding trade reference. Failure to comply will be cause to disqualify award consideration.

4. All formal solicitations must be returned via mail, courier or in person on or before the opening day/time; telephone, fax or e-mail responses are not acceptable. Sullivan County is not responsible for delays by mail or courier. Late priced proposals, bids and/or priced quotes are not acceptable! Priced quotes solicited by fax, must be returned (by fax) to the appropriate procurement officer on the day/time designated.

5. The Sullivan County Purchasing Agent may conduct discussion with the responding trade reference for the purpose of facilitating an understanding of the information submitted.

6. The Sullivan County Purchasing Agent has the right to accept or reject any/all priced proposals, bids and/or priced quotes and to waive any informalities or irregularities and/or to reject a priced proposal, bid and/or priced quote from any responding trade reference who, in the judgment of the Sullivan County Purchasing Agent is not in a position to perform the services, and/or to reject a priced proposal, bid and/or priced quote based on unacceptable provisions of a responding trade reference. Sullivan County does not obligate itself to accept the lowest and/or any priced proposal, bid and/or priced quote. If all responses should be deemed unacceptable, the Sullivan County Purchasing Agent shall prepare a written determination outlining the nature of such rejection.

7. Priced proposals, bids and/or priced quotes may be submitted for all and/or part of the total quantities requested, unless otherwise noted in the priced proposals, bids and/or priced quotes.

8. Priced proposals, bids and/or priced quotes must be presented in the exact format as solicited and, if applicable, bear the handwritten signature of the responding firm's authorized representative. Failure to submit priced proposals, bids and/or priced quotes which conforms to the specified content and format requirements will be sufficient cause to disqualify trade reference. If required by the Sullivan County Purchasing Agent, trade references shall furnish satisfactory evidence of their ability to furnish commodities/services in accordance to the specifications, terms or conditions of the priced proposals, bids and/or priced quotes and shall submit brochure-type information, actual product samples or any other instrument requested. Failure to comply with any requirement, material deficient responses and/or incomplete responses will be cause to disqualify award consideration.

9. Proposals which are solicited for the purposes of qualifying trade references to provide specific services and/or professional services shall be presented to the Sullivan County Purchasing Agent in the same methods as priced proposals, bids and/or priced quotes. A qualifying proposal is generally the first task of a multi-task solicitation, which requires certain data, enclosures and information for the purpose of identifying a trade reference's ability to supply and perform services. Qualifying information requested and received by the Sullivan County Purchasing Agent will remain confidential until proposal

has been reviewed, determined compliant and recorded in written tabulation form. If directed by the Sullivan County Commission or any committee thereof, the Sullivan County Purchasing Agent will present the findings for discussion and/or recommendations, prior to proceeding to the next tasks (i.e. compliance, priced proposals, interviews, etc.) in the multi-task procurement processes.

10. The Sullivan County Purchasing Agent reserves the right to use all pertinent information (also learned from sources other than those disclosed in the priced proposal, bid and/or priced quote), that might affect Sullivan County's judgment as to the appropriateness of an award to the best evaluated trade reference. The information may be appended to the priced proposal, bid and/or priced quote evaluation process results. Information on a trade reference from reliable sources (and not within the trade reference's priced proposal, bid and/or priced quote) may also be noted and made part of the evaluation file.

11. Unless otherwise stated by the Sullivan County Purchasing Agent, no trade reference may withdraw any priced proposal, bid and/or priced quote within a period of sixty (60) days (or longer if specifically designated in the solicitation) after the day/time designated as the official deadline for accepting the priced proposal, bid and/or priced quote.

12. Priced proposals, bids and/or priced quotes shall be quoted FOB (delivered) Sullivan County locations, unless otherwise authorized by the Sullivan County Purchasing Agent. Additional charges for shipping, handling, freight, boxing, crating, drayage, etc. will not be acceptable, unless otherwise authorized by the Sullivan County Purchasing Agent.

13. It is the responsibility of each responding trade reference to ascertain that all requirements are satisfied and that all requests are presented and assembled in the format as solicited. It will be assumed that the trade reference has made investigations to be fully informed as to the extent and character of the requirements. If a trade reference is in doubt as to the true meaning of any part of the specifications, instructions, terms, conditions, drawings or other documents, he/she should request an interpretation from the Sullivan County Purchasing Agent. If the solicitation should require an addendum, the Sullivan County Purchasing Agent will forward same in writing to each trade reference to which solicitations were offered.

14. The successful trade reference pledges to Sullivan County that all commodities delivered and all services rendered shall conform to the proposal, specifications, drawings, instruments and descriptions furnished and/or incorporated by reference and will be of merchantable quality, good workmanship, free from defects and fit for the particular purpose purchased. The successful trade reference shall also extend all warranties to Sullivan County allowed under the U.C.C. and shall provide copies of such warranties to Sullivan County. Return of merchandise not meeting warranties shall be at the expense of the trade reference who originally supplied the commodities and/or services.

15. Warranty periods shall not commence until Sullivan County inspects and formally accepts the commodities and/or services. The terms, conditions and timing of acceptance shall be determined by the Sullivan County Purchasing Agent. Acceptance of commodities and/or services does not constitute a waiver of latent or hidden defects or defects not readily detectable.

16. Any statement or words (i.e. must, shall, will, etc) are declarative statements and trade reference must comply with this condition. Failure to comply will be cause to disqualify award consideration.

17. Any exceptions to the specifications in a solicitation must be offered in written form and entitled "exceptions", or as specifically instructed in the solicitation.

18. Any alteration, erasure, addition to, or omission of the solicitation must be properly noted and initialed prior to the day/time the priced proposal, bid and/or priced quote is due. Failure to comply will be cause to disqualify award consideration.

19. Unless qualified by the provision "no substitute", the use of the name of a manufacturer, brand, make or catalog description in specifying an item does not restrict trade references to that manufacturer, brand, make or catalog designation identification. This is used simply to indicate the character, quality and/or performance equivalence of the commodity desired, but the commodity on which priced proposals, bids and/or priced quotes are submitted must be of such character, quality and/or performance equivalence that it will serve the purpose for which it is to be used equally, as well as that specified. In submitting a priced proposal, bid and/or priced quote on a commodity other than as specified, trade reference shall furnish complete data and identification with respect to the substitute commodity he proposes to furnish. Consideration will be given to substitute commodities, if such action is deemed to serve the best interest of Sullivan County. If a trade reference does not indicate that the commodity he proposed to furnish is other than as specified, it will be construed to mean that the trade reference proposes to furnish the exact commodity as described.

20. Where "no substitute" is stated in the solicitation, alternate brands/models will not be considered in the award process, unless otherwise prior approved by the user department(s) and authorized by the Sullivan County Purchasing Agent.

Commodities identified as "no substitutes" are products that have been tested and justified to be superior in quality, workmanship and performance, based on the needs of Sullivan County user departments. It is at the sole discretion of any trade reference to offer free product samples to be tested and evaluated by the appropriate user department, to determine if an alternate brand/model meets or exceeds the specification criteria of a "no substitute" commodity. An alternate brand/model offered in a priced proposal, bid and/or priced quote identified as a "no substitute" commodity, that has not been offered for testing and evaluation prior to the solicitation deadline, will be cause to disqualify award consideration.

21. When alternate priced proposals, bids and/or priced quotes reveal more economical services, supplies or materials than those specified, the Sullivan County Purchasing Agent has the right to re-solicit in open market with modified specifications.

22. Prices must be offered per unit, by line item (when applicable) and extended based on the total quantities requested. When pricing is requested in form of specific case quantity, or in hundreds-thousands, it is the responsibility of the trade reference to offer pricing accordingly. Failure to extend the pricing in conformance to our solicitation will be cause to disqualify award consideration. In the event of a disparity between the unit and extended prices, the unit price shall prevail.

23. All prices, notations and/or corrections shall be written in ink and/or typed. Corrections made in any written priced proposal, bid and/or priced quote document must be initialed in ink by the individual signing same. Prior to the opening day/time, trade references can make price corrections on the outside of the envelope (if applicable) containing their written priced proposals, bids and/or priced quotes. Such price corrections will be read aloud by the Sullivan County Purchasing Agent during the public opening and recorded by the appropriate procurement officer for public record.

24. Prices shall be extended in decimals, not fractions. Prices must include all transportation and delivery charges fully prepaid by the trade reference to the Sullivan County destination specified in the priced proposals, bids and/or priced quotes, unless otherwise authorized by the Sullivan County Purchasing Agent.

25. Sullivan County is a government municipality within the State of Tennessee and is exempt from local, state and federal excise, transportation, sales and/or use tax for goods and services purchased for the exclusive use by its departments. The Sullivan County Purchasing Agent will furnish the successful trade reference with a properly executed exemption certificate. In certain circumstances where the Federal Identification Number is required, the Sullivan County Purchasing Agent will authorize same on a valid request form.

26. In the event cash discounts are offered by the trade reference, the discount date shall begin with the date of the invoice or the date of receipt of delivery of all commodities indicated on the purchase order/contract (whichever is the later date). If advantageous to Sullivan County, the Sullivan County Purchasing Agent will consider cash discounts during the evaluation process and award.

27. Tennessee Code Annotated allows cooperative purchasing between government entities within the State of Tennessee. Upon request from another government entity within the State of Tennessee, it will be at the discretion of the responding trade reference to offer identical commodities/services to such entities for the same costs offered to Sullivan County.

28. As approved by the governing board of Sullivan County, the Sullivan County Purchasing Agent enforces a compulsory "Procurement/Credit Card Policy" to any Sullivan County official and/or employee authorized to exploit any form of credit card transactions. The Policy requires the Sullivan County Purchasing Agent to determine the needs for credit, to approve any/all types of allowable credit, to establish credit limits, to maintain an active file of users and signed "Agreements" from authorized officials and/or employees and to execute any/all additions, deletions, changes or cancellations regarding credit card usages. Trade reference is responsible for verifying that any County official and/or employee who charges commodities and/or services have been prior authorized by the Sullivan County Purchasing Agent. Payments for any commodities and/or services charged by an official and/or employee who have not been pre-authorized, will be the sole responsibility of the trade reference allowing the transactions. It is understood that a trade reference cannot create a credit card account for any official, employee, department and/or office of Sullivan County without prior approval from the Sullivan County Purchasing Agent. The initiation and/or issuance of credit card accounts, without authorization from the Sullivan County Purchasing Agent, will not be tolerated!

a. GENERAL PROCUREMENT

The Sullivan County Purchasing Agent allows general procurement by credit cards for certain commodities and/or services, if same is advantageous and/or cost effective to Sullivan County. Certain procurement officers selected by and working directly under the supervision of the Sullivan County Purchasing Agent who are familiar with the rules, regulations and policies are authorized to use credit cards for specific procurement transactions.

b. TRAVEL

The Sullivan County Purchasing Agent has established a Global Credit Card account to be used in concurrence with all travel related events. Selected officials and/or employees have been issued individual credit cards in their names, under our major billing account. These credit cards are not approved for general procurement.

c. FLEET FUEL

The Sullivan County Purchasing Agent has established a Fleet Fuel Credit Card account to be used in concurrence with fleet fuel purchases. Selected officials and/or employees have been issued individual fleet fuel cards in their names, under our major billing account. Fleet fuel cards are only approved for fuel purchases.

d. OTHER CREDIT CARD PROCUREMENT

The Sullivan County Purchasing Agent must pre-approve any/all procurement/credit cards offered by a trade reference for business purposes. Any trade reference who is interested in offering credit card merchant services to Sullivan County, must contact the Sullivan County Purchasing Agent and schedule an appointment to confer and corroborate all issues, terms and conditions, rules and regulations of Sullivan County's procurement/credit card policy. If trade reference administers credit card services without prior approval from the Sullivan County Purchasing Agent, trade reference is subject to removal from active status and denial of future procurement transactions with Sullivan County government.

29. A trade reference agrees to defend and save Sullivan County from and against all demands, claims, suits, costs, expenses, damages, and judgments based upon infringement of any patents relating to goods specified, or the ordinary use or operation of such goods by the county, or use or operation of such goods in accordance with trade reference's instructions.
30. Purchase orders and/or contracts will be made or entered into with the lowest, responsible, compliant trade reference meeting specifications for the particular grade or class of material, work, or service desired in the best interest and advantage to Sullivan County. Responsible trade references are defined as a trade references whose reputations, past performances, and business and financial capabilities are such that they would be judged by the Sullivan County Purchasing Agent to be capable of satisfying Sullivan County's needs for a specific purchase order and/or contract.
31. Sullivan County reserves the right to determine the award of a purchase order and/or contract either on the basis of the individual items or on the basis of all items included in the priced proposals, bids and/or priced quotes, unless otherwise expressly provided in the priced proposals, bids and/or priced quotes. Sullivan County reserves the right to accept any item or group of items of any kind and to modify or cancel in whole or in part.
32. By submission of a signed priced proposal, bid and/or priced quote, the trade reference certifies total compliance with Title VI and Title VII of the Civil Rights Act of 1964, as amended, and all regulations promulgated there under.
33. It is the policy of Sullivan County that all its services and activities be administered in conformance with the requirements of Title VI of the Civil Rights Act. "Nondiscrimination in Federally Assisted Programs" – "No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." 42 U.S.C. Section 2000 et seq.
34. A trade reference agrees that no person on the grounds of handicap, age, race, color, religion, sex or national origin, shall be excluded from participation in, or be denied benefits of, or otherwise subjected to discrimination in the performance of any services rendered to Sullivan County or in the employment practices of the Trade Reference.
35. A trade reference covenants that it has no public or private interest and shall not acquire directly or indirectly any interest that would conflict in any manner with the provision of its commodities or performance of its services.
36. Any remedies in a priced proposal, bid and/or priced quote, including conformity, license agreement, terms, conditions, literature, etc. that may be considered an agreement to waive the legal rights of the citizens of Sullivan County, will be cause to reject a priced proposal, bid and/or priced quote.
37. Failure of Sullivan County to enumerate any Federal, State or County regulation in a solicitation, is not cause for trade reference to exclude same.
38. A trade reference is assumed to be familiar with and agrees to observe and comply with all federal, state and local laws, statutes, ordinances and regulations in any manner affecting the provision of commodities and/or services and shall

obtain all necessary permits, licenses, certifications and/or instruments required.

39. All specifications requested and/or solicited for priced proposals, bids and/or priced quotes are minimum standards. Acceptance of samples does not supersede specifications for quality, unless sample is superior.

40. Samples (when required) must be submitted in accordance to instructions. If requested by the Sullivan County Purchasing Agent, samples (accompanied by descriptive data) shall be delivered within a specific time following the request and must be furnished free of charge. Failure to comply will be cause to disqualify award consideration.

41. When the solicitation indicates that an item to be purchased is to be equivalent to a specific product, said product and/or its specifications will be available for viewing. Failure on the part of a trade reference to examine product and/or its specifications shall not entitle trade reference to any relief from the conditions imposed in the priced proposal, bid and/or priced quote.

42. If successful trade reference fails to perform or comply with any provision of any terms, conditions, documents referenced and made part of a purchase order and/or contract award, the Sullivan County Purchasing Agent may terminate the purchase order and/or contract, in whole or in part and may consider such failure or noncompliance as a breach of contract. Sullivan County reserves the right to purchase its requirements elsewhere, with or without competitive priced proposals, bids and/or priced quotes.

PROCUREMENT LIMITS

43. When the amount of the purchase request is estimated under \$500 per requisition, the procurement officers shall secure pricing and availability from an active trade reference who can supply the commodity and/or service requested (such purchases do not require competitive pricing). If prior authorization is granted by the Sullivan County Purchasing Agent, procurement officers may issue purchase order number confirmations to user departments, via telephone, for the purpose of picking up commodities at the trade references' places of business.

44. When the amount of the purchase request is estimated between \$500 - \$4999, the procurement officers shall secure pricing and availability in open market from a minimum of three (3) trade references (if available) either by phone, fax and/or e-mail quotations. A written tabulation of priced quotes is prepared by the appropriate procurement officer and filed for public record.

45. When the amount of the purchase request is estimated at \$5000 and above, the procurement officers shall secure pricing and availability in open market from a minimum of three (3) trade references (if available) by soliciting a formal Request for Proposal and/or Bid Document. Newspaper advertisement is required. All Requests for Proposals and/or Bid Solicitations will be publicly opened on the day and time specified. Late RFPs and/or Bids are not acceptable! The public is encouraged to attend the openings. All documentation and tabulations will be available for public review after the solicitation information and prices have been evaluated and recorded.

46. When sole source purchases, emergency purchases and/or other exceptions to the procurement limits are applicable; same will be defined in each appropriate file for public record.

AWARD

47. Award will be made to the lowest responsible qualified trade reference. The quality of the articles to be supplied, their conformity with the specifications, their suitability to the requirements of Sullivan County and the delivery terms will be taken into consideration in making the award.

48. The Sullivan County Purchasing Agent reserves the right to award by item (or part thereof), group of items (or parts thereof), or all items of the priced proposals, bids and/or priced quotes. The Sullivan County Purchasing Agent may award purchase orders and/or contracts to one or more trade references; to reject any and all priced proposals, bids and/or priced quotes in whole or in part; to waive technical defects, irregularities and omissions if in the best interest of Sullivan County.

49. The Sullivan County Purchasing Agent reserves the right to make awards within sixty (60) calendar days (or longer if designated in the solicitation) from the priced proposals, bids and/or priced quotes opening dates, unless otherwise authorized by the Sullivan County Purchasing Agent.

50. If an award, in whole or in part, is delayed beyond a period of sixty (60) days (or longer if designated in the solicitation); such award shall be conditioned upon trade reference's acceptance.

51. The successful trade reference shall not subcontract any portion of the award of a purchase order and/or contract, unless otherwise authorized by the Sullivan County Purchasing Agent.

DELIVERY

52. It shall be understood and agreed that any and all commodities and/or services offered to Sullivan County shall fully comply with all local, state and federal rules and regulations.

53. All commodities delivered will be new equipment/latest model, new materials and/or new supplies, except as otherwise specifically stated in the solicitation. Where any part of nominal appurtenances of equipment is not described, it shall be understood that all equipment and appurtenances which are usually provided in the manufacturer's stock model shall be furnished. Reconditioned equipment, materials and/or supplies are not acceptable, unless otherwise authorized by the Sullivan County Purchasing Agent.

54. Delivery must be in accordance with the priced proposals, bids and/or priced quotes. If no specific delivery instructions are presented, it will be interpreted to mean prompt delivery. The decision of the Sullivan County Purchasing Agent as to reasonable compliance with delivery terms shall be final. Burden of proof of delay in receipt of order shall rest with the trade reference.

55. Any request for extension of time of delivery from that specified must be approved by the Sullivan County Purchasing Agent; such extension will be applicable to only the particular commodity that is delayed because of unexpected circumstances.

56. Commodities shall be securely and properly packed for shipment, according to accepted standard commercial practice. The containers will remain the property of Sullivan County unless otherwise stated in the solicitation and/or otherwise approved by the Sullivan County Purchasing Agent.

57. Deliveries are subject to recounting by our Central Receiving Department. If discrepancies exist, the trade reference will be notified. Backorders or re-shipment of defective commodities will be noted in writing. Payment will be made only after all items have been received, unless otherwise authorized by the Sullivan County Purchasing Agent. A written revision to the purchase order and/or contract will be processed by the appropriate procurement officer, indicating any/all changes.

58. The time anticipated by trade references for delivery of the items requested must be definitely stated in the priced proposals, bids and/or priced quotes. When time is critical to the award of a commodity and/or service, delivery/performance time may be a factor in determining such award, price notwithstanding.

59. Default by the trade reference concerning delivery as promised is subject to the following: the Sullivan County Purchasing Agent has the right to cancel and repurchase from another source due to non-delivery as promised, and may recover the excess costs by (a) deduction from an unpaid balance due (b) collection against the priced proposal, bid and/or priced quote or performance bond (c) combination of the aforementioned remedies or other remedies provided by law (d) open market purchasing and charging the trade reference the difference in his costs and another source's costs.

PAYMENT

60. Payment will be made only after the delivery and acceptance of all items, unless partial payments have been otherwise authorized by the Sullivan County Purchasing Agent. Payment will be made only after the presentation of all applicable invoices. All invoices shall be addressed to the accounting department address shown on the purchase order and must clearly indicate the purchase order number on all invoices. Invoices should be mailed in duplicate.

61. Payment for all delivered and accepted commodities/services shall be made to the trade reference in a timely manner, after the receipt of a correct invoice/statement. Where there is a question of non-performance involved, payment will be withheld. In the event cash discount is involved, the withholding of payment as provided herein shall not deprive Sullivan County from taking such a discount.

62. Payment for partial deliveries and/or services will only be considered if delivery circumstances are beyond the control of the trade reference and/or if prior authorization has been given by the Sullivan County Purchasing Agent.

63. Partial payments for contracts and services that are awarded on a timed-payment schedule will be made in accordance to the award, as authorized by the Sullivan County Purchasing Agent. Payments will be authorized only upon receipt of authorized documents reflecting appropriate payments for services rendered.

TRADE REFERENCE GUARANTEE

64. Acceptance of a purchase order and/or contract by a trade reference guarantees that said trade reference will perform services, supply commodities, etc. in accordance to the specifications, terms and conditions under which it was awarded and within the delivery time specified.

65. A trade reference who accepts a purchase order confirmation and/or contract award guarantees his services/commodities against defective material or workmanship and agrees to repair and/or replace (at the discretion of the Sullivan County Purchasing Agent) any damage or marring occasioned in transit.

66. A trade reference guarantees to furnish adequate protection from damage for all work or workmanship and to repair damages of any kind, for which its workmen are responsible, to the premises or equipment, to its own work or to the work of other trade references.

67. Whenever a delivery is rejected due to non-compliance of the terms and conditions of the services, commodities, etc. the trade reference shall be notified by the Sullivan County Purchasing Agent with reason(s) for such rejection. All rejected deliveries due to the fault of the trade reference shall be held at the trade reference's risk and same shall bear the expense of removal.

68. Changes in or cancellations to a purchase order and/or contract will not be acceptable unless otherwise authorized by the Sullivan County Purchasing Agent. Any/all changes to a purchase order and/or contract (description, pricing, terms, language, etc) will be recognized by a signed and printed "revision" and filed for public record.

TRADE REFERENCE EXPENSES

69. No fees are applicable to becoming an active trade reference in Sullivan County.

70. Sullivan County accepts no responsibility, whatsoever, for any expenses incurred in the preparation and/or presentation of any priced proposal, bid and/or priced quote. Such expenses are the sole responsibility of the trade reference offering commodities and/or services for award consideration.

71. Sullivan County accepts no responsibility, whatsoever, for any payments of credit card charges made by an unauthorized Sullivan County official and/or employee.

(REFER TO SECTION 28 FOR EXPLANATION)

INAPPROPRIATION OF FUNDS

72. Sullivan County can only obligate funds during its current operating year. Funds are appropriated on a fiscal year basis; July 1st through June 30th. If a purchase order and/or contract is awarded on a multi-term basis (up to 60 months), the Sullivan County Purchasing Agent will renew at the beginning of each fiscal year, obligating only the 12 months of that current operating year. If funds are legally exhausted due to circumstances beyond Sullivan County's control and cannot be obligated past the current fiscal year, the Sullivan County Purchasing Agent has the right to terminate, upon the expenditure of previously appropriated funds or at the end of the current fiscal year (whichever occurs first), with no further obligation owed to and/or by either party and without penalty to either party.

73. In the event that funds are not appropriated for commodities and/or services in any fiscal year and/or insufficient funds exist for the purchase of commodities and/or services, the trade reference accepts that any existing purchase order and/or contract shall expire upon the expenditure of previously appropriated funds or at the end of the current fiscal year (whichever occurs first), with no further obligation owed to and/or by either party and without penalty to either party.

ACCEPTANCE OF TERMS AND CONDITIONS

SIGNATURE AUTHORIZATION IS CONFIRMATION THAT APPLICANT/TRADE REFERENCE UNDERSTANDS AND ACCEPTS ALL GENERAL TERMS AND CONDITIONS GOVERNING SULLIVAN COUNTY PROCUREMENT PROCESSES AND PLEDGES TO CONDUCT BUSINESS IN ACCORDANCE TO ALL PROPOSALS, SPECIFICATIONS, DRAWINGS, INSTRUMENTS AND DESCRIPTIONS FURNISHED AND/OR INCORPORATED BY REFERENCE TO ALL PRICED PROPOSALS, QUALIFYING PROPOSALS, BIDS AND/OR PRICED QUOTES.

NAME OF TRADE REFERENCE (VENDOR): _____

SIGNATURE: _____ **DATE:** _____

COMPLETE, SIGN AND RETURN THIS PAGE --- FORM GPTC1004-14

COST SHEET

RFP # 421VFD2016(AM)

FIRE FIGHTING APPARATUS

421 VOLUNTEER FIRE DEPARTMENT

NEW 2016 FIRE FIGHTING APPARATUS TO MEET OR EXCEED SPECIFICATIONS AS REQUESTED

PURCHASE PRICE = \$ _____

DELIVERY DATE (in calendar days): _____

** PRICE MUST BE GUARANTEED FOR 90 DAYS FROM BID OPENING DATE**

PAYMENT TERMS

THE TERMS FOR PAYMENT SHALL BE "PAYMENT IN FULL ON DELIVERY AND ACCEPTANCE" FOR THE FIRE APPARATUS.

The undersigned is an authorized representative of the vendor submitting bid and offers the following price (guaranteed for 90 days) for the Fire Fighting Apparatus as specified in the RFP documentation and in compliance with all requirements.

COMPANY NAME _____

AUTHORIZED REPRESENTATIVE NAME (PRINTED) _____

REPRESENTATIVE'S SIGNATURE _____ DATE _____

PHONE _____ FAX _____ EMAIL _____

421 Area Emergency Service Volunteer Fire Department

		Bidder Complies	
		Yes	No
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		Bidder Complies	
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		Bidder Complies	
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		Bidder Complies	
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		Bidder Complies	
		Yes	No
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		Bidder Complies	
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	Bidder Complies	
	Yes	No
<p><u>SPECIFICATIONS FOR A MULTI PURPOSE RESPONSE VEHICLE</u></p> <p><u>INTENT OF SPECIFICATIONS</u></p> <p>It shall be the intent of these specifications to cover the furnishing and delivery of a complete fire apparatus. These detailed specifications cover the requirements as to the type of construction and test to which the apparatus shall conform, together with certain details as to finish, equipment and appliances with which the successful bidder shall conform. Minor details of construction and materials, which are not otherwise specified, are left to the discretion of the contractor. The manufacturer shall provide loose equipment only when specified by the customer. Otherwise, in accordance with the current NFPA 1901 standards, the proposal shall specify whether the fire department or apparatus dealership shall provide required loose equipment.</p> <p>In order to ensure fair, ethical, and legal competition, neither original equipment manufacturer (O.E.M.) or parent company of the O.E.M. shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market (no exception).</p> <p>Each bidder shall furnish satisfactory evidence of their ability to construct the apparatus specified and shall state the location of the factory where the apparatus is to be built. The bidder shall also show that the company is in position to render prompt service and to furnish replacement parts.</p> <p>Each bid shall be accompanied by a detailed set of Contractor's Specifications consisting of a detailed description of the apparatus and equipment proposed, and to which the apparatus</p>		

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	Bidder Complies	
	Yes	No
<p>furnished under contract shall conform. These specifications shall indicate size, type, model and make of all component parts and equipment.</p> <p>Images and illustrative material in this specification are as accurate as known at the time of publication, but are subject to change without notice. Images and illustrative material is for reference only, and may include optional equipment and accessories and may not include all standard equipment.</p> <p><u>FLEXIBILITY OF USE</u></p> <p>This apparatus is required to be a versatile piece of equipment and shall meet a wide range of performance criteria.</p> <p>It must have the capability to battle structural fires with a rated pump of at least 1250 gallons per minute. It must also be able to pump water while in motion for situations requiring fighting large area or fast moving wildland types of fires. Additional details of the fire suppression package are defined later in this document.</p> <p>It must be very maneuverable. A short wheelbase of 193" or 195" and high degree of wheel cut (approximately 50 degrees) are required.</p> <p>A body with a large amount of storage space is required. The various uses that this apparatus shall encounter require that it be equipped for most any situation.</p> <p>A large water tank for mutual aid water shuttle shall be available. The exact size required is specified later in this document.</p> <p>The ability to safely carry the number of personnel specified in this document shall not be compromised.</p> <p><u>QUALITY AND WORKMANSHIP</u></p> <p>The design of the apparatus shall embody the latest approved automotive engineering practices. The workmanship shall be of the highest quality in its respective field. Special consideration shall be given to the following points: Accessibility of the various units which require periodic maintenance; ease of operation (including both pumping and driving); and symmetrical proportions. Construction shall be rugged and ample safety factors shall be provided to carry the loads specified and to meet both on and off road requirements and speed conditions as set forth under Performance Tests and Requirements. Welding shall not be employed in the assembly of the apparatus in a manner that shall prevent the ready removal of any component part for service or repair. All steel welding shall follow American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding shall follow American Welding Society and ANSI D1.2-2003 requirements for structural welding of aluminum. All</p>		

	Bidder Complies	
	Yes	No
<p>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 American Welding Society codes upon hire and every three (3) years thereafter. The manufacturer shall be required to have an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.</p> <p><u>SERVICEABILITY</u></p> <p>This apparatus shall have exceptional serviceability designed into it. Areas on the chassis, pump, valves, plumbing and other areas shall be easily accessible for maintenance and repair. Support for service and maintenance shall be from a single source and shall not have split responsibilities between various components.</p> <p><u>DELIVERY</u></p> <p>Apparatus, to insure proper break in of all components while still under warranty, shall be delivered under its own power - rail or truck freight shall not be acceptable. A qualified delivery engineer representing the contractor shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in the proper operation, care and maintenance of the equipment delivered.</p> <p><u>INFORMATION REQUIRED</u></p> <p>The manufacturer shall supply at time of delivery, complete operation and maintenance manuals covering the completed apparatus as delivered. A permanent plate shall be mounted in the driver's compartment which specifies the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.</p> <p><u>SAFETY VIDEO</u></p> <p>Documentation provided at the time of delivery shall also include an apparatus safety video, in DVD format. This video shall address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus. Safety procedures for the following shall be included: vehicle pre-trip inspection, chassis operation, pump operation, and maintenance.</p> <p><u>PERFORMANCE TESTS AND REQUIREMENTS</u></p> <p>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 axles 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:</p>		

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	Bidder Complies	
	Yes	No
<p>A) The apparatus, when fully equipped and loaded, shall have not less than 25 percent nor 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.</p> <p>B) 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.</p> <p>C) 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.</p> <p>D) The apparatus, fully loaded, shall be capable of obtaining a speed of 50 mph on a level concrete highway with the engine not exceeding its governed rpm (full load).</p> <p><u>FAILURE TO MEET TEST</u></p> <p>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. Permission to keep or store the apparatus in any building owned or occupied by the purchaser or its use by the purchaser during the above-specified period with the permission of the bidder shall not constitute acceptance.</p> <p><u>VEHICLE STABILITY</u></p> <p>The stability of the vehicle shall be demonstrated by performing like product testing on tilt table testing. Vehicle shall be able to withstand up to 27 degrees, fully loaded before tires lift. Test documents shall be made available if requested. Actual like product testing must have been done. Calculations shall not be acceptable.</p> <p><u>LIABILITY</u></p> <p>The successful bidder 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.</p> <p><u>SPECIFICATION BID REQUIREMENTS</u></p> <p>Bidders shall also indicate in the "yes/no" column if their bid complies on each item (PARAGRAPH) specified. Exceptions shall be allowed if they are equal to or superior to that specified and provided they are listed and fully explained on a separate page.</p>		

	Bidder Complies	
	Yes	No
<p>Proposals taking total exception to specifications shall not be acceptable.</p> <p>Also, bidders shall submit a detailed proposal. A letter only, even though written on a company letterhead, shall not be sufficient. Bid proposals shall be submitted in the same sequence as specifications for ease of evaluation, comparison and checking of compliance. An exception to these requirements shall not be tolerated.</p> <p><u>EXCEPTIONS</u></p> <p>Any deviations, variations or exceptions (no matter how slight), shall be clearly explained on a separate page immediately following the cover page "EXCEPTIONS TO RFP". Same shall be submitted in exact RFP format with reference to each particular section. Exceptions will only be considered if they are equal to or better than those specified. Total exception to the specifications shall result in immediate disqualification. Any exceptions not listed are assumed to be included in the RFP, regardless of future cost to the vendor. During the evaluation process, if deviations are found that were not specifically defined in the RFP, the RFP will be disqualified from the award process.</p> <p>The purchaser shall assume that failure to cite an exception indicates full compliance with the specifications. Should the equipment not comply with all requirements of this document, the equipment shall be rejected at the final inspection. All equipment shall be inspected for material, workmanship, and compliance with the specifications prior to acceptance. All equipment found to be in noncompliance shall be identified and the purchaser reserves the right to accept or reject the specific items. The noncompliant rejected equipment shall be replaced or reworked to meet the requirements of this document at no additional cost to the purchaser. The contractor shall have thirty (30) days after delivery to fulfill that part(s) of the specifications which does not comply with the original outlined specifications. Contractor shall incur all expenses of pickup and redelivery of the apparatus.</p> <p style="text-align: center;">--ENCLOSE AS EXHIBIT A - EXCEPTIONS</p> <p><u>MANUFACTURER HISTORY</u></p> <p>The proposed fire apparatus and equipment must be the product of an established reputable fire apparatus manufacturer of a minimum of twenty (20) years or more.</p> <p style="text-align: center;">--ENCLOSE AS EXHIBIT B – MANUFACTURER HISTORY</p> <p><u>REFERENCES</u></p> <p>A minimum of five (5) trade references with which you have done business during the past three (3) years must be included. Names, phone numbers and other reference information must be correspondingly indicated.</p> <p style="text-align: center;">--ENCLOSE AS EXHIBIT C – REFERENCES</p>		

	Bidder Complies	
	Yes	No
<p><u>LETTER OF AUTHORIZATION</u></p> <p>If the RFP is submitted by a dealer/agent in the name of a particular manufacturer, the responding vendor shall include in the RFP response, a copy of the appropriate letter of authorization, authorizing the dealer/agent to sign on behalf of the manufacturer.</p> <p style="text-align: center;">--ENCLOSE AS EXHIBIT D – DEALER AUTHORIZATION</p> <p><u>BUSINESS LICENSES</u></p> <p>Any responding vendor must have all current licenses to do business with Sullivan County and the State of Tennessee. If the responding vendor is a manufacturer bidding direct (not through a dealer/agent or distributor), the RFP response shall include copies of both the automotive manufacturer and automotive dealer licenses. If the responding vendor is a dealer/agent or distributor, the RFP response shall include a copy of the appropriate dealer license.</p> <p style="text-align: center;">--ENCLOSE AS EXHIBIT E –BUSINESS LICENSES</p> <p><u>GENERAL CONSTRUCTION</u></p> <p>The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association.</p> <p><u>COMMERCIAL GENERAL LIABILITY INSURANCE</u></p> <p>The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:</p> <p style="padding-left: 40px;">Each Occurrence \$1,000,000</p> <p style="padding-left: 40px;">Products/Completed Operations Aggregate \$1,000,000</p> <p style="padding-left: 40px;">Personal and Advertising Injury \$1,000,000</p> <p style="padding-left: 40px;">General Aggregate \$5,000,000</p> <p>Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form and shall include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy shall include Owner as an additional insured when required by written contract.</p> <p><u>COMMERCIAL AUTOMOBILE LIABILITY INSURANCE</u></p> <p>The successful bidder shall, during the performance of the contract keep in force at least the following minimum limits of commercial automobile liability insurance:</p>		

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	Bidder Complies	
	Yes	No
<p>Each Accident Combined Single Limit:\$1,000,000</p> <p>Coverage shall be written on a Commercial Automobile liability form.</p> <p><u>UMBRELLA/EXCESS LIABILITY INSURANCE</u></p> <p>The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:</p> <p>Aggregate: \$25,000,000</p> <p>Each Occurrence: \$25,000,000</p> <p>The umbrella policy shall be written on an occurrence basis and at a minimum provide excess to the Bidder's General Liability, Automobile Liability and Employer's Liability policies.</p> <p>The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.</p> <p>Coverage shall be provided by a carrier(s) rated A- or better by A.M. Bests.</p> <p>All policies shall provide a 30 day notice of cancellation to the named insured. The Certificate of Insurance shall provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice shall be delivered in accordance with the policy provisions. Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with its bid. The certificate shall show the purchaser as certificate holder.</p> <p><u>--ENCLOSE AS EXHIBIT F – EXCESS LIABILITY INSURANCE</u></p> <p><u>ISO COMPLIANCE</u></p> <p>The manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that shall be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid.</p> <p>The bidder shall state the location of the factory where the apparatus is to be built.</p> <p><u>NFPA 2016 STANDARDS</u></p> <p>This apparatus specification includes a commercial chassis that has not been certified to meet the requirements of NFPA 1901 by the chassis manufacturer. Although this chassis may comply with certain aspects of the standard, has not received certification from this chassis manufacturer</p>		

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	Bidder Complies	
	Yes	No
<p>that all criteria have been met. The body as built by the manufacturer must comply with the NFPA standards effective January of 2016.</p> <p>Certification of slip resistance of all stepping, standing and walking surfaces must be supplied with delivery of the apparatus.</p> <p>All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points shall be identified on the customer approval print and are shown as approximate. Actual location(s) shall be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.</p> <p>A plate that is highly visible to the driver while seated shall be provided. This plate shall show the overall height, length, and gross vehicle weight rating.</p> <p>The manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications.</p> <p>An official of the company shall designate, in writing, who is qualified to witness and certify test results.</p> <p><u>NFPA COMPLIANCY</u></p> <p>Apparatus proposed by the bidder shall meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in the current edition at time of contract execution. Fire Department's specifications that differ from NFPA specifications shall be indicated in the proposal as "non-NFPA."</p> <p><u>PUMP TEST</u></p> <p>The rated water pump shall be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results, along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horsepower curve, and the manufacturer's record of pump construction details shall be forwarded to the Fire Department.</p> <p><u>GENERATOR TEST</u></p> <p>If the unit has a generator, the generator shall be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results shall be provided to the Fire Department at the time of delivery.</p> <p><u>BANKRUPTCY STATEMENT</u></p>		

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	Bidder Complies	
	Yes	No
<p>If the manufacturer of the apparatus, or if any owner, shareholder, or immediate relative of an owner or shareholder that has previously been involved in or held ownership in any company that has filed bankruptcy or any other type of reorganization plan, it must be clearly stated in the bid proposal. The statement must include details and dates of all occurrences.</p> <p style="text-align: center;">--ENCLOSE AS EXHIBIT G - BANKRUPTCY</p> <p><u>SURETY BID BOND</u></p> <p>All bidders shall provide a bid bond as security for the bid in the form of a 5% bid bond to accompany their bid. This bid bond shall be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond shall be issued by an authorized representative of the Surety Company and shall be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond shall include language, which assures that the bidder/principal shall give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract.</p> <p>Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle shall apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle shall not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision shall prevail.</p> <p style="text-align: center;">--ENCLOSE AS EXHIBIT H – SURETY (BID BOND)</p> <p><u>PERFORMANCE & PAYMENT BOND</u></p> <p>The successful vendor will be required to submit <u>Performance & Payment</u> bonds in the amount of 100% of the purchase price of the specified apparatus, prior to issuance of a purchase confirmation and notice to proceed.</p> <p><u>REFERENCE DRAWING</u></p> <p>A drawing of the proposed apparatus shall be provided for review. This drawing shall indicate the major components such as the chassis make and model, body configuration and door style, location of the lights, siren, horns, compartments, major components, etc.</p> <p>This drawing shall not need to be signed and returned to the apparatus manufacturer.</p>		

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	Bidder Complies	
	Yes	No
<p><u>ELECTRICAL WIRING DIAGRAMS</u></p> <p>Two (2) electrical wiring diagrams, prepared for the body as it interfaces with the commercial chassis, shall be provided.</p> <p><u>CHASSIS</u></p> <p>The chassis shall be a Freightliner, Model M2, 106MD Conventional Chassis, supplied with the following equipment:</p> <p><u>WHEELBASE</u></p> <p>The wheelbase of the vehicle shall be no greater than 215.</p> <p><u>GVW RATING</u></p> <p>The gross vehicle weight rating shall be a minimum of 40,000.</p> <p><u>FRAME</u></p> <p>The frame rails shall be formed from 120,000 psi yield, heat treated alloy steel.</p> <p><u>FRAME LINER</u></p> <p>An 0.25" inner frame reinforcement shall be provided.</p> <p>The frame section properties shall be:</p> <ul style="list-style-type: none"> - Section Modulus: 26.50 cubic inch, per rail - RBM: 3,200,000 in-lb, per rail - Yield Strength: 120,000 psi, per rail <p><u>FRONT AXLE</u></p> <p>Front axle shall be a Meritor driving axle with a ground rating capacity of 14,000 lb.</p> <p>The transfer case to drive the front axle shall be the 2-speed Meritor MTC4210XL. The transfer case shall have synthetic lubricant provided.</p> <p><u>FRONT SUSPENSION</u></p> <ul style="list-style-type: none"> - Spring mounted - Capacity at Ground: 14,600 lb - Shock Absorbers: Double Acting <p>Shock absorbers shall be provided on the front axle.</p>		

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	Bidder Complies	
	Yes	No
<p><u>TIRES, FRONT</u></p> <p>Front tires shall be Michelin 22.50, radial tires with a traction tread pattern suitable for the steering axle position on a front driving axle. The capacity of the tires shall meet or exceed the rating of the axle and/or suspension.</p> <p><u>WHEELS, FRONT</u></p> <p>Wheels for the front axle shall be 22.50" x 8.25" aluminum disc, ten (10)-hole pattern.</p> <p><u>REAR AXLE</u></p> <p>The single reduction rear axle shall be a Meritor™, Model RS-26-185, with a ground rating capacity of 26,000 lb.</p> <p>The brake chambers shall be forward mounted and the brakes shall be 16.50" x 7.00", S-Cam type.</p> <p><u>PARKING BRAKE</u></p> <p>The parking brake shall be spring set and located on the rear axle service brake.</p> <p><u>REAR AXLE RATIO</u></p> <p>A rear axle ratio shall be furnished to allow the vehicle to reach a top speed of 60 MPH.</p> <p><u>REAR SUSPENSION</u></p> <p>The rear suspension shall be spring mounted 11 leaf, 60.00" x 3.00" with a capacity at ground level of 26,000 lbs. Auxiliaries shall be included and the deflection shall be a variable rate</p> <p><u>DUST SHIELDS</u></p> <p>The front and rear brakes shall be provided with dust shields.</p> <p><u>TIRES, REAR, 4X4</u></p> <p>Rear tires shall be Michelin, 22.50, radial tires with a traction tread pattern suitable for the rear axle position on an all-wheel-drive vehicle. The tire capacity shall meet or exceed the capacity of the axle and/or suspension.</p> <p>Due to ratio matching requirements of an all-wheel-drive vehicle, the front and rear tire sizes shall be the same. The size of the tires provided shall be at least the minimum size required to meet the GAWR rating of both axles.</p> <p><u>WHEELS, REAR</u></p> <p>The rear wheels shall be aluminum 22.50" x 9.00" disc with a ten (10)-hole pattern.</p>		

	Bidder Complies	
	Yes	No
<p><u>TIRE PRESSURE MANAGEMENT</u></p> <p>There shall be a RealWheels LED AirSecure™ tire alert pressure management system provided, that shall monitor each tire's pressure. A sensor shall be provided on the valve stem of each tire for a total of six (6) tires.</p> <p>The sensor shall calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor shall activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.</p> <p>Removing the cap from the sensor shall indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED shall immediately start to flash.</p> <p><u>FRONT HUB COVERS</u></p> <p>Stainless steel hub covers shall be provided on the front axle. An oil level viewing window shall be provided.</p> <p><u>REAR HUB COVERS</u></p> <p>A pair of stainless steel high hat hub covers shall be provided on rear axle hubs.</p> <p><u>CHROME LUG NUT COVERS</u></p> <p>Chrome lug nut covers shall be supplied on front and rear wheels.</p> <p><u>MUD FLAPS</u></p> <p>Mud flaps shall be installed behind the front and rear wheels of the apparatus.</p> <p><u>U-BOLTS, EXTENDED</u></p> <p>The u-bolts shall be extended, leaving at least 1.00" for the customer provided tire chains.</p> <p><u>WHEEL CHOCKS</u></p> <p>There shall be one (1) pair of folding Ziamatic, Model SAC-44-E, aluminum alloy, Quick-Choc wheel blocks with easy-grip handle provided.</p> <p><u>WHEEL CHOCK BRACKETS</u></p> <p>There shall be one (1) pair of Zico, Model SQCH-44-H, horizontal mounting wheel chock brackets provided for the Ziamatic, Model SAC-44-E, folding wheel chocks. The brackets shall be made of aluminum and consist of a quick release spring loaded rod to hold the wheel chocks in place. The brackets shall be mounted forward of the left side rear tire.</p> <p><u>ANTI-LOCK BRAKE SYSTEM</u></p> <p>The vehicle shall be equipped with a Wabco, model 4S/4M, four (4) channel anti-lock braking system. The ABS shall provide anti-lock braking control on both the front and rear wheels. It shall be a digitally controlled system that utilizes microprocessor technology to control the anti-</p>		

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	Bidder Complies	
	Yes	No
<p>lock braking system. Each wheel shall be monitored by the system. When any particular wheel begins to lockup, a signal shall 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.</p> <p>The system shall include Automatic Traction Control (ATC).</p> <p>The system shall include Electronic Stability Control (ESC). When instability is detected, the ESC system shall automatically apply brakes to individual wheels (with no intervention from the driver) and may also reduce engine torque to help keep the vehicle on track.</p> <p><u>FRONT BRAKES</u></p> <p>The front brakes shall be S-Cam, 16.50" x 5.00". The front brakes shall be provided with Meritor™ automatic slack adjusters.</p> <p><u>AIR COMPRESSOR, BRAKE SYSTEM</u></p> <p>The air compressor shall be a Wabco with 18.7 cubic feet per minute output.</p> <p><u>AIR DRYER</u></p> <p>A Bendix AD-9SI air dryer with a heater shall be provided. Other features of this air dryer include:</p> <ul style="list-style-type: none"> - Desiccant style filter - In-line filtration system - Automatic purge valve <p><u>AIR INLET</u></p> <p>A single air inlet with male coupling shall be provided. It shall allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet shall be located in the driver's side cab step area . A check valve shall be provided to prevent reverse flow of air. The inlet shall discharge into the "wet" tank of the brake system. A mating female coupling shall also be provided with the loose equipment.</p> <p><u>ENGINE</u></p> <ul style="list-style-type: none"> • Model: Electronic Cummins ISL-350 • Number of Cylinders: Six (6) • Displacement: 8.9 L • Rated Brake Horsepower: 350 at 2000 rpm • Peak Torque: 1000 at 1400 rpm 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • Governed rpm: 2200 • Turbocharger • Charge Air Cooled • Fuel System: Hydraulically Actuated, Electronically Controlled Unit Injectors (HEUI) <p><u>ENGINE ACCESSORIES</u></p> <ul style="list-style-type: none"> • Air Cleaner: Dry type, with restriction indicator in cab • Fuel Filters: Dual, with check valve • Governor: Limiting speed type • Lube Oil Cooler • Lube Oil Filter: Full flow • Starting Motor: 12-volt • Oil Fill and Level Gauge <p><u>RADIATOR</u></p> <ul style="list-style-type: none"> • Pressurized System, Tube and Fin • Deaeration Tank and Sight Glass • Anti-Freeze Protection -30 Degrees Fahrenheit <p><u>HIGH IDLE</u></p> <p>A high idle switch shall be provided on the instrument panel inside the cab. Activating the switch shall cause the vehicle to automatically maintain a preset engine rpm.</p> <p>The high idle switch shall be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light shall be provided adjacent to the switch. The light shall be labeled "OK To Engage High Idle."</p> <p><u>ENGINE BRAKE</u></p> <p>A Cummins C-Brake engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver. The driver shall be able to turn the brake system "On" or "Off" and have at least a "High & Low" setting.</p> <p><u>FUEL/WATER SEPARATOR</u></p> <p>An Alliance fuel/water separator shall be provided on the chassis.</p> <p><u>AIR INTAKE, W/EMBER SEPARATOR</u></p> <p>The air inlet shall be equipped with a stainless steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.</p> <p>This shall comply with NFPA 1901 and 1906 standards.</p>		

	Bidder Complies	
	Yes	No
<p><u>EXHAUST SYSTEM</u></p> <p>The exhaust system shall include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF and SCR shall be mounted horizontally outside of the frame rails in the passenger side front step area.</p> <p><u>EXHAUST MODIFICATIONS</u></p> <p>The exhaust shall terminate the side of the body with a horizontal tailpipe and diffuser ahead of the passenger side rear wheels.</p> <p>A heat deflector shield shall be provided where the tail pipe is routed under any side compartmentation.</p> <p><u>COOLANT LINES</u></p> <p>Gates Blue Stripe rubber hose shall be used for all engine coolant lines installed by the chassis manufacturer.</p> <p>Hose clamps shall be of a design commonly called constant torque type to prevent coolant leakage. They shall react to temperature changes in the cooling system and expand or contract accordingly while maintaining a constant clamping pressure on the hose.</p> <p><u>FUEL TANK</u></p> <p>A 50 gallon fuel tank shall be provided and mounted at the left-hand cab step. The rectangular tank shall be constructed of aluminum.</p> <p><u>DIESEL EXHAUST FLUID TANK</u></p> <p>A 6.00 gallon diesel exhaust fluid (DEF) tank shall be provided and mounted on the driver's side, below the cab.</p> <p>The tank shall include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.</p> <p><u>FUEL PRIMER PUMP</u></p> <p>A fuel primer pump shall be included with the fuel water separator.</p> <p><u>AUXILIARY FUEL COOLING SYSTEM</u></p> <p>A supplementary fuel cooling system shall be provided to allow the use of water from the discharge side of the pump for cooling the chassis engine fuel. The heat exchanger shall be a cylindrical type and shall be a separate unit. The cooler shall operate any time the pump is discharging water and shall be plumbed to the master drain valve.</p>		

	Bidder Complies	
	Yes	No
<p><u>TRANSMISSION</u></p> <p>An Allison, model 3000 EVS, electronic torque converting automatic transmission shall be provided.</p> <p>Two (2) PTO openings shall be located on left side and top of converter housing (positions 8 o'clock and 4 o'clock).</p> <p>A transmission temperature gauge or warning light shall be installed on cab instrument panel.</p> <p><u>TRANSMISSION SHIFT CONTROL</u></p> <p>A push button shift module shall be mounted to right of driver. Shift position indicator shall be indirectly lit for after dark operation.</p> <p>The transmission shall be a five (5)-speed.</p> <p><u>TRANSMISSION COOLER</u></p> <p>A transmission oil cooler shall be provided in the lower tank of the radiator.</p> <p><u>ALLISON EVS AUTOMATIC TRANSMISSION PROGNOSTICS</u></p> <p>The Allison EVS automatic transmission shall be provided with the prognostics software enabled.</p> <p>The prognostics shall be accessed via the shift selector, and the following information shall display on the shift pad read-out:</p> <p>Oil Level</p> <p>Oil Life Monitor</p> <p>Filter Life Monitor</p> <p>Trans Health Monitor</p> <p>Diagnostic Code</p> <p><u>DRIVELINE</u></p> <p>Drivelines shall be a heavy duty metal tube equipped with universal joints properly sized for the application. A splined slip joint shall be provided in each driveshaft.</p> <p><u>STEERING</u></p> <p>The steering system shall be hydraulically driven. The steering column shall have an adjustable tilt and telescope feature.</p>		

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	Bidder Complies	
	Yes	No
<p><u>BUMPER</u></p> <p>A 14.00", three (3) piece, full width chrome plated steel bumper with collapsible boxed ends shall be attached to the front of the chassis frame.</p> <p><u>TOW HOOKS</u></p> <p>Two (2) painted, forged steel tow hooks shall be provided.</p> <p><u>BUMPER GAP</u></p> <p>The standard bumper furnished with the chassis shall be used.</p> <p><u>CAB</u></p> <p>The standard crew cab shall consist of the following:</p> <p>Configuration</p> <p>154.00" BBC aluminum day cab</p> <p>Exterior Styling</p> <p>Aerodynamic hood and windshield</p> <p>Tinted Glass in all Windows</p> <p>Aluminum cab</p> <p>Fiberglass hood</p> <p>Single motor electric windshield wipers with delay</p> <p>Single 63.00"x14.00" rear window</p> <p>Interior</p> <p>Gray vinyl mats</p> <p>Two dash mounted cup holders, right-hand and left-hand</p> <p>Gray Vinyl Upholstery</p> <p>Dual Sun visors</p> <p>Fresh Air Heater and Defroster</p> <p>- Gray Vinyl Upholstery</p>		

	Bidder Complies	
	Yes	No
<p><u>CAB GRILLE, INTERIOR CONVENIENCE AND EXTERIOR APPEARANCE PACKAGE</u></p> <p>The cab exterior shall have a high impact plastic chromed grille and matching headlight bezels. The grille shall tilt with the hood.</p> <p>Additionally, the headlight bezels and the engine air intake housing shall have a chrome finish.</p> <p>The cab interior shall include black dash panels, molded door panels with vinyl inserts and brushed aluminum door kick plates.</p> <p><u>MIRRORS</u></p> <p>West Coast style heated, remote operated mirrors constructed from a molded composite material with a bright finish shall be provided. A heated 8.00" convex mirror shall be included below the primary mirrors. An auxiliary down view mirror shall be included on the passenger side.</p> <p><u>CAB ACCESS STEPS</u></p> <p>The cab access steps shall be provided by the apparatus manufacturer. The steps shall be a two (2) step design fabricated from bright aluminum treadplate. The step assembly shall enclose the area under the cab and be continuous from front to rear. The fuel and DEF tank fill caps shall be exposed for refueling if located under the cab. Access shall be provided to inspect the chassis batteries when located under the cab.</p> <p><u>REEL COMPARTMENT</u></p> <p>A compartment shall be provided under the crew cab in the right side step area. An aluminum treadplate access plate shall be provided on the compartment.</p> <p><u>STEP, STIRRUP STYLE</u></p> <p>A hinged swing style stirrup step shall be provided below each cab door.</p> <p><u>STEP LIGHTS</u></p> <p>White LED step lights shall be provided at each cab and crew cab door. There shall be enough lights installed to illuminate each stepping surface to meet the requirements of the current edition of NFPA 1901.</p> <p>In order to ensure exceptional illumination, each light shall provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.</p> <p>The lights shall be activated when the adjacent door is opened or when the park brake is on.</p>		

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	Bidder Complies	
	Yes	No
<p><u>DAYTIME RUNNING LIGHTS</u></p> <p>The chassis shall be provided with daytime running lights.</p> <p><u>AIR CONDITIONING</u></p> <p>An air conditioner shall be provided that is integral with heater and defroster system.</p> <p><u>ENGINE COMPARTMENT LIGHTS</u></p> <p>Two (2) engine compartment lights shall be installed under the engine hood, of which the switches are an integral part.</p> <p><u>STORAGE CONSOLE</u></p> <p>There shall be a console located between the front seats with room for map storage, the siren head and a radio. There shall be four (4) sections for map storage to the rear of the console. Each map storage section shall be approximately 4.00" wide x 13.00" long x 12.25" deep. The console shall be constructed of smooth aluminum and painted black.</p> <p><u>SEATING CAPACITY</u></p> <p>The seating capacity in the cab shall be five (5).</p> <p><u>SEATING</u></p> <p>Seating inside the cab shall consist of a Seats Inc. air-ride driver seat and a non-suspension Seats Inc. 911 SCBA officer seat.</p> <p><u>SEATING (CREW CAB)</u></p> <p>Three (3) individual Seats Inc. #911 SCBA style seats shall be provided inside the crew cab. Each seat shall be mounted to an individual storage box with drop down hinged door and latch.</p> <p><u>AIR BOTTLE HOLDERS</u></p> <p>All SCBA type seats in the cab shall have a "Hands-Free" auto clamp style bracket in its backrest. For efficiency and convenience, the bracket shall include an automatic spring clamp that allows the occupant to store the SCBA bottle by simply pushing it into the seat back. For protection of all occupants in the cab, in the event of an accident, the inertial components within the clamp shall constrain the SCBA bottle in the seat and shall exceed the NFPA standard of 9G. Bracket designs with manual restraints (belts, straps, buckles) that could be inadvertently left unlocked and allow the SCBA to move freely within the cab during an accident, shall not be acceptable.</p> <p>There shall be a quantity of four (4) SCBA brackets.</p>		

	Bidder Complies	
	Yes	No
<p><u>SEAT BELT WEB LENGTH</u></p> <p>NFPA 1901, 2016 edition, Section 14.1.3.1 and 14.1.3.2 requires effective seat belt web length for a Type 1 lap belt for pelvic restraint to be a minimum of 60.00", and a Type 2 pelvic and upper torso restraint-style seat belt assembly to be a minimum of 110.00".</p> <p>Per Fire Department specification of a commercial chassis, this apparatus may not have seat belts of the required length. These belts may not provide sufficient length for large firefighters in bunker gear. This apparatus shall be non-compliant to NFPA 1901 standards effective at time of contract execution.</p> <p><u>SEAT BELTS</u></p> <p>All seating positions in the cab and crew cab shall have highly visible (orange) seat belts.</p> <p><u>HELMET STORAGE PROVIDED BY FIRE DEPARTMENT</u></p> <p>NFPA 1901, 2016 edition, section 14.1.7.4.1 requires a location for helmet storage be provided.</p> <p>There is no helmet storage on the apparatus as manufactured. The fire department shall provide a location for storage of helmets.</p> <p><u>PORTABLE HAND LIGHTS, PROVIDED BY FIRE DEPARTMENT</u></p> <p>NFPA 1901, 2016 edition, section 5.9.4 requires two portable hand lights mounted in brackets fastened to the apparatus.</p> <p>The hand lights are not on the apparatus as manufactured. The fire department shall provide and mount these hand lights.</p> <p><u>CAB INSTRUMENTS</u></p> <ul style="list-style-type: none"> - Engine Temperature Gauge and Warning Buzzer - Engine Oil Pressure Gauge and Warning Buzzer - Speedometer with Odometer - Engine Tachometer - Engine Hourmeter - Fuel Level Gauge - DEF Level Gauge and Warning Lamp with 2010+ engines - Voltmeter: Low voltage red warning light and audible alarm - Air Brake Pressure Gauge 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> - Air Restriction Indicator - Circuit Breakers: For overload protection of electric circuits - Ignition Switch: Keyless type <p><u>EMERGENCY SWITCH PANELS</u></p> <p>The emergency light switch panel shall have a master switch for ease of use plus individual switches for selective control. Each switch panel shall contain eight (8) membrane-type switches each rated for one million (1,000,000) cycles. Documentation shall be provided by the manufacturer indicating the rated cycle life of the switches. The switch panels shall be located on the driver's side overhead and lower instrument panel areas to allow for easy access.</p> <p>The switches shall be membrane-type and act as an integral indicator light. For quick, visual indication, the entire surface of the switch shall be illuminated white whenever back lighting is activated and illuminated red whenever the switch is active. For ease of use, a two (2)-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch shall be placed in the center of the switch. The label shall allow light to pass through the letters for ease of use in low light conditions.</p> <p><u>PUMP PRESSURE GAUGE IN CAB</u></p> <p>A pump pressure gauge shall be provided in the cab.</p> <p>The pump pressure gauge shall be a silicone filled gauge.</p> <p>It shall be a minimum of 2.50" in diameter and shall have a white face with black lettering.</p> <p>Gauge shall be compound type with a vacuum/pressure range of 30.00"-0-400#.</p> <p><u>"DO NOT MOVE APPARATUS" INDICATOR</u></p> <p>A flashing red indicator light, located in the driving compartment, shall be illuminated automatically per the current NFPA requirements. The light shall be labeled "Do Not Move Apparatus If Light Is On".</p> <p>The same circuit that activates the Do Not Move Apparatus indicator shall activate a pulsing alarm when the parking brake is released.</p> <p><u>OPEN DOOR INDICATOR LIGHT</u></p> <p>A red "open door" indicator light shall be provided inside the cab, in clear view of the driver, to warn of an open compartment door.</p> <p><u>WIPER CONTROL</u></p> <p>Wiper control shall include an intermittent feature and windshield washer controls.</p>		

	Bidder Complies	
	Yes	No
<p><u>CUSTOMER SUPPLIED RADIO WIRING</u></p> <p>There shall be one (1) 12 volt combination wiring leads of which each shall include one (1) direct battery, one (1) ignition and one (1) negative for use with radio equipment.</p> <p>Each lead shall be 18.00" long and be provided Bottom of center console. The leads shall be clearly marked in a coil and terminate with butt splices.</p> <p>A breaker rated for 30 amps shall be provided for circuit protection of the direct battery lead with a minimum of 10 gauge wire.</p> <p>A breaker rated for 7.5 amps shall be provided for circuit protection of the ignition lead.</p> <p>The wires shall be colored coded as follows:</p> <ul style="list-style-type: none"> • red for direct battery • yellow for ignition • black for ground <p><u>SPARE CIRCUIT</u></p> <p>There shall be two (2) pair of wires, including a positive and a negative, installed on the apparatus.</p> <p>The above wires shall have the following features:</p> <ul style="list-style-type: none"> • The positive wire shall be connected directly to the battery power • The negative wire shall be connected to ground • Wires shall be protected to 15 amps at 12 volts DC • Power and ground shall terminate in the center console • Termination shall be with 15 amp, power point plug with rubber cover • Wires shall be sized to 125 percent of the protection <p>The circuit(s) may be load managed when the parking brake is set.</p> <p><u>VEHICLE DATA RECORDER</u></p> <p>There shall be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.</p> <p>The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR shall be available to download on-line.</p>		

	Bidder Complies	
	Yes	No
<p>The vehicle data recorder shall be capable of recording the following data via hardwired and/or CAN inputs:</p> <ul style="list-style-type: none"> • Vehicle Speed - MPH • Acceleration - MPH/sec • Deceleration - MPH/sec • Engine Speed - RPM • Engine Throttle Position - % of Full Throttle • ABS Event - On/Off • Seat Occupied Status - Yes/No by Position • Seat Belt Buckled Status - Yes/No by Position • Master Optical Warning Device Switch - On/Off • Time - 24 Hour Time • Date - Year/Month/Day <p>The system shall also be capable of no additional functionality required.</p> <p>An additional input shall be included with this system. When the VDR is active, this input shall not be required.</p> <p><u>Seat Belt Monitoring System</u></p> <p>A seat belt monitoring system (SBMS) shall be provided. The SBMS shall be capable of monitoring up to six (6) seating positions indicating the status of each seat position per the following:</p> <ul style="list-style-type: none"> • Seat Occupied & Buckled = Green LED indicator illuminated • Seat Occupied & Unbuckled = Red LED indicator with audible alarm • No Occupant & Buckled = Red LED indicator with audible alarm • No Occupant & Unbuckled = No indicator and no alarm <p>The SBMS shall include an audible alarm that shall warn that an unbuckled occupant condition exists and the parking brake is released, or the transmission is not in park.</p> <p><u>RADIO ANTENNA MOUNT</u></p> <p>There shall be one (1) standard 1.125", 18 thread antenna-mounting base(s) installed on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the console. A weatherproof cap shall be installed on the mount.</p> <p><u>VEHICLE CAMERA SYSTEM</u></p> <p>There shall be a color vehicle camera system provided with the following:</p>		

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	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> One (1) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse <p>The camera image shall be displayed on a 7.00" LCD display located in view of the driver on the dash . The display shall include manual camera activation capability and audio from the active camera.</p> <p>The following components will be included:</p> <ul style="list-style-type: none"> One (1) MO700136DC, display One (1) SV-CW134639CAI, camera All necessary cables <p><u>ELECTRICAL</u></p> <p>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. Automatic reset circuit breakers shall be provided which conform to SAE Standards. Wiring shall be color, function and number coded. Function and number codes shall be continuously imprinted on all wiring harness conductors at 2.00" intervals. 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:</p> <p>(1) 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.</p> <p>(2) 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.</p> <p>(3) 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 small amount of wire shall be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.</p> <p>(4) 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).</p>		

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	Bidder Complies	
	Yes	No
<p>(5) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.</p> <p>(6) 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. All switches shall be properly identified and mounted in a removable panel for ease in servicing. The switches shall be membrane-type and also act as an integral indicator light. For quick, visual indication the entire surface of the switch shall be illuminated white whenever backlighting is activated and illuminated red whenever the switch is active. For ease of use, a 2-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch shall be placed in the center of the switch. The label shall allow light to pass through the letters for ease of use in low light conditions.</p> <p>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.</p> <p>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.</p> <p>The results of the tests shall be recorded and provided to the purchaser at time of delivery.</p> <p><u>ELECTRICAL POWER CONTROL SYSTEM</u></p> <p>Electrical distribution centers shall be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components and be easily accessible for simplified maintenance and troubleshooting. The electrical distribution centers shall be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers shall be readily accessible.</p> <p>Overhead, battery box and rear distribution centers located throughout the vehicle shall contain battery powered studs for customer installed equipment thus providing a lower cost of ownership.</p> <p>Circuit protection devices, which conform to SAE standards, shall be utilized to protect electrical circuits. All circuit protection devices shall be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers shall be Type-I automatic reset (continuously resetting). When required, automotive type fuses shall be utilized to protect electronic equipment. Control relays and solenoid shall</p>		

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	Bidder Complies	
	Yes	No
<p>have a direct current rating of 125% of the maximum current for which the circuit is protected per NFPA.</p> <p><u>SOLID-STATE CONTROL SYSTEM</u></p> <p>A solid-state electronics based control system shall be utilized to achieve advanced operation and control of the vehicle components. A fully computerized vehicle network shall consist of electronic modules located near their point of use to reduce harness lengths and improve reliability. The control system shall comply with SAE J1939-11 recommended practices.</p> <p>The control system shall operate as a master/slave system whereas the main control module instructs all other system components. The system shall contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main controller error. The system shall utilize a Real Time Operating System (RTOS) fully compliant with OSEK/VDX™ specifications providing a lower cost of ownership.</p> <p>For increased reliability and simplified use the control system modules shall include the following attributes:</p> <p>Green LED indicator light for module power</p> <p>Red LED indicator light for network communication stability status</p> <p>Control system that self tests continually throughout vehicle operation</p> <p>No moving parts due to transistor logic</p> <p>Software logic control for NFPA mandated safety interlocks and indicators</p> <p>Integrated electrical system load management without additional components</p> <p>Integrated electrical load sequencing system without additional components</p> <p>Customized control software to this vehicle's configuration</p> <p>Factory and field programmability - program accommodations to the vehicles operating parameters</p> <p>USB connection to the main control module for troubleshooting and programming</p> <p>To assure long life and operation in a broad range of environmental conditions, the solid-state control system modules shall meet the following specifications:</p> <p>Module circuit board shall meet SAE J771 specifications.</p>		

	Bidder Complies	
	Yes	No
Operating temperature from -40C to +70C		
Storage temperature from -40C to +70C		
Vibration to 50g		
IP67 rated enclosure		
Totally protected against dust		
Totally protected against the effect of temporary immersion between 15 centimeters and 1 meter		
Operating voltage from 8 volts to 16 volts DC		
The main controller shall activate a fault status indicator and audible alarm, located in the instrument panel, designed to provide warning of problems before they become critical.		
<u>CIRCUIT PROTECTION AND CONTROL DIAGRAM</u>		
Copies of all job-specific, computer network input and output (I/O) connection shall be provided with each chassis. The Sheets shall indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information.		
<u>ADVANCED DIAGNOSTICS</u>		
An advanced, Windows-based, diagnostic software program shall be provided for this control system. The software shall provide troubleshooting tools to service technicians equipped with an IBM compatible computer.		
The service and maintenance software shall be easy to understand and use, have the ability to view system input/output (I/O) information, and include a USB cable for connection from a computer to the vehicle.		
<u>EMI/RFI PROTECTION</u>		
To prevent erroneous signals from Crosstalk contamination and interference, the electrical system shall meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic and radio frequency emissions. An advanced electrical system shall be used to insure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.		
The apparatus shall have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The apparatus manufacturer-installed electrical system shall meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10KHz-1GHz to 100 Volts/Meter. The vehicle OEM,		

	Bidder Complies	
	Yes	No
<p>upon request, shall provide EMC test results from the original test vehicle and shall certify that the vehicle meets SAE J551/2 and SAE J1113/41 Region 1, Class 4 EMR for 15KHz 950MHz requirements.</p> <p>EMI/RFI susceptibility shall be controlled by applying appropriate circuit designs and shielding. The electrical system shall be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing shall be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.</p> <p><u>BATTERY SYSTEM</u></p> <p>A single starting battery system shall be provided consisting of three (3)-12 volt, 1031, 760CCA, maintenance-free, group 31 batteries. The battery system shall have a total of 2280 cold cranking amps.</p> <p><u>Jump Start Connections</u></p> <p>Positive and negative posts for jump starting shall be provided by the chassis manufacturer. They shall be frame mounted and located under the hood.</p> <p><u>BATTERY SYSTEM MODIFICATION</u></p> <p>Due to specific apparatus configuration requirements, the batteries shall be relocated to the driver's side crew cab step by the apparatus manufacturer. An enclosure with an access panel shall protect the batteries.</p> <p><u>MASTER BATTERY SWITCH</u></p> <p>A master battery switch, to activate the battery system, shall be provided inside the cab within easy reach of the driver.</p> <p>The master battery disconnect switch shall be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.</p> <p>A green "battery on" indicator light, visible from the driver's position, shall be provided.</p> <p><u>BATTERY CHARGER</u></p> <p>A Kussmaul Autocharge 1000, Model 091-56-12, battery charger with internal battery saver shall be provided. A bar graph display indicating the state of charge shall be included.</p> <p>The battery saver circuit shall be capable of supplying up to three (3) amps for external loads such as hand light or auxiliary radio batteries.</p> <p>The battery charger shall be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.</p>		

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	Bidder Complies	
	Yes	No
<p>Battery charger shall be located in the front right body compartment, mounted as high as possible.</p> <p>The battery charger indicator shall be located in the driver's step area.</p> <p><u>AUTO EJECT FOR SHORELINE</u></p> <p>There shall be one (1) Kussmaul™, Model 091-55-20-120, 20 amp 120 volt AC shoreline inlet(s) provided to operate the dedicated 120 volt AC circuits on the apparatus.</p> <p>The shoreline inlet(s) shall include red weatherproof flip up cover(s).</p> <p>There shall be a release solenoid wired to the vehicle's starter to eject the AC connector when the engine is starting.</p> <p>The shoreline(s) shall be connected to the battery charger.</p> <p>There shall be a mating connector body supplied with the loose equipment.</p> <p>There shall be a label installed near the inlet(s) that state the following:</p> <ul style="list-style-type: none"> • Line Voltage • Current Rating (amps) • Phase • Frequency <p>The shoreline receptacle shall be located in the driver's side cab step area .</p> <p><u>ALTERNATOR</u></p> <p>The alternator shall be a Delco with a capacity of 12-volt 300 amp.</p> <p><u>ELECTRONIC LOAD MANAGEMENT</u></p> <p>Included with the apparatus manufacturer's electrical system shall be a programmable load management system.</p> <p>This system shall monitor the vehicle's 12-volt electrical system, and automatically reduce the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.</p> <p><u>EXTERIOR LIGHTING</u></p> <p>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.</p>		

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	Bidder Complies	
	Yes	No
Front headlights shall be halogen type and comply to all FMVSS requirements.		
Five (5) LED clearance and marker lights shall be installed across the leading edge of the cab.		
<u>REAR CLEARANCE/MARKER/ID LIGHTING</u>		
There shall be three (3) Truck-Lite®, Model 35200R, LED lights used as identification lights located at the rear of the apparatus per the following:		
<ul style="list-style-type: none"> • As close as practical to the vertical centerline • Centers spaced not less than 6.00" or more than 12.00" apart • Red in color • All at the same height 		
There shall be two (2) Truck-Lite, Model 35200R, LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:		
<ul style="list-style-type: none"> • To indicate the overall width of the vehicle • One (1) each side of the vertical centerline • As near the top as practical • Red in color • To be visible from the rear • All at the same height 		
There shall be two (2) Truck-Lite, Model 35200R, LED lights installed on the side of the apparatus as marker lights as close to the rear as practical per the following:		
<ul style="list-style-type: none"> • To indicate the overall length of the vehicle • One (1) each side of the vertical centerline • As near the top as practical • Red in color • To be visible from the side • All at the same height 		
There shall be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.		
There shall be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.		

	Bidder Complies	
	Yes	No
<p>Per FMVSS 108 and CMVSS 108 requirements.</p> <p><u>REAR FMVSS LIGHTING</u></p> <p>The rear stop/tail and directional LED lighting shall consist of the following:</p> <ul style="list-style-type: none"> • Two (2) Whelen®, Model M6BTT, red LED stop/tail lights • Two (2) Whelen, Model M6T, amber LED arrow turn lights <p>The lights shall be provided with color lenses.</p> <p>The lights shall be mounted in a polished combination housing.</p> <p>There shall be two (2) Whelen Model M6BUW, LED backup lights provided in the tail light housing.</p> <p><u>LICENSE PLATE BRACKET</u></p> <p>There shall be one (1) license plate bracket mounted on the rear of the body.</p> <p>A white LED light shall illuminate the license plate. A polished stainless steel light shield shall be provided over the light that shall direct illumination downward, preventing white light to the rear.</p> <p><u>BACK-UP ALARM</u></p> <p>A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse shall be provided. The device shall sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.</p> <p><u>CAB PERIMETER SCENE LIGHTS</u></p> <p>There shall be four (4) Amdor LumaBar H2O, Model AY-9500-020, 20.00" white LED strip lights provided, one (1) for each cab door.</p> <p>These lights shall be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.</p> <p><u>PUMP HOUSE PERIMETER LIGHTS</u></p> <p>There shall be one (1) Amdor LumaBar H2O, Model AY-9500-020, 20.00" LED weatherproof strip light with bracket provided under the driver's side front body compartment.</p> <p>The light shall be controlled by the same means as the body perimeter lights.</p>		

	Bidder Complies	
	Yes	No
<p><u>BODY PERIMETER SCENE LIGHTS</u></p> <p>There shall be two (2) Amdor LumaBar H2O™, Model AY-9500-020, 20.00" 12 volt DC LED strip lights provided at the rear step area of the body, one (1) each side shining to the rear.</p> <p>The perimeter scene lights shall be activated when the parking brake is applied.</p> <p><u>STEP LIGHTS</u></p> <p>There shall be two (2) white LED step lights shall be provided at the rear to illuminate the tailboard/step area.</p> <p>In order to ensure exceptional illumination, each light shall provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.</p> <p>These step lights shall be actuated with the perimeter scene lights.</p> <p>All other steps on the apparatus shall be illuminated per the current edition of NFPA 1901.</p> <p><u>12 VOLT LIGHTING</u></p> <p>There shall be one (1) Whelen® Model PFS2P, 16,200 lumens 12 volt DC LED light(s) installed on the apparatus.</p> <p>The painted parts of this light assembly to be white.</p> <p>The lights shall be installed front bulkhead drivers side.</p> <p>The push up side mount outside pole length to be 20.00" long with handle holder and sensor connecting the pole to the Do Not Move Truck Indicator circuit.</p> <p>The inside pole length to be 57.00" long or as long as practical to fit in the location selected.</p> <p>The lights shall be controlled by a switch at the driver's side switch panel and by a switch at the driver's side pump panel.</p> <p>These light(s) may be load managed when the parking brake is applied.</p> <p><u>12 VOLT LIGHTING</u></p> <p>There shall be one (1) Whelen® Model PFS2P, 16,200 lumens 12 volt DC LED light(s) installed on the apparatus.</p> <p>The painted parts of this light assembly to be white.</p> <p>The lights shall be installed front bulkhead passenger side.</p>		

	Bidder Complies	
	Yes	No
<p>The push up side mount outside pole length to be 20.00" long with handle holder and sensor connecting the pole to the Do Not Move Truck Indicator circuit.</p> <p>The inside pole length to be 57.00" long or as long as practical to fit in the location selected.</p> <p>The lights shall be controlled by a switch at the driver's side switch panel and by a switch at the driver's side pump panel.</p> <p>These light(s) may be load managed when the parking brake is applied.</p> <p><u>12 VOLT LIGHTING</u></p> <p>There shall be a Whelen® Pioneer™, Model PFS2*, 12 volt LED light(s) provided. The light shall be mounted on a special bracket, centered on the front of the cab roof.</p> <p>The painted parts of this light assembly to be white.</p> <p>The light(s) shall be controlled by the following:</p> <ul style="list-style-type: none"> • a switch at the driver's side switch panel • a switch at the driver's side pump panel <p>These light(s) may be load managed when the parking brake is set.</p> <p><u>HOSE BED LIGHTS</u></p> <p>There shall be white 12 volt DC LED light strips with stainless steel protective cover, provided to light the hose bed area.</p> <ul style="list-style-type: none"> • One (1) light strip shall be installed the entire length of the driver's side of the hose bed. • One (1) light strip shall be installed the entire length of the passenger's side of the hose bed. <p>The lights shall be activated by a cup switch at the rear of the apparatus no more than 62.00" from the ground.</p> <p><u>REAR SCENE LIGHTS</u></p> <p>There shall be two (2) Whelen, Model 6SC0ENZR, gradient LED scene lights with chrome flanges installed at the rear of the apparatus. These lights shall be installed between 30.00" and 66.00" above the ground.</p> <p>The lights shall be controlled by a switch at the driver's side switch panel.</p>		

	Bidder Complies	
	Yes	No
<p><u>WALKING SURFACE LIGHT</u></p> <p>There shall be Model FRP, 4" round black 12 volt DC LED floodlight with bolt mount provided to illuminate the entire designated walking surface on top of the body.</p> <p>The light shall be activated when the body step lights are on.</p> <p><u>WATER TANK</u></p> <p>Booster tank shall have a capacity of 1000 gallons and be constructed of UV stabilized ultra high impact polypropylene plastic by a manufacturer with a minimum of 20 years experience building tanks, is ISO 9001:2000 certified in all its manufacturing facilities, and has over 50,000 tanks in service.</p> <p>The booster tank shall be a form-fitting design that serves to keep the tank height as low as possible. The tank design shall allow for greater compartment depth.</p> <p>Tank joints and seams shall be nitrogen welded inside and out.</p> <p>Tank shall be baffled in accordance with NFPA Bulletin 1901 requirements.</p> <p>Baffles shall have vent openings at both the top and bottom to permit movement of air and water between compartments.</p> <p>Longitudinal partitions shall be constructed of .38" polypropylene plastic and shall extend from the bottom of the tank through the top cover to allow for positive welding.</p> <p>Transverse partitions shall extend from 4.00" off the bottom of the tank to the underside of the top cover.</p> <p>All partitions shall interlock and shall be welded to the tank bottom and sides.</p> <p>Tank top shall be constructed of .50" polypropylene. It shall be recessed .38" and shall be welded to the tank sides and the longitudinal partitions.</p> <p>Tank top shall be sufficiently supported to keep it rigid during fast filling conditions.</p> <p>Construction shall include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two (2) of the dowels shall be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes.</p> <p>A sump shall be provided at the bottom of the water tank.</p> <p>Sump shall include a drain plug and the tank outlet.</p> <p>Tank shall be installed in a fabricated cradle assembly constructed of structural steel.</p>		

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	Bidder Complies	
	Yes	No
<p>Sufficient crossmembers shall be provided to properly support bottom of tank. Crossmembers shall be constructed of steel flat bar or rectangular tubing.</p> <p>Tank shall "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, shall be placed on all horizontal surfaces that the tank rests on.</p> <p>Stops or other provision shall be provided to prevent an empty tank from bouncing excessively while moving vehicle.</p> <p>Mounting system shall be approved by the tank manufacturer.</p> <p>Fill tower shall be constructed of .50" polypropylene and shall be a minimum of 8.00" wide x 14.00" long.</p> <p>Fill tower shall be furnished with a .25" thick polypropylene screen and a hinged cover.</p> <p>An overflow pipe, constructed of 4.00" schedule 40 polypropylene, shall be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.</p> <p><u>WATER TANK RESTRAINT</u></p> <p>A heavy-duty water tank restraint shall be provided.</p> <p><u>DIRECT TANK FILL</u></p> <p>There shall be one (1) - 2.50" gated external tank fill(s) installed and properly labeled at the rear of the water tank, located passenger's side, with the valve installed as low as practical for easy hose connection.</p> <p>Piping, for the fill, shall be routed through the rear wall of the tank and include a flow deflector to break up the stream of water entering the water tank.</p> <p>A 2.50" full flow ball valve with 2.50" piping and a 2.50" (F)NST chrome swivel shall be located at the inlet.</p> <p>A 2.50" chrome plated 30 degree elbow and plug with VLH automatic pressure relieving thread technology shall be provided for the tank fill.</p> <p><u>HOSE BED</u></p> <p>The hose bed shall be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength.</p>		

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	Bidder Complies	
	Yes	No
<p>Flooring of the hose bed shall be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats shall be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation.</p> <p>Hose bed shall accommodate 1500 feet of 2.50" and 400 feet of 1.50" hose.</p> <p><u>HOSE BED DIVIDER</u></p> <p>Two (2) adjustable hosebed dividers shall be furnished for separating hose.</p> <p>Each divider shall be constructed of a .25" brushed aluminum sheet. Flat surfaces shall be sanded for uniform appearance, or constructed of brushed aluminum.</p> <p>An oval opening shall be provided near the rear of the divider to be used as a hand hold and aid in accessing the hosebed.</p> <p>Divider shall be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.</p> <p>Divider shall be held in place by tightening bolts, at each end.</p> <p>Acorn nuts shall be installed on all bolts in the hose bed which have exposed threads.</p> <p><u>HOSE BED HOSE RESTRAINT</u></p> <p>The hose in the hose bed shall be restrained by a black nylon Velcro® strap at the top of the hose bed. At the rear of the hose bed, 2.00" black nylon webbing with a 1.50" x 4.00" box pattern shall attach at the top rear outside corners with seat belt buckle fasteners. The webbing shall have straps connected with seat belt buckle fasteners located at the rear body sheet below the hose bed.</p> <p><u>RUNNING BOARDS</u></p> <p>Design of the vehicle shall be such that running boards shall not be required to reach pre connects or other items on the side of the vehicle.</p> <p><u>TAILBOARD</u></p> <p>The rear step shall be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly.</p> <p>The rear tailboard shall be 12.00" deep.</p> <p>The exterior side shall be flanged down and in.</p> <p>Flanges shall not be notched.</p> <p><u>SMOOTH ALUMINUM REAR WALL</u></p> <p>The rear wall shall be smooth aluminum.</p>		

	Bidder Complies	
	Yes	No
<p><u>TOW EYES (REAR)</u></p> <p>Two (2) tow eyes shall be installed below the rear tailboard compartment.</p> <p>The tow eyes shall be properly reinforced so that the truck can be pulled from the eyes.</p> <p><u>COMPARTMENTATION</u></p> <p>Body and compartments shall be formed sheet metal fabricated of .125", 5052-H32 aluminum. Body shall be designed and constructed with the latest technologies. A combination of torque-retaining mechanical fasteners and bonded construction shall ensure structural strength and longevity.</p> <p>The thermosetting bonding material shall be resistant to dilute acids, solvents, greases, moisture, ultra violet light or other substances commonly used by the fire department and carried in the compartments.</p> <p>This construction method shall maintain superior body integrity compared to other bolted or welded construction as there are no welds to crack or typical bolts to loosen. The superior clamp holding design of the torque-retaining fastener system and the firm yet flexible (compared to a weld) bonding agent shall prevent body cracking and structural failure, since the stresses placed on the body are much more widely distributed and dispersed.</p> <p>Circular fender liners shall be provided. For prevention of paint chips and ease of suspension maintenance the fender liners shall be formed from aluminum, be unpainted, and removable for suspension maintenance.</p> <p>Compartment flooring shall be of the sweep out design with the floor 1.00" higher than the compartment door lip.</p> <p>Drip protection shall be provided above the doors by means of aluminum extrusion.</p> <p>The top of the compartment shall be covered with bright aluminum treadplate rolled over the edges on the front, and rear. These covers shall have the corners welded.</p> <p>All screws and bolts where they protrude into a compartment shall be hidden or have acorn nuts on the ends to prevent injury.</p> <p><u>UNDERBODY SUPPORT SYSTEM</u></p> <p>Due to the severe loading requirements of this pumper a method of body and compartment support suitable for the intended load shall be provided.</p> <p>The backbone of the body support system shall begin with the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads.</p>		

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	Bidder Complies	
	Yes	No
<p>The body and tank subframe support system begins with two (2) powder-coated main rails constructed with 5/16" thick steel. Across these main rails are a series of formed powder-coated channels constructed from steel. These channels support the water tank and the body. Under all four (4) corner compartments of the body are a series of formed stainless steel channels that support the compartments and are fastened to the subframe with torque-retaining fasteners.</p> <p>This entire structure rests on the main chassis frame rails and is held in place through a series of four brackets. These brackets are spring loaded to allow the entire structure to flex during frame flexing maneuvers when the vehicle is operating over uneven terrain. These spring loaded mounts shall reduce the natural flex stress of the chassis from being transmitted to the body.</p> <p><u>AGGRESSIVE WALKING SURFACE</u></p> <p>All exterior surfaces designated as stepping, standing, and walking areas shall comply with the required average slip resistance of the current NFPA standards. Documentation of the material meeting the standard shall be provided at time of delivery.</p> <p><u>COMPARTMENT VENTILATION</u></p> <p>All body compartments shall be vented. The vents shall allow air circulation between compartments and/or to the outside atmosphere. They shall be designed and located for optimum performance.</p> <p><u>COMPARTMENTATION, DRIVER'S SIDE</u></p> <p>A full height, roll-up door compartment ahead of the rear wheels shall be provided. This compartment shall contain the primary pump controls and panel.</p> <p>The interior dimensions of this compartment shall be 36.50" wide x 59.00" high x 12.00" deep in the upper section of the compartment with the pump panel and controls. A section that is 27.00" deep and 12.00" tall x 27.50" wide shall be located in the lower section. The depth of the compartment shall be calculated with the compartment door closed.</p> <p>The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 33.50" wide x 59.00" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be 64.50" wide x 29.50" high x 12.00" deep. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be 59.00" wide x 28.50" high.</p>		

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	Bidder Complies	
	Yes	No
<p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A full height, roll-up door compartment behind the rear wheels shall be provided. The interior dimensions of this compartment shall be 40.00" wide x 59.00" high x 27.00" deep in the lower 26.00" of the compartment and 12.00" deep in the remaining upper portion. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 37.00" wide x 59.00" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>The body fender panels on both sides of the truck shall have a paint finish matching the primary color of the cab and other painted sections of the apparatus body.</p> <p><u>COMPARTMENTATION, PASSENGER'S SIDE</u></p> <p>A full height, roll-up door compartment ahead of the rear wheels shall be provided. The interior dimensions of this compartment shall be 36.50" wide x 59.00" high x 27.00" deep. The depth of the compartment shall be calculated with the compartment door closed.</p> <p>The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 33.50" wide x 59.00" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be 64.50" wide x 29.50" high x 12.00" deep. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be 59.00" wide x 28.50" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p>A full height, roll-up door compartment behind the rear wheels shall be provided. The interior dimensions of this compartment shall be 40.00" wide x 59.00" high x 27.00" deep in the lower 26.00" of the compartment and 12.00" deep in the remaining upper portion. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that</p>		

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	Bidder Complies	
	Yes	No
<p>no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be 37.00" wide x 59.00" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p><u>ROLLUP DOOR, SIDE COMPARTMENTS</u></p> <p>There shall be six (6) compartment doors installed on the side compartments. The doors shall be double faced aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by A&A Manufacturing (Gortite).</p> <p>Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.</p> <p>Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene.</p> <p>All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from plus 300 to minus 40 degrees Fahrenheit. Hardened plastic shall not be acceptable.</p> <p>A polished stainless steel lift bar to be provided for each roll-up door. Lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door.</p> <p>Doors shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surfaces shall be concave to provide strength and prevent loose equipment from jamming the door from inside.</p> <p>To conserve space in the compartments, the spring roller assembly shall not exceed 3.00" in diameter. A garage style roll door shall not be acceptable.</p> <p>The header for the rollup door assembly shall not exceed 4.00".</p> <p>A heavy-duty magnetic switch shall be used for control of open compartment door warning lights.</p> <p><u>COMPARTMENTATION, REAR</u></p> <p>A roll-up door compartment above the rear tailboard shall be provided.</p>		

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	Bidder Complies	
	Yes	No
<p>Interior dimensions of this compartment shall be 41.50" wide x 46.00" high (to the bottom of the roll-up door) x 25.88" deep. An area behind the roll of the roll-up door shall be 14.75" deep and have a total height of 54.50". Depth of the compartment shall be calculated with the compartment door closed.</p> <p>A ladder or other long equipment storage area shall be accessible from within this compartment, thus altering the available storage space within the compartment. The dimensions of this storage area that extends into the rear compartment shall be approximately 27.75" wide, by 11.50" tall and full depth of the compartment. There shall be a space below this equipment storage approximately 15.50" tall.</p> <p>Clear door opening of this compartment shall be 34.50" wide x 46.00" high.</p> <p>Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.</p> <p><u>ROLLUP DOOR, REAR COMPARTMENT</u></p> <p>There shall be a rear rollup door. The door shall be double faced aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by A&A Manufacturing (Gortite).</p> <p>Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.</p> <p>Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene.</p> <p>All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from plus 300 to minus 40 degrees Fahrenheit. Hardened plastic shall not be acceptable.</p> <p>A polished stainless steel lift bar to be provided for each roll-up door. Lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door.</p> <p>Door shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surface shall be concave to provide strength and prevent loose equipment from jamming the door from inside.</p>		

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	Bidder Complies	
	Yes	No
<p>To conserve space in the compartments, the spring roller assembly shall not exceed 3.00" in diameter. A garage style roll door shall not be acceptable.</p> <p>The header for the rollup door assembly shall not exceed 4.00".</p> <p>A heavy-duty magnetic switch shall be used for control of open compartment door warning lights.</p> <p><u>PULL STRAP, DOORS</u></p> <p>There shall be seven (7) compartment doors provided with pull straps. each door.</p> <p><u>COMPARTMENT LIGHTING</u></p> <p>There shall be seven (7) compartment(s) with two (2) white 12 volt DC LED compartment light strips. The dual light strips shall be centered vertically along each side of the door framing. There shall be two (2) light strips per compartment. The dual light strips shall be in all body compartment(s).</p> <p>Any remaining compartments without light strips shall have a 6.00" diameter Truck-Lite, Model: 79384 light. Each light shall have a number 1076 one filament, two wire bulb.</p> <p>Opening the compartment door shall automatically turn the compartment lighting on.</p> <p><u>MOUNTING TRACKS</u></p> <p>There shall be four (4) sets of tracks for mounting shelf(s) in D1,R1,P1, P3. These tracks shall be installed vertically to support the adjustable shelf(s). The tracks to the outside of the body shall be mounted to the compartment wall. The tracks to the inside of the body shall be recessed into the corners of the compartment. The tracks shall be unpainted with a natural finish.</p> <p><u>ADJUSTABLE SHELVES</u></p> <p>There shall be five (5) shelves, with a capacity of 500 lb provided. The shelf construction shall consist of natural finish aluminum with 2.00" sides. Each shelf shall be infinitely adjustable by means of a threaded fastener, which slides in a track..</p> <p>The location shall be 1 in D1, 1 in R1, 1 in P1, 2 P3.</p> <p><u>SLIDE-OUT FLOOR MOUNTED TRAY</u></p> <p>There shall be two (2) floor mounted slide-out tray(s) with 2.00" sides provided D1,P1. Each tray shall be rated for up to 250lb in the extended position. The tray(s) shall be constructed of a minimum .13" aluminum with welded corners and an unpainted aluminum finish.</p> <p>There shall be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides shall have a safety factor rating of 2.</p>		

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	Bidder Complies	
	Yes	No
<p>To ensure years of dependable service, the slides shall be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.</p> <p>To ensure years of easy operation, the slides shall require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file shall have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance shall be provided upon request.</p> <p>Automatic locks shall be provided for both the "in" and "out" positions. The trip mechanism for the locks shall be located at the front of the tray for ease of use with a gloved hand.</p> <p><u>COMPARTMENT FLOOR SCUFFPLATE</u></p> <p>Aluminum treadplate shall be provided on the compartment floor. The edges of the treadplate shall be completely caulked before installation to prevent corrosion.</p> <p><u>RUB RAIL</u></p> <p>Bottom edge of the side compartments shall be trimmed with a bright aluminum extruded rub rail.</p> <p>Trim shall be 2.12" high with 1.38" flanges turned outward for rigidity.</p> <p>The rub rails shall not be an integral part of the body construction, which allows replacement in the event of damage.</p> <p><u>BODY FENDER CROWNS</u></p> <p>Stainless steel fender crowns shall be provided around the rear wheel openings. These fender crowns shall be designed to accommodate large tires, including a 315/80R 22.50".</p> <p>A rubber welting shall be provided between the body and the crown to seal the seam and restrict moisture from entering.</p> <p>A dielectric barrier shall be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.</p> <p><u>HARD SUCTION HOSE</u></p> <p>Two (2) lengths of 6.00" clear corrugated PVC hard suction hose, 10' in length, shall be provided. The hose shall be equipped with a long handle female coupling on one (1) end and a rocker lug male coupling on the other end. Couplings shall be hard coated aluminum.</p>		

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	Bidder Complies	
	Yes	No
<p><u>HOSE TROUGHS</u></p> <p>Hard suction hose shall be carried in two (2) V-shaped troughs, one (1) each side. The hose shall be held in place by an easy to release clamping mechanism.</p> <p>Troughs shall be constructed of aluminum and remain the natural aluminum finish.</p> <ul style="list-style-type: none"> Handrails shall be located on each rear bulkhead. These handrails shall meet the requirements of NFPA and shall help provide safe access to the hosebed. <p><u>AIR BOTTLE STORAGE</u></p> <p>A total of four (4) air bottle compartments shall be provided, two (2) each side of the body. The air bottle compartment shall be in the form of a PVC round tube to accommodate different size air bottles. The inside diameter of the tube shall be approximately 7.63" in diameter x 26.00" deep. Drain holes shall be provided at the bottom of the tubes to prevent water collection.</p> <p>A Cast Products door with latch shall be provided to contain the air bottle.</p> <p><u>EXTENSION LADDER</u></p> <p>There shall be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.</p> <p><u>ROOF LADDER</u></p> <p>There shall be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.</p> <p><u>LADDER STORAGE</u></p> <p>The ladders shall be stored at an ergonomically safe working height. This height shall be defined as no more than 1.00" above the height of the chassis frame rails. Easy access, quick removal, and storage of the ladders are required.</p> <p>The ladders shall be carried inside a compartment below the center of the water tank. They shall be accessible from within the rear compartment. The extension ladder and roof ladder shall be banked together within the compartment. Storage for the folding ladder shall be located to the left of the extension and roof ladder in a separate trough.</p> <p>Durable plastic slides shall be provided in the troughs to protect the ladders and also aid in the loading and removal of them.</p> <p>The rear of the ladder storage area shall have a horizontally hinged, drop-down aluminum treadplate door with two (2) lift-and-turn style latches to contain the ladders.</p> <p><u>LADDER COMPARTMENT ENCLOSURE</u></p> <p>In addition to the standard structure of the ladder storage area below the water tank, the ladder storage area shall be further enclosed to keep the ladders clean and free of debris.</p>		

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	Bidder Complies	
	Yes	No
<p><u>PIKE POLE STORAGE</u></p> <p>Included within the ladder storage area described above, shall be provisions for carrying two (2) pike poles. Two (2) aluminum tubes shall be provided for pike pole storage.</p> <p><u>FOLDING LADDER</u></p> <p>One (1) 10' aluminum Series 585-A Duo-Safety folding ladder shall be installed in a U-shaped trough in the ladder storage compartment.</p> <p><u>PIKE POLE, 8'</u></p> <p>One (1) pike pole, 8' long Akron with a fiberglass handle, shall be provided and located in the ladder storage compartment.</p> <p><u>PIKE POLE, 6'</u></p> <p>One (1) pike pole, 6' long Akron with a fiberglass handle, shall be provided and located in the ladder storage compartment.</p> <p><u>PIKE POLE STORAGE</u></p> <p>Aluminum tubes shall be provided for the storage of two (2) pike poles and shall be located in the ladder storage compartment.</p> <p><u>REAR ACCESS STEP</u></p> <p>Wedge style steps shall be provided at the rear of the apparatus, on the driver side for access to the hose bed. The steps shall be constructed of bright aluminum treadplate and be a minimum of 10.00" wide x 8.00" deep to provide an adequate stepping surface.</p> <p>In addition, for repacking the hosebed, an intermediate full-width step shall be provided. It shall be designed into the body construction. The stepping surface shall be bright aluminum treadplate. It shall be 10.00" deep and located above the rear compartment, below the hosebed.</p> <p><u>STEP, PULL-OUT/DROP DOWN</u></p> <p>A pull-out drop down step shall be provided at the rear of the truck below the tailboard.</p> <p><u>PUMP</u></p> <p>Pump shall be a Waterous CXVPA, 1250 gpm, single (1) stage, PTO driven centrifugal type.</p> <p>The pump shall be installed in a position outboard of the chassis frame rails in a location that provides easy access for service and repair. Pumps mounted between the frame rails are unacceptable due to their limited access and excessive associated maintenance and repair times.</p> <p>Pump shall be the class "A" type and rated to NFPA 1901 standards up to 2000 feet above sea level.</p>		

	Bidder Complies	
	Yes	No
<p>Pump shall deliver the percentage of rated discharge at pressures indicated below:</p> <ul style="list-style-type: none"> - 100% of rated capacity at 150 psi net pump pressure. -70% of rated capacity at 200 psi net pump pressure. -50% of rated capacity at 250 psi net pump pressure. <p>Pump casting shall be a two (2) piece, vertically split design and shall be constructed of high tensile, close grain gray iron.</p> <p>Impeller shaft shall be stainless steel, heat treated, accurately ground to size, and polished under the shaft seal. It shall be supported by oil lubricated ball bearings.</p> <p>Bearings shall be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings shall be used.</p> <p><u>MECHANICAL SEAL ON PUMP</u></p> <p>Pump shall be equipped with a self-adjusting, maintenance-free, mechanical shaft seal.</p> <p>The mechanical seal shall consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring shall press against a highly polished stainless steel stationary ring that is sealed within the pump body.</p> <p>In addition, a throttling ring shall be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance shall not deteriorate, nor shall the pump lose prime, while drafting if the seal fails during pump operation.</p> <p>Wear rings shall be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.</p> <p><u>PUMP TRANSMISSION</u></p> <p>The pump transmission shall be made of light weight aluminum casing. Power transfer to pump shall be through a pressure lubricated, Morse HY-VO drive chain.</p> <p>Drive shafts shall be a minimum of 1.50" diameter and made of hardened and ground alloy steel. All shafts shall be ball bearing supported. The case shall be designed as to eliminate the need for water cooling.</p> <p>The water pump shall be driven by a special heavy duty ten (10)-bolt hot shift PTO. It shall be located on the driver's side of the chassis transmission. This PTO shall be designed specifically for the torque required to drive a 1250 gpm or larger water pump.</p>		

	Bidder Complies	
	Yes	No
<p><u>PUMPING MODE</u></p> <p>An interlock system shall be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. The interlock system shall be designed to allow stationary pumping and the truck to be in motion while pumping.</p> <p>A digital pump pressure gauge shall be supplied in the cab.</p> <p><u>PUMP SHIFT</u></p> <p>A pump shift shall be provided within easy reach of the driver for engagement of the PTO driven pump. The shift shall include the indicator lights as mandated by NFPA. The pump shift control shall be illuminated to meet NFPA requirements.</p> <p><u>AUXILIARY COOLING SYSTEM</u></p> <p>A supplementary heat exchange cooling system shall be provided to allow the use of water from the discharge side of the pump for cooling the engine water. Heat exchanger shall be cylindrical type and shall be a separate unit. It shall be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger shall be plumbed to the master drain valve.</p> <p><u>INTAKE RELIEF VALVE</u></p> <p>A Task Force Tips relief valve shall be installed on the suction side of the pump preset at 125 psig.</p> <p>Relief valve shall have a working range of 90 psig to 300 psig.</p> <p>Outlet shall terminate below the frame rails with a 2.50" National Standard hose thread adapter and shall have a "do not cap" warning tag.</p> <p><u>PRESSURE CONTROLLER</u></p> <p>A FRC Pump Boss Pressure Governor shall be provided. An electric pressure governor shall be provided which is capable of automatically maintaining a desired preset discharge pressure in the water pump. When operating in the pressure control mode, the system shall automatically maintain the discharge pressure set by the operator (within the discharge capabilities of the pump and water supply) regardless of flow, within the discharge capacities of the water pump and water supply.</p> <p>A pressure transducer shall be installed in the water discharge of the pump. The transducer continuously monitors pump pressure sending a signal to the Electronic Control Module (ECM).</p> <p>The governor can be used in two (2) modes of operation, RPM mode and pressure modes.</p>		

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	Bidder Complies	
	Yes	No
<p>In the RPM mode, the governor can be activated after vehicle parking brake has been set. When in this mode, the governor shall maintain the set engine speed, regardless of engine load (within engine operation capabilities).</p> <p>In the pressure mode, the governor system can only operate after the fire pump has been engaged and the vehicle parking brake has been set. When in the pressure mode, the pressure controller monitors the pump pressure and varies engine speed to maintain a precise pump pressure. The pressure controller shall use a quicker reacting J1939 database for engine control.</p> <p>A preset feature allows a predetermined pressure or rpm to be set.</p> <p>A pump cavitation protection feature is also provided which shall return the engine to idle should the pump cavitate. Cavitation is sensed by the combination of pump pressure below 30 psi and engine speed above 2000 rpm for more than five (5) seconds.</p> <p>The throttle shall be a vernier style control, with a large control knob for use with a gloved hand. A throttle ready light shall be provided adjacent to the throttle control. A large 0.75" RPM display shall be provided to be visible at a glance.</p> <p>Check engine, and stop engine indicator lights shall be provided for easy viewing.</p> <p>Large 0.75" push buttons shall be provided for menu, mode, preset, and silence selections.</p> <p>The water tank level indicator shall be incorporated in the pressure governor.</p> <p>A fuel level indicator shall be incorporated in the pressure controller.</p> <p>A pump hour meter shall be incorporated in the pressure controller.</p> <p>The pressure controller shall incorporate monitoring for engine temperature, oil pressure, fuel level alarm, and voltage. Pump monitoring shall include, pump gearcase temperature, error codes, diagnostic data, pump service reminders, and time stamped data logging, to allow for fast accurate trouble shooting. It shall also notify the driver/engineer of any problems with the engine and the apparatus. Complete understandable messages shall be provided in a 20-character display, providing for fewer abbreviations in the messages. An automatic dim feature shall be included for night operations.</p> <p>The pressure controller shall include a USB port for easy software upgrades, which can be downloaded through a USB memory stick, eliminating the need for a laptop for software installations.</p> <p>A complete interactive manual shall be provided with the pressure controller.</p>		

	Bidder Complies	
	Yes	No
<p><u>PRIMING PUMP</u></p> <p>The priming pump shall be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in NFPA pamphlet #1901.</p> <p>All wetted metallic parts of the priming system are to be of brass and stainless steel construction.</p> <p>One (1) priming control shall open the priming valve and start the pump primer.</p> <p><u>PUMP MANUALS</u></p> <p>There shall be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals shall be provided by the pump manufacturer in the form of two (2) CDs. Each manual shall cover pump operation, maintenance, and parts.</p> <p><u>PLUMBING, STAINLESS STEEL AND HOSE</u></p> <p>All inlet and outlet lines shall be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's shall be equipped with brass or stainless steel couplings. All stainless steel hard plumbing shall be a minimum of a schedule 10 wall thickness.</p> <p>Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping shall be equipped with victaulic or rubber couplings.</p> <p>Plumbing manifold bodies shall be ductile cast iron or stainless steel.</p> <p>All piping lines are to be drained through a master drain valve or shall be equipped with individual drain valves. All drain lines shall be extended with a hose to drain below the chassis frame.</p> <p>All water carrying gauge lines shall be of flexible polypropylene tubing.</p> <p>All piping, hose and fittings shall have a minimum of a 500 PSI hydrodynamic pressure rating.</p> <p><u>MAIN PUMP INLETS</u></p> <p>A 6.00" pump manifold inlet shall be provided on each side of the vehicle. Removable die cast zinc screens shall be included for additional cathodic corrosion protection for the pump.</p> <p><u>MAIN PUMP INLET CAP</u></p> <p>The main pump inlets shall have National Standard Threads with a long handle chrome cap.</p> <p>The cap shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p>		

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	Bidder Complies	
	Yes	No
<p><u>VALVES</u></p> <p>All ball valves shall be Akron® in-line valves. They shall be heavy-duty style brass valves with a stainless steel ball and a simple seat design. The valves shall meet all NFPA requirements.</p> <p>Ease of maintenance and repair is critical. No lubrication or regular maintenance shall be required on the valve. Replacement must not require dismantling of plumbing to remove the valve body.</p> <p><u>LEFT SIDE INLET</u></p> <p>There shall be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.</p> <p>The auxiliary inlet shall be provided with a strainer, chrome swivel and plug.</p> <p><u>RIGHT SIDE INLET</u></p> <p>There shall be one (1) auxiliary inlet with a 2.50" valve at the right side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter.</p> <p>The auxiliary inlet shall be provided with a strainer, chrome swivel and plug.</p> <p>The location of the valve for the inlet(s) shall be recessed behind the pump panel.</p> <p><u>INLET CONTROL</u></p> <p>The side auxiliary inlet(s) shall incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism shall indicate the position of the valve.</p> <p><u>INLET BLEEDER VALVE</u></p> <p>A 0.75" bleeder valve shall be provided for each side gated inlet. The valves shall be located behind the panel with a swing style handle control extended to the outside of the panel. The handles shall be chrome plated and provide a visual indication of valve position. The swing handle shall provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders shall be routed below the chassis frame rails.</p> <p><u>TANK TO PUMP</u></p> <p>The booster tank shall be connected to the intake side of the pump with heavy duty piping and a quarter turn 3.00" valve with the control remotely located at the operator's panel. A rubber coupling shall be included in this line to prevent damage from vibration or chassis flexing.</p> <p>A check valve shall be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.</p>		

	Bidder Complies	
	Yes	No
<p><u>TANK REFILL</u></p> <p>A 1.50" combination tank refill and pump re-circulation line shall be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.</p> <p><u>LEFT SIDE DISCHARGE OUTLETS</u></p> <p>There shall be two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.</p> <p><u>RIGHT SIDE DISCHARGE OUTLETS</u></p> <p>There shall be two (2) discharge outlets 2.50" valve on the right side of the apparatus, terminating with a (M) 2.50" National Standard hose thread adapter.</p> <p><u>REAR DISCHARGE OUTLET</u></p> <p>There shall be one (1) discharge outlet piped to the rear of the hose bed, on the right side. It shall be installed so proper clearance is provided for spanner wrenches or adapters. Plumbing shall consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel.</p> <p><u>DISCHARGE CAPS</u></p> <p>Chrome plated, rocker lug, caps with chains shall be furnished for all side discharge outlets.</p> <p>The caps shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>OUTLET BLEEDER VALVE</u></p> <p>A 0.75" bleeder valve shall be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.</p> <p>The valves shall be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles shall be chrome plated and provide a visual indication of valve position. The swing handle shall provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders shall be located at the bottom of the pump panel. They shall be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders shall be routed below the chassis frame rails.</p> <p><u>LEFT SIDE OUTLET ELBOWS</u></p> <p>The 2.50" discharge outlets located on the left side pump panel shall be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p>		

	Bidder Complies	
	Yes	No
<p>The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>RIGHT SIDE OUTLET ELBOWS</u></p> <p>The 2.50" discharge outlets located on the right side pump panel shall be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>REAR OUTLET ELBOWS</u></p> <p>The 2.50" discharge outlets located at the rear of the apparatus shall be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 45 degree elbow.</p> <p>The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).</p> <p><u>DISCHARGE OUTLET CONTROLS</u></p> <p>The discharge outlets shall incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The lever style of valve operating mechanism shall indicate the position of the valve.</p> <p>No push-pull style controls shall be allowed due to their typically more difficult operation.</p> <p><u>DELUGE RISER</u></p> <p>A 3.00" deluge riser shall be installed above the pump in such a manner that a monitor can be mounted and used effectively.</p> <p>The 3.00" piping shall be installed securely so there is no movement when the line is charged. A 2.50" gated valve shall be installed and directly controlled at the pump operator's position with a lever style handle.</p> <p>This deluge outlet shall flow a minimum 1000 GPM.</p> <p>The deluge riser shall have male National Pipe Threads for mounting the monitor.</p> <p><u>CROSSLAY HOSE BEDS</u></p> <p>Two (2) crosslays with 1.50" outlets shall be provided. Each bed to be capable of carrying 200 feet of 1.75" double jacketed hose and shall be plumbed with 2.00" i.d. schedule 10 304L welded or formed stainless steel pipe and gated with a 2.00" quarter turn ball valve.</p>		

	Bidder Complies	
	Yes	No
<p>Crosslays shall be low mounted with the bottom of both crosslay trays no more than 22.00" above the frame rails for simple, safe reloading and deployment. (no exception)</p> <p>Outlets shall be equipped with a 1.50" National Standard hose thread 90-degree swivel located in the hose bed so that hose may be removed from either side of apparatus.</p> <p>The crosslay controls shall be at the pump operator's panel.</p> <p>To provide easy repacking of hose, a removable tray shall be provided for each crosslay hosebed. For durability, reduced weight and easy removal, the crosslay tray shall be constructed of poly material.</p> <p>Hand holes shall be provided in the sides for easy removal and installation from the compartment. The floor of the trays shall be perforated to allow for drainage and hose drying.</p> <p><u>CROSSLAY HOSE RESTRAINT</u></p> <p>Hose restraints shall be provided across the ends of the crosslays.</p> <p><u>BOOSTER HOSE REEL</u></p> <p>A steel Hannay electric rewind booster hose reel shall be installed below the crew cab door on the passenger's side of the apparatus. The reel shall be located behind the aluminum treadplate enclosure above the crew cab step. The opening shall include a high-density synthetic guide to conceal exposed edges around the opening and perform as a protective guide to prevent abrasion during rewinding and unwinding.</p> <p>The exterior finish of the reel shall be painted #269 gray from the reel manufacturer.</p> <p>Discharge control shall be provided at the pump operator's panel. Plumbing to the reel shall consist of 1.50" Aeroquip hose and a full flow ball valve.</p> <p>Reel motor shall be protected from overload with a circuit breaker rated to match the motor.</p> <p>An electric rewind control switch shall be installed adjacent to the reel.</p> <p>Booster hose, 1.00" diameter and 150 feet, with chrome plated Barway, or equal couplings shall be provided.</p> <p>Working pressure of the booster hose shall be a minimum of 800 psi.</p> <p>Capacity of the hose reel shall be 150 feet of 1.00" booster hose.</p> <p><u>HOSE REEL NOZZLE</u></p> <p>A Task Force, model B-BGH 10-125 gpm, booster hose nozzle shall be provided.</p>		

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	Bidder Complies	
	Yes	No
<p>There shall be one (1) polished stainless steel, captive roller and guide assembly mounted Passenger side booster reel.</p> <p><u>NOZZLE BRACKET</u></p> <p>A PAC Track model #1004 bracket, part #1437070, shall be provided for each booster hose. The bracket shall be located on the front sheet of the body, to secure the hose above the nozzle cup.</p> <p><u>FOAM SYSTEM</u></p> <p>A foam system shall not be required on this apparatus.</p> <p><u>PUMP CONTROL PANELS (LEFT SIDE CONTROL)</u></p> <p>Pump controls and gauges shall be located midship at the left (driver's) side of the apparatus and properly identified.</p> <p>The main pump operator's control panel shall be completely enclosed and located in the forward left side body compartment, to protect against road debris and weather elements.</p> <p>Manual controls shall be easy moving 8" long lever style controls that operate in a vertical, up and down swing motion. Bezels shall encompass the opening, be securely mounted to the pump operator's panel, and shall incorporate the discharge gauge bezel. Bezels shall be bolted to the panel for easy removal and gauge service. The driver's side discharges shall be controlled directly at the valve. There shall be no push-pull style control handles (no exception).</p> <p>The discharge identification tags shall be color coded, with each discharge having its own unique color. All discharge outlets shall be labeled to correspond with the discharge identification tag.</p> <p>The pump panels for the midship discharge and intake ports shall be located ahead of the body compartments. The pump panels shall be easily removable with simple hand tools.</p> <p>A recessed cargo area shall be provided at the front of the body, ahead of the water tank above the plumbing.</p> <p><u>PUMP PANEL CONFIGURATION</u></p> <p>The pump panel configuration shall be arranged and installed in an organized manner that shall provide user-friendly operation.</p> <p><u>PUMP AND GAUGE PANEL</u></p> <p>The pump operator's panel and gauge panel shall be constructed of aluminum with a FormCoat black finish.</p> <p>The side control panels shall be constructed of stainless steel with a brushed finish.</p>		

	Bidder Complies	
	Yes	No
<p><u>PUMP AND PLUMBING ACCESS</u></p> <p>Simple, comprehensive access to the pump and plumbing shall be provided. The driver's side panel below the crosslays shall be easily removable to allow access to the pump and plumbing.</p> <p>The bezels on the pump operator's panel shall be oversized so that when they are removed, maintenance access to the valve body and seals shall be accomplished without removing the entire panel.</p> <p>This simple easy access to the pump and plumbing shall allow for fast, easy valve or pump rebuilding, making for reduced out-of-service times.</p> <p><u>PUMP COMPARTMENT LIGHT</u></p> <p>A compartment light shall be provided inside the pump enclosure.</p> <p><u>PUMP PANEL GAUGES AND CONTROLS</u></p> <p>The following information shall be displayed on the pump panel in the FRC "Pump Boss" pressure governor system screen:</p> <ul style="list-style-type: none"> - Engine Oil Pressure Gauge: LED bar graph display - Engine Water Temperature Gauge: LED bar graph display - Tachometer: over 1/2" high LED digits - Voltmeter: LED bar graph display - PSI and RPM mode LED light - Throttle ready LED light <p><u>VACUUM AND PRESSURE GAUGES</u></p> <p>The pump vacuum and pressure gauges shall be liquid filled and manufactured by Class 1 Incorporated ©.</p> <p>The gauges shall be a minimum of 4.00" in diameter and shall have white faces with black lettering, with a pressure range of 30.00"-0-600#.</p> <p>Gauge construction shall include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.</p> <p>The pump pressure and vacuum gauges shall be installed adjacent to each other at the pump operator's control panel.</p>		

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	Bidder Complies	
	Yes	No
<p>Test port connections shall be provided at the pump operator's panel. One (1) shall be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They shall have 0.25 in. standard pipe thread connections and non-corrosive polished stainless steel or brass plugs. They shall be marked with a label.</p> <p>This gauge shall include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.</p> <p><u>PRESSURE GAUGES</u></p> <p>The individual "line" pressure gauges for the discharges shall be interlube filled and manufactured by Class 1©.</p> <p>They shall be a minimum of 2.00" in diameter and shall have white faces with black lettering.</p> <p>Gauge construction shall include a Zytel nylon case with adhesive mounting gasket and threaded retaining nut.</p> <p>Gauges shall have a pressure range of 30"-0-400#.</p> <p>The individual pressure gauge shall be installed as close to the outlet control as practical.</p> <p>This gauge shall include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.</p> <p><u>WATER LEVEL GAUGE</u></p> <p>A Fire Research TankVision Pro model WLA300-A00 water tank indicator gauge shall be installed on the pump operators panel. The gauge kit shall include an electronic indicator module, a pressure sensor, and a 10' sensor cable. The gauge shall show the volume of water in the tank on nine (9) easy to see super bright RGB LEDs. A wide view lens over the LEDs shall provide for a viewing angle of 180 degrees. The gauge case shall be waterproof, manufactured of Polycarbonate/Nylon material, and have a distinctive blue label.</p> <p>The program features shall be accessed from the front of the indicator module. The program shall support self-diagnostics capabilities, self-calibration, six (6) programmable colored light patterns to display tank volume, adjustable brightness control levels and a data link to connect remote indicators. Low water warnings shall include flashing LEDs at 1/4 tank and down chasing LEDs when the tank is almost empty.</p> <p>The gauge shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted from the outside of the water tank near the bottom. No probe shall be placed on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.</p>		

	Bidder Complies	
	Yes	No
<p><u>MINI SLAVE UNIT</u></p> <p>A Fire Research TankVision model WLA205-A00 miniature tank indicator gauge shall be installed in the cab. The indicator gauge shall show the volume of water in the tank on five (5) easy to see super bright LEDs. A wide view lens over the LEDs shall provide for a viewing angle of 180 degrees. The indicator gauge case shall be manufactured of Polycarbonate material with an integrated lens and have a distinctive blue label.</p> <p><u>PUMP OPERATOR'S / PUMP PANEL LIGHTING</u></p> <p>Illumination shall be provided for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the equipment provided on it. External illumination shall be a minimum of five (5) foot-candles on the face of the device. Internal illumination shall be a minimum of four (4) foot lamberts.</p> <p>The exterior pump panels shall be illuminated by lights on each side of the vehicle located on the forward body bulkhead.</p> <p>The pump operator's panel shall utilize a pair of lights installed in the pump operator's compartment. These lights shall be activated by opening the pump enclosure door. An LED light shall be mounted on the bulkhead wall for additional illumination and shall activate with the "pump engaged" circuit.</p> <p><u>AIR HORN SYSTEM</u></p> <p>Two (2) Grover air horns shall be provided and located one (1) each side of the engine. The horn system shall be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve shall be installed in-line to prevent the loss of air, in the air brake system.</p> <p><u>AIR HORN CONTROL</u></p> <p>A lanyard rope pull control shall be provided centered between the driver and officer seats.</p> <p><u>ELECTRONIC SIREN</u></p> <p>A Whelen®, Model 295SLSA1, electronic siren with noise canceling microphone shall be provided.</p> <p>This siren to be active when the battery switch is on and that emergency master switch is on.</p> <p>Siren head shall be located near the overhead switches.</p> <p>The electronic siren shall be controlled on the siren head only. No horn button or foot switches shall be required.</p>		

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	Bidder Complies	
	Yes	No
<p><u>SPEAKER</u></p> <p>There shall be two (2) speakers provided. Each speaker shall be a Whelen®, Model SA315P, black nylon composite, 100-watt, with through bumper mounting brackets and polished stainless steel grille. Each speaker shall be connected to the siren amplifier.</p> <p>The speaker(s) shall be located behind the front bumper on the passenger and driver's side.</p> <p><u>CAB ROOF LIGHTBAR</u></p> <p>There shall be one (1) 56.00" Whelen, Model Justice LED lightbar provided.</p> <p>This lightbar shall include the following:</p> <ul style="list-style-type: none"> • Six (6) red flashing forward facing LED modules. • Two (2) clear flashing forward facing LED modules. • Two (2) red flashing front corner LED modules. • Two (2) red flashing rear corner LED modules. <p>All lenses shall be clear.</p> <p>There shall be a switch located in the cab on the switch panel to control the lightbar.</p> <p>The white warning lights shall be disabled when the parking brake is set.</p> <p><u>FRONT WARNING LIGHT</u></p> <p>There shall be two (2) Whelen, Model M6** LED flashing lights provided at the front of the truck.</p> <p>The driver's side front warning light to be red.</p> <p>The passenger's side front warning light to be red.</p> <p>The color of the lenses shall be clear.</p> <p>The lights shall be mounted with with a flange.</p> <p>The lights shall be activated by a switch on the cab instrument panel.</p> <p><u>SIDE ZONE LOWER LIGHTING</u></p> <p>There shall be four (4) Whelen®, Model M6*C, flashing LED warning lights with chrome trim installed per the following:</p> <ul style="list-style-type: none"> • Two (2) lights, one (1) each side of the front fender. The side front lights to be red. • Two (2) lights, one (1) each side above rear wheels. The side rear lights to be red. • The lights shall include a clear lenses. 		

	Bidder Complies	
	Yes	No
<p>There shall be a switch in the cab on the switch panel to control the lights.</p> <p><u>REAR ZONE LOWER LIGHTING</u></p> <p>There shall be two (2) Whelen®, Model M6*C, LED flashing warning lights located at the rear of the apparatus.</p> <ul style="list-style-type: none"> • The driver's side rear light to be red • The passenger's side rear light to be red <p>Both lights shall include a lens that is clear.</p> <p>There shall be a switch located in the cab on the switch panel to control the lights.</p> <p><u>REAR OF HOSE BED WARNING LIGHTS</u></p> <p>There shall be two (2) Whelen Rota-Beam, Model R316*F, 4.00" high x 7.19" wide beacons with clear domes provided.</p> <p>The rear zone upper lights to be red in color.</p> <p>There shall be a switch located in the cab on the switch panel to control the beacons.</p> <p>The rear emergency lights shall be mounted on top of the body compartmentation in treadplate boxes with all wiring totally enclosed.</p> <p><u>TRAFFIC DIRECTING LIGHT</u></p> <p>There shall be one (1) Whelen®, Model TAL65, 36.01" long x 2.84" high x 2.24" deep, amber LED traffic directing light installed at the rear of the apparatus.</p> <p>The Whelen, Model TACTLD1, control head shall be included with this installation.</p> <p>The auxiliary warning mode shall be activated with the emergency master switch.</p> <p>This traffic directing light shall be recessed with a stainless steel trim plate at the rear of the apparatus as high as practical.</p> <p>The traffic directing light controller shall be located within the switch panel in the dashboard. The controller shall be within easy reach of the driver.</p> <p><u>LOOSE EQUIPMENT</u></p> <p>The following equipment shall be furnished with the completed unit:</p> <ul style="list-style-type: none"> - One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit 		

	Bidder Complies	
	Yes	No
<u>NFPA REQUIRED LOOSE EQUIPMENT PROVIDED BY FIRE DEPARTMENT</u>		
The following loose equipment as outlined in NFPA 1901, 2016 edition, section 5.9.3 and 5.9.4 shall be provided by the fire department.		
<ul style="list-style-type: none"> • 800 ft (60 m) of 2.50" (65 mm) or larger fire hose. • 400 ft (120 m) of 1.50" (38 mm), 1.75" (45 mm), or 2.00" (52 mm) fire hose. • One (1) handline nozzle, 200 gpm (750 L/min) minimum. • Two (2) handline nozzles, 95 gpm (360 L/min) minimum. • One (1) smoothbore or combination nozzle with 2.50" shutoff that flows a minimum of 250 gpm. • One (1) SCBA complying with NFPA 1981 for each assigned seating position, but not fewer than four (4), mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer. • One (1) spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space(s). • One (1) first aid kit. • Four (4) combination spanner wrenches. • Two (2) hydrant wrenches. • One (1) double female 2.50" (65 mm) adapter with National Hose threads. • One (1) double male 2.50" (65 mm) adapter with National Hose threads. • One (1) rubber mallet, for use on suction hose connections. • Two (2) salvage covers each a minimum size of 12 ft x 14 ft (3.7 m x 4.3 m). • One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, <i>Standard for High Visibility Public Safety Vests</i>, and have a five-point breakaway feature that includes two (2) at the shoulders, two (2) at the sides, and one (1) at the front. • Five (5) fluorescent orange traffic cones not less than 28.00" (711 mm) in height, each equipped with a 6.00" (152 mm) retro-reflective white band no more than 4.00" (102 mm) from the top of the cone, and an additional 4.00" (102 mm) retro-reflective white band 2.00" (51 mm) below the 6.00" (152 mm) band. • Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities. • One (1) automatic external defibrillator (AED). • Four (4) ladder belts meeting the requirements of NFPA 1983, <i>Standard on Fire Service Life Safety Rope and System Components</i> (if equipped with an aerial device). • If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit the supply hose carried, shall be carried mounted in brackets fastened to the apparatus. 		

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	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> • If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side shall be carried. Any intake connection larger than 3.00" (75 mm) shall include a pressure relief device that meets the requirements of 16.6.6. • If the apparatus does not have a 2.50" National Hose (NH) intake, an adapter from 2.50" NH female to a pump intake shall be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake. • If the supply hose carried has other than 2.50" National Hose (NH) threads, adapters shall be carried to allow feeding the supply hose from a 2.50" NH thread male discharge and to allow the hose to connect to a 2.50" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake. <p><u>SOFT SUCTION HOSE PROVIDED BY FIRE DEPARTMENT</u></p> <p>NFPA 1901, 2016 edition, section 5.8.2.1 requires a minimum of 20' of suction hose or 15' of supply hose shall be carried.</p> <p>Hose is not on the apparatus as manufactured. The fire department shall provide suction or supply hose.</p> <p>- One (1)-6.00" National Standard hose thread barrel strainer, chrome plated</p> <p><u>DRY CHEMICAL EXTINGUISHER PROVIDED BY FIRE DEPARTMENT</u></p> <p>NFPA 1901, 2016 edition, section 5.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.</p> <p>The extinguisher is not on the apparatus as manufactured. The fire department shall provide and mount the extinguisher.</p> <p><u>WATER EXTINGUISHER PROVIDED BY FIRE DEPARTMENT</u></p> <p>NFPA 1901, 2016 edition, section 5.9.4 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.</p> <p>The extinguisher is not on the apparatus as manufactured. The fire department shall provide and mount the extinguisher.</p> <p><u>FLATHEAD AXE PROVIDED BY FIRE DEPARTMENT</u></p> <p>NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) flathead axe mounted in a bracket fastened to the apparatus.</p> <p>The axe is not on the apparatus as manufactured. The fire department shall provide and mount the axe.</p>		

	Bidder Complies	
	Yes	No
<p><u>PICKHEAD AXE PROVIDED BY FIRE DEPARTMENT</u></p> <p>NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) pickhead axe mounted in a bracket fastened to the apparatus.</p> <p>The axe is not on the apparatus as manufactured. The fire department shall provide and mount the axe.</p> <p><u>PAINT PROCESS</u></p> <p>The exterior custom cab and/or body painting procedure shall consist of a seven (7) step finishing process. A commercial chassis paint process shall follow similar processes as determined by the chassis manufacturer. The following procedure shall be used by the apparatus manufacturer:</p> <ol style="list-style-type: none"> 1. <u>Manual Surface Preparation</u> - All exposed metal surfaces on the custom cab and body shall be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces shall be removed and sanded to a smooth finish. Exterior seams shall be sealed before painting. Exterior surfaces that shall not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate. 2. <u>Chemical Cleaning and Pretreatment</u> - All surfaces shall be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces shall be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces shall be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion. A final pure water rinse shall be applied to all metal surfaces. 3. <u>Surfacer Primer</u> - The Surfacer Primer shall be applied to a chemically treated metal surface to provide a strong corrosion protective base coat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a critical aesthetic finish. The surfacer primer shall be a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded. 4. <u>Finish Sanding</u> - The surfacer primer shall be sanded with a fine grit abrasive to achieve an ultra-smooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat. 5. <u>Sealer Primer</u> - The sealer primer is applied prior to the base coat in all areas that have not been previously primed with the surfacer primer. The sealer primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when top coated. 6. <u>Base coat Paint</u> - Two coats of a high performance, two component high solids polyurethane base coat shall be applied. The Base coat shall be applied to a thickness 		

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	Bidder Complies	
	Yes	No
<p>that shall achieve the proper color match. The Base coat shall be used in conjunction with a urethane clear coat to provide protection from the environment.</p> <p>7. <u>Clear Coat</u> - Two (2) coats of clear coat shall be applied over the base coat color. The clear coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style doors shall be clear coated to match the body. Paint warranty for the roll-up doors shall be provided by the roll-up door manufacturer.</p> <p>Specifications are written to define cyclic corrosion testing, physical strengths, durability and minimum appearance requirements must be met in order for an exterior paint finish to be considered acceptable as a quality finish.</p> <p>Each batch of base coat color shall be checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again to make sure that it matches the color standard. Electronic color measuring equipment shall be used to compare the color sample to the color standard entered into the computer. Color specifications are used to determine the color match. A Delta E reading shall be used to determine a good color match within each family color.</p> <p>All removable items such as brackets, compartment doors, door hinges, and trim shall be removed and separately if required, to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly shall be finish painted before assembly.</p> <p><u>PAINT - ENVIRONMENTAL IMPACT</u></p> <p>Contractor shall meet or exceed 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:</p> <ul style="list-style-type: none"> • Topcoats and primers shall be chrome and lead free. • Metal treatment chemicals shall be chrome free. The wastewater generated in the metal treatment process shall be treated on-site to remove any other heavy metals. • Particulate emission collection from sanding operations shall have a 99.99% efficiency factor. • Particulate emissions from painting operations shall be collected by a dry filter or water wash process. If the dry filter is used, it shall have an efficiency rating of 98.00%. Water wash systems shall be 99.97% efficient • Water from water wash booths shall be reused. Solids shall be removed on a continual basis to keep the water clean. • Paint wastes shall be disposed of in an environmentally safe manner. • Empty metal paint containers shall be recycled to recover the metal. 		

	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> Solvents used in clean-up operations shall be recycled on-site or sent off-site for distillation and returned for reuse. <p>Additionally, the finished apparatus shall not be manufactured with or contain products that have ozone depleting substances. Contractor shall, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with the state EPA rules and regulations.</p> <p><u>PAINT</u></p> <p>The chassis and body shall be painted by the apparatus manufacturer to ensure a color match between the body and chassis cab. The apparatus shall be painted Ford F1 Race Red to match the Mini Pumper.</p> <p><u>COMMERCIAL CHASSIS REPAINT</u></p> <p>In order to assure a perfect match between the chassis cab and the rest of the apparatus, or to provide the specified color not typically available from a commercial chassis manufacturer, the chassis cab shall be repainted by the apparatus manufacturer.</p> <p>Since it is not practical to repaint certain areas of the cab such as the fire wall, radiator core support, or bottom of the cab, the best results shall be obtained by ordering the commercial chassis painted a neutral color.</p> <p><u>PAINT CHASSIS FRAME ASSEMBLY</u></p> <p>The chassis frame assembly shall be painted black by the chassis manufacturer. It shall remain the commercial grade finish as provided.</p> <p><u>COMPARTMENT INTERIOR FINISH</u></p> <p>The interior of the body compartments shall be left unpainted and have the natural finish.</p> <p><u>REFLECTIVE BAND</u></p> <p>A 6.00" white reflective band shall be provided across the front of the vehicle and along the sides of the body.</p> <p>The reflective vinyl band shall be provided across the front bumper.</p> <p><u>REAR CHEVRON STRIPING</u></p> <p>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.</p> <p>The colors shall be red and fluorescent yellow green diamond grade.</p> <p>Each stripe shall be 6.00" in width.</p>		

	Bidder Complies	
	Yes	No
<p>This shall meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface shall be covered with chevron striping.</p> <p><u>CAB DOORS REFLECTIVE STRIPE</u></p> <p>A white reflective stripe shall be provided on the interior of each cab door.</p> <p>This stripe shall be a minimum of 96.00 square inches and shall meet the NFPA 1901 requirement.</p> <p><u>LETTERING</u></p> <p>The lettering shall be totally encapsulated between two (2) layers of clear vinyl.</p> <p><u>LETTERING</u></p> <p>One hundred one (101) to one hundred twenty (120) genuine gold leaf lettering, 3.00" high, with outline and shade shall be provided.</p> <p><u>CD MANUAL, BODY PARTS ONLY</u></p> <p>A custom parts manuals for the factory installed parts only shall be provided in CD format with the completed unit.</p> <p>The manual shall contain the following:</p> <ul style="list-style-type: none"> - Job number - Part numbers with full descriptions - Table of contents - Parts section sorted in functional groups reflecting a major system, component, or assembly - Parts section sorted in Alphabetical order - Instructions on how to locate parts <p>The manual shall be specifically written for the body model being purchased. It shall not be a generic manual for a multitude of different bodies.</p> <p><u>SERVICE PARTS INTERNET SITE</u></p> <p>The service parts information included in this manual are also available on the factory website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.</p>		

	Bidder Complies	
	Yes	No
<p><u>MANUALS, SERVICE</u></p> <p>A CD format service manual supplement containing parts and service information on factory installed components shall be provided with the completed unit.</p> <p>The manual shall be specifically written for the unit being purchased. It shall not be a generic manual for a multitude of different units.</p> <p><u>MANUAL, CHASSIS OPERATION</u></p> <p>One (1) chassis operation (manufacturers standard) shall be provided with the completed unit.</p> <p><u>ONE (1) YEAR MATERIAL AND WORKMANSHIP</u></p> <p>Each new piece of apparatus shall be provided with a minimum one (1) year basic apparatus material and workmanship limited warranty. The warranty shall cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (No Exception).</p> <p><u>CHASSIS WARRANTY</u></p> <p>The chassis manufacturer shall provide a three (3) year or 100,000 mile warranty.</p> <p><u>TEN (10) YEAR PRO-RATED PAINT AND CORROSION</u></p> <p>Each new piece of apparatus shall be provided with a ten (10) year pro-rated paint and corrosion limited warranty on the apparatus cab. The warranty shall cover painted exterior surfaces of the body to be free from blistering, peeling, corrosion, or any other adhesion defect caused by defective manufacturing methods or paint material selection that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>CAMERA SYSTEM WARRANTY</u></p> <p>A fifty four (54) month warranty shall be provided for the camera system.</p> <p><u>COMPARTMENT LIGHT WARRANTY</u></p> <p>A ten (10) year material and workmanship limited warranty shall be provided for the 12 volt DC LED strip lights. The warranty shall cover the LED strip lights to be free from defects in material and workmanship that would arise under normal use.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p>		

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	Bidder Complies	
	Yes	No
<p><u>TRANSMISSION WARRANTY</u></p> <p>The transmission shall have a five (5) year/unlimited mileage warranty covering 100 percent parts and labor. The warranty to be provided by Allison Transmission and not apparatus builder.</p> <p><u>WATER TANK WARRANTY</u></p> <p>The UPF poly water tank shall be provided with a lifetime material and workmanship limited warranty.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>TEN (10) YEAR STRUCTURAL INTEGRITY</u></p> <p>Each new piece of apparatus shall be provided with a ten (10) year material and workmanship limited warranty on the apparatus body. The warranty shall cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY</u></p> <p>A Gortite roll-up door limited warranty shall be provided. The mechanical components of the roll-up door shall be warranted against defects in material and workmanship for the lifetime of the vehicle. A six (6) year limited warranty shall be provided on painted and satin roll up doors.</p> <p>A copy of the warranty certificate shall be submitted with the bid package.</p> <p><u>PUMP WARRANTY</u></p> <p>The Waterous pump shall be provided with a five (5) year material and workmanship limited warranty.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>TEN (10) YEAR PUMP PLUMBING WARRANTY</u></p> <p>The stainless steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system shall be warranted for a period of ten (10) years or 100,000 miles. This covers structural failures caused by defective design or workmanship, or perforation caused by corrosion, provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original purchaser for a period of ten years from the date of delivery.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p>		

	Bidder Complies	
	Yes	No
<p><u>TEN (10) YEAR PRO-RATED PAINT AND CORROSION</u></p> <p>Each new piece of apparatus shall be provided with a ten (10) year pro-rated paint and corrosion limited warranty on the apparatus body. The warranty shall cover painted exterior surfaces of the body to be free from blistering, peeling, corrosion, or any other adhesion defect caused by defective manufacturing methods or paint material selection that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>THREE (3) YEAR MATERIAL AND WORKMANSHIP</u></p> <p>The gold leaf lamination shall be provided with a three (3) year material and workmanship limited warranty. The warranty shall cover the gold leaf lamination as being free from defects in material and workmanship that would arise under normal use and service.</p> <p>A copy of the warranty certificate shall be submitted with the bid package (no exception).</p> <p><u>VEHICLE STABILITY CERTIFICATION</u></p> <p>The fire apparatus manufacturer shall provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification shall be provided at the time of bid.</p> <p><u>CAB INTEGRITY</u></p> <p>The cab has been tested to and passed the following standards:</p> <ul style="list-style-type: none"> - ECE Regulation No.29 - SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks. <p><u>AMP DRAW REPORT</u></p> <p>The bidder shall provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.</p> <p>The manufacturer of the apparatus shall provide the following:</p> <ul style="list-style-type: none"> • Documentation of the electrical system performance tests. • A written load analysis, which shall include the following: <ul style="list-style-type: none"> ○ The nameplate rating of the alternator. ○ The alternator rating under the conditions specified per: <ul style="list-style-type: none"> ▪ Applicable NFPA 1901 or 1906 (Current Edition). ○ The minimum continuous load of each component that is specified per: <ul style="list-style-type: none"> ▪ Applicable NFPA 1901 or 1906 (Current Edition). 		

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	Bidder Complies	
	Yes	No
<ul style="list-style-type: none"> ○ Additional loads that, when added to the minimum continuous load, determine the total connected load. ○ Each individual intermittent load. <p>All of the above listed items shall be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).</p>		

Bidder Complies	
Yes	No
<div>EXHIBIT “A” EXCEPTIONS TO RFP</div>	

		Bidder Complies	
		Yes	No
<div>EXHIBIT “B”</div> <div>MANUFACTURER HISTORY</div>			

Bidder Complies	
Yes	No
<div>EXHIBIT “C” REFERENCES</div>	

Bidder Complies	
Yes	No

EXHIBIT “D”

DEALER AUTHORIZATION

[illegible]

EXHIBIT “E”

BUSINESS LICENSES

Bidder Complies	
Yes	No
<div><div><div><div><div><div>EXHIBIT “F”</div><div>EXCESS LIABILITY INSURANCE</div></div></div></div></div></div>	

Bidder Complies	
Yes	No

EXHIBIT “G”

BANKRUPTCY

Bidder Complies	
Yes	No

EXHIBIT “H”

SURETY (BID BOND)