



Department of Administrative Services
Purchasing and Contracts Division

**CONFIRMATION FORM
for
RECEIPT OF BID NO. 603599-15**

If you are interested in this invitation, immediately upon receipt please fax this confirmation form to the fax number provided at the bottom of this page.

Failure to do so means you are not interested in the project and do not want any associated addenda mailed to you.

SUPPLIER ACKNOWLEDGES RECEIVING THE FOLLOWING BID DOCUMENT:

PROJECT NO. BID NO. 603599-15 BID PAGES: 59
DESCRIPTION: CURRENT PRODUCTION MODEL WATER TENDER TANKER

SUPPLIER MUST COMPLETE THE FOLLOWING INFORMATION:

Company Name: _____

Company Address: _____

City / State / Zip: _____

Name / Title: _____

Area Code/Phone Number: _____

Area Code/Fax Number: _____

Email Address: _____

Please indicate the method you used to obtain this Bid Document:

_____ Internet _____ Plan Room

**FAX THIS CONFIRMATION FORM TO: (702) 386-4914
TYPE or PRINT CLEARLY**

CLARK COUNTY, NEVADA

INVITATION TO BID

BID NO. 603599-15 CURRENT PRODUCTION MODEL WATER TENDER TANKER

The bid package is available as follows:

- Internet – Visit the Clark County Purchasing and Contracts Division website at <http://www.ClarkCountyNV.gov/Purchasing>. Click on “Current Opportunities” and locate Document No. 603599 in the list of current solicitations.
- Mail – Please fax a request to (702) 386-4914 specifying project number and description. Be sure to include company address, phone and fax numbers.
- Pick up - Clark County Government Center, 500 South Grand Central Parkway, Purchasing and Contracts Division, Fourth Floor, Las Vegas, NV 89106.

A Pre-bid Conference will be held on **March 6, 2015** at **9:00 a.m.**, at the Clark County Government Center, 500 South Grand Central Parkway, Purchasing and Contracts Division, Fourth Floor, Las Vegas, Nevada 89106. If your firm is unfamiliar with the County Bid Submittal procedures and would like to obtain training on the submittal process for this Bid, please contact Sandra Mendoza, Purchasing Analyst II, at (702) 455-4184 no later than **THURSDAY, MARCH 5, 2015**, and a training session will be provided immediately following the pre-bid conference referenced above.

Bids will be accepted at the Clark County Government Center address specified above, on or before **MARCH 13, 2015** at **3:00:00 p.m.** based on the time clock at the Clark County Purchasing and Contracts front desk.

PLEASE PUBLISH THE INFORMATION PROVIDED ABOVE THE LINE.

PUBLISHED:
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I – INSTRUCTION TO BIDDERS

BID NO. 603599-15 CURRENT PRODUCTION MODEL WATER TENDER TANKER

1. INTENT OF INVITATION

In accordance with the terms and conditions provided in this bid document, it is the intent of this formal Invitation to Bid to receive bids from qualified Bidders for the items specified in this document.

2. DEFINITIONS

- A. **Addendum:** A written document issued by COUNTY, via the Purchasing and Contracts Division, prior to the submission of bids which modifies or clarifies the Bidding Documents by additions, deletions, clarifications, or corrections.
- B. **BCC:** The Clark County Board of County Commissioners.
- C. **Bid (Bidder):** An offer, in response to a solicitation by COUNTY, to supply goods or services at a specific price and within a specified time period.
- D. **Bid (COUNTY):** A competitive solicitation by COUNTY to procure goods or services in accordance with Nevada Revised Statutes (NRS) 332.
- E. **Bid Form:** Standard printed form given to Bidders that must be completed and submitted back to COUNTY with the required information for evaluation of the bid, in correct format and sequence. Bid pages are identified herein as "Bid Form" and contain a black line in the right margin.
- F. **Bid Submittal:** Bid Form pages, Bid Security (if required), and all required attachments.
- G. **Bidder(s):** A supplier who submits a bid to COUNTY.
- H. **Bidding Documents:** May include but are not limited to, the Invitation to Bid, Instructions to Bidders, General Conditions, Special Conditions, Technical Specifications, Contract Requirements and Forms, Bid Forms/Attachments, Exhibits, Specifications/Special Provisions and Drawings, and any Addenda issued prior to the date designated for receipt of bids, as applicable.
- I. **CONTRACT:** Contract documents include the Bidding Documents, SUCCESSFUL BIDDER'S Bid Form, all Addenda, SUCCESSFUL BIDDER'S bonds and insurance and Notice of Award letter.
- J. **COUNTY:** The term used throughout these documents to mean County of Clark, Nevada.
- K. **F.O.B. Destination:** Designates the seller will pay shipping cost and remain responsible for the goods until the buyer takes possession.
- L. **Governing Body:** Used throughout these documents to mean the Clark County Board of Commissioners.
- M. **Nevada Revised Statutes (NRS):** The current codified laws of the State of Nevada. Nevada law consists of the Constitution of Nevada (the state constitution) and Nevada Revised Statutes. The Nevada Supreme Court interprets the law and constitution of Nevada.
- N. **No Substitute:** Means there is only one brand name product that is acceptable to perform the function required by the using department.
- O. **Purchasing Manager:** The Clark County Purchasing Manager or their designee responsible for the Purchasing and Contracts Division.
- P. **Purchase Order:** The formal authorization by COUNTY for seller to provide goods or services to COUNTY. The formal CONTRACT takes precedence over any conflicting terms and conditions contained in the purchase order.
- Q. **SUCCESSFUL BIDDER:** Bidder who is the lowest responsive, responsible or best Bidder, to whom the Governing Body or the authorized representative has authorized the award of the CONTRACT.

3. DESIGNATED CONTACTS

For questions pertaining to this Invitation to Bid, please call Sandra Mendoza, Purchasing Analyst II, telephone number (702) 455-4184 or the Purchasing and Contracts Front Desk at (702) 455-2897. After award, the designated contact will be Riccardo Terzo, Supervisor, Clark County Fire Department, telephone number (702) 455-7704.

4. CONTACT WITH COUNTY DURING BIDDING PROCESS

Communication between a Bidder and a member of the BCC, or between a Bidder and a non-designated COUNTY contact, regarding this bid is prohibited from the time the bid is advertised until the bid is recommended for award of a contract. Questions pertaining to this Invitation to Bid shall be addressed to the designated contact(s) specified above. Failure of a Bidder, or any of its representatives, to comply with this paragraph may result in its bid being rejected.

5. PREBID CONFERENCE

A pre-bid conference is being held for this bid. The intent of the pre-bid conference is to review the entire bid document and answer any questions Bidders may have.

6. ADDENDA AND INTERPRETATIONS

- A. If it becomes necessary to revise any part of this bid, a written Addendum will be issued by COUNTY. COUNTY shall not be bound by any oral representations, clarifications, or changes made in the written requirements or specifications by COUNTY'S employees, unless such clarification or change is provided by COUNTY in written addendum form from the Purchasing and Contracts Division.
- B. Bidder(s) shall take no advantage of any apparent error or omission in the Bidding Documents. In the event Bidder(s) discover such an error or omission, they shall immediately notify COUNTY. COUNTY will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Bidding Documents through the issuance of an Addendum.
- C. Addenda shall be available via mail, certified mail, fax, online or pick up by all prospective Bidders.
- D. Prior to submission of the bid, Bidder shall ascertain that it has received all Addenda issued. Bidder shall acknowledge receipt of each Addendum by completing the acknowledgement space provided on the Bid Form. Failure to acknowledge receipt of all addenda and use the correct bid form as required may result in rejection of bid.

7. DOCUMENT REVIEW

Bidders may visit the Purchasing and Contracts Division, during normal business hours, to review any current bid documents. This information is available for review provided the contents of the document have not been deemed confidential or proprietary as defined in the "Public Records" clause in the General Conditions section of this bid. Bids submitted in response to this invitation to bid may be reviewed after the formal bid opening has been completed. To review bid documents, an appointment must be made in advance to ensure that full consideration will be provided. Please call telephone number (702) 455-2897 and request the Purchasing Front Desk to schedule your appointment.

8. PREPARATION OF FORMS

All bids must be submitted on the Bid Form provided in this document. **All figures must be written in ink or typed.** Figures written in pencil or containing erasures are not acceptable and may be rejected. However, mistakes may be crossed out and corrections may be inserted adjacent thereto and initialed in ink by the person signing the bid form.

In the event there are unit price bid items provided in the Bid Form, and the total indicated for a unit price bid item does not equal the product of the unit price and quantity, the unit price shall govern and the total will be corrected accordingly. Mathematical errors in the Bid shall be corrected by COUNTY. If there is no cost for a unit price, the Bidder **MUST** enter "0" or write the words "NO COST."

9. BID DOCUMENTS NECESSARY FOR SUBMITTAL

Bid Form, all required attachments, and the bid security (if required) shall be included in the envelope containing the bid. These documents, together, comprise a bid. Omission of, or failure to complete, any portion of the required documents at the time of bid opening may be cause to reject the entire bid.

10. SUBCONTRACTOR INFORMATION

Bidders should submit with their bids a list of the Minority-Owned Business Enterprise (MBE), Women-Owned Business Enterprise (WBE), Physically-Challenged Business Enterprise (PBE), Small Business Enterprise (SBE) Veteran Business Enterprise (VET), Disabled Veteran Business Enterprise (DVET), and Emerging Small Business Enterprise (ESB) subcontractors for CONTRACT utilizing **Attachment 1**. The information provided in **Attachment 1** by Bidder is for COUNTY'S information only.

If there are any questions regarding **Attachment 1**, please contact Adleen Stidhum at telephone number (702) 455-7155.

11. DESCRIPTIVE LITERATURE

Bidder may be requested to provide the latest printed specifications and advertising literature on the product(s) offered on its Bid Form.

12. PRODUCTS

New Product:

SUCCESSFUL BIDDER shall guarantee that the product provided to COUNTY shall be new, and of the latest and most improved model of current production, and shall be of first quality as to workmanship and materials used in said units.

A new product is defined as a product that is made up completely of unused, genuine, original parts. The product shall not have been operated for any purpose other than routine operational testing. A demonstrator product does not meet this definition and is not acceptable.

13. BRAND NAMES "OR EQUAL"

Whenever, in this Invitation to Bid, any particular materials, process, or equipment are indicated or specified by patent, proprietary or brand name, or by name of manufacturer, such wording will be deemed to be used for the purpose of facilitating description of the material, process, or equipment desired and will be deemed to be followed by the words, "or equal." Proof satisfactory to COUNTY must be provided by SUCCESSFUL BIDDER to show that the alternative product is, in fact, equal to the product required in the specifications.

14. SUBSTITUTIONS

Specifications are intended to show kind and quality required, and are not intended to be restrictive. **Additional bids that are equal to, or exceed the requirements stated in this document are invited.** Bidders desiring to submit more than one bid for items other than those specified shall observe the following procedure:

- A. Submit with the bid complete manufacturer's brochures of the actual items being offered, including pictures or dimensional drawings.
- B. Proof, satisfactory to COUNTY, must be provided by Bidder to show that the product is equal to, or exceeds the bid specifications in design and performance.
- C. Equivalent items may be subject to performance testing.

15. ORDER QUANTITIES AND UNIT PRICING

Unit pricing for the items listed in this bid shall be reflective of the unit of measure of "each." This bid expressly prohibits "minimum order quantity" practices. All invoices shall reflect the pricing for the exact quantities received.

16. DISCOUNT TERMS OF PAYMENT

Terms of payment, as listed on the Bid Form, shall be defined as the amount of discount offered by Bidder to COUNTY if payment is made within a specified time frame.

Examples:

Terms of Payment: 2%, Net thirty (30) Calendar Days.

A 2% payment discount will be deducted from the purchase price if the invoice is paid within thirty (30) calendar days of receipt of invoice or delivery of an acceptable product or service, whichever is later.

Terms of Payment: 0%, Net thirty (30) Calendar Days.

No payment discount is offered and payment is due within thirty (30) calendar days of receipt of invoice or delivery of an acceptable product or service, whichever is later.

No prompt payment discount will be considered by COUNTY in the bid evaluation process unless the discount period offered by Bidder is thirty (30) calendar days or more.

17. ADDITIONAL BIDS

Bidders may submit more than one bid as long as all such bids comply with, or exceed, the bid terms, conditions and specifications.

18. DEVIATIONS TO TERMS AND CONDITIONS OR SPECIFICATIONS

Any additional agreements, terms, conditions, or exceptions to the bid requirements or specifications that are submitted with Bidder's Bid Form may be considered substantial deviations from the bid requirements and be cause for rejection.

19. DURATION OF OFFER

All offers (bids) submitted in association with this Invitation to Bid shall be considered firm offers for a period of ninety (90) calendar days after the date of bid opening in order to allow COUNTY to evaluate and consider award, unless the offer is further extended in writing and agreed upon by both parties.

20. DEVIATIONS TO TECHNICAL SPECIFICATIONS

Any deviation taken at the time of or after bid submittal may render the bid non-responsive. If a Bidder is unable to meet the Technical Specifications, Bidder **MUST** complete the attached **Exhibit A** and submit it to the Purchasing Analyst at least five (5) business days prior to the scheduled **PRE-BID CONFERENCE**. It shall be the sole responsibility of the Bidder to ensure that the Purchasing Analyst has been properly notified, **PRIOR TO THE PRE-BID CONFERENCE** of the Bidder's deviation to the Technical Specifications.

21. BIDDER'S REPRESENTATION

Each Bidder by submitting their Bid represents that:

- A. Bidder has read and understands the Bidding Documents and asserts that its bid is made in accordance therewith and shall be considered a firm offer for a period of ninety (90) calendar days following the opening of bids. The Bidder's offer may expire at the end of the ninety (90) calendar day period.
- B. Bidder is familiar with the local conditions under which the work is to be performed.
- C. **Prior to submission of the bid, Bidder shall ascertain that it has received all Addenda issued; Bidder shall acknowledge receipt of each Addendum by completing the acknowledgment space provided on the Bid Form. Failure to acknowledge receipt of all addenda and use the correct bid form as required may result in rejection of bid.**

22. SUBMISSION OF BIDS

All bids must be submitted in a sealed envelope plainly marked with the name and address of Bidder and the bid number and title. Bidders are requested to submit one (1) original and one (1) copy of the Bid Form and one (1) copy of all requested attachments unless otherwise specified. No responsibility will attach to COUNTY, or any official or employee thereof, for the pre-opening of, post opening of, or the failure to open a bid not properly addressed and identified. Bids are time-stamped upon receipt. Bids time-stamped after 3:00:00 p.m. based on the time clock at the Clark County Purchasing and Contracts front desk will be recorded as late, remain unopened and be formally rejected. **FAXED OR ELECTRONICALLY SUBMITTED BIDS ARE NOT ALLOWED AND WILL NOT BE CONSIDERED.**

The following are detailed delivery/mailing instructions for bids:

<u>HAND DELIVERY</u>	<u>U.S. MAIL DELIVERY</u>	<u>EXPRESS DELIVERY</u>
Clark County Government Center Purchasing and Contracts Division, 4th Floor 500 South Grand Central Parkway Las Vegas, Nevada 89106	Clark County Government Center Attn: Purchasing and Contracts, 4th Floor 500 South Grand Central Parkway P.O. Box 551217 Las Vegas, Nevada 89155-1217	Clark County Government Center Attn: Purchasing and Contracts, 4th Floor 500 South Grand Central Parkway Las Vegas, Nevada 89106

Regardless of the method used for delivery, Bidder shall be wholly responsible for the timely delivery of its bid. Overnight Mail must use the EXPRESS DELIVERY instructions.

Any bids submitted via a third party courier must be sealed in a separate envelope from courier's packaging to allow for proper recording of receipt.

Bidders and other interested parties are invited to attend the bid opening.

23. COST TO PREPARE AND SUBMIT RESPONSE

All costs incurred in the preparation and submission of responses to this Invitation to Bid shall be the responsibility of the Bidder.

24. WITHDRAWAL OF BID

A. Before Bid Opening

Bidders may request withdrawal of a posted, sealed bid prior to the scheduled bid opening time, provided the request for withdrawal is submitted to the Purchasing Analyst in writing, or a bid release form has been properly completed and submitted to the Purchasing and Contracts Division reception desk. Withdrawn bids must be re-submitted and time-stamped in accordance with this bid document in order to be accepted.

B. After the Bid Opening

All responsive and responsible bids received are considered firm offers for a period of ninety (90) calendar days. Bidder's offer will expire after ninety (90) calendar days unless the offer is further extended in writing by Bidder and agreed upon by both parties. If Bidder intended for award requests that its bid be withdrawn, that Bidder may be deemed non-responsible if responding to future invitations to bid or may be required to forfeit its bid bond (if applicable).

25. LOWEST RESPONSIVE AND RESPONSIBLE BIDDER

All bids will be awarded to the lowest responsive and responsible Bidder. The determination of the lowest responsive and responsible Bidder may be judged on all or some of the following factors: price, conformity to specifications, facilities and equipment, availability of repair parts, experience, terms of payment, qualifications, past performance, performance or delivery dates, quality and utility of services, supplies, materials or equipment offered and the adaptability of those services, supplies, materials or equipment to the required purpose of CONTRACT, and other objective and accountable factors which are reasonable. COUNTY has the option to accept additional promotional specials, discounts or trade-in allowances offered by SUCCESSFUL BIDDER during the term of CONTRACT but these offers will not be part of the determination for award of this bid unless otherwise specified.

In accordance with NRS 332.065.3, COUNTY may re-award CONTRACT if SUCCESSFUL BIDDER is found to be in breach of contract. Re-awarding the CONTRACT by COUNTY is not a waiver of any liability of the initial Bidder awarded CONTRACT.

26. REJECTION OF BID

COUNTY reserves the right to reject any and all bids received by reason of this request. COUNTY reserves the right to waive any minor informality or irregularity.

27. DISQUALIFICATION OF BIDDERS

Bidders may be disqualified and their bids may be rejected for any of, but not limited to, the following causes:

- A. Failure to use the specified Bid Form furnished by COUNTY.
- B. Lack of signature by an authorized representative.
- C. Failure to properly complete the Bid Form.
- D. Evidence of collusion among Bidders.
- E. Unauthorized alteration to content of the Bid Form.
- F. Failure to acknowledge all addenda issued.

28. TIE-BIDS

A tie-bid is defined as an instance where bids are received from two (2) or more Bidders who are the low Bidders, and their offers are identical. Bids must be identical in all evaluation areas; e.g., price, quality, delivery, terms, and ability to supply, etc. If any of these areas are not identical, it is not considered a tie-bid, and COUNTY can justify awarding to Bidder with the lowest responsive and responsible bid.

The procedure for tie-bids is to hold a public drawing and award the bid to the winner of the draw in accordance with the Method of Award clause in the Instruction to Bidders. When a drawing is necessary, Bidder(s) involved will be contacted with the time and place of the drawing. Attendance is not mandatory for the drawing. An impartial witness will be present at the drawing.

29. NOTIFICATION OF INTENT TO AWARD

COUNTY will issue to all Bidders a formal letter of "Notification of Intent to Award." This notice will confirm COUNTY'S determination of the lowest responsive and responsible Bidder.

30. PROTESTS

- A. Any Bidder who submits a bid and is allegedly aggrieved in connection with this solicitation or award of CONTRACT may protest. The letter of protest must, at a minimum, contain a written statement setting forth with specificity the reasons the person filing the notice believes that the applicable provisions of the law were violated and be accompanied by required bond. The protest must be submitted in writing to the Purchasing Analyst, within five (5) business days after COUNTY issued a "Notification of Intent to Award" letter. If a written protest is received within the time frame specified and is not resolved by mutual agreement, the Purchasing Analyst will issue a decision in writing to the protestor. Within three (3) business days of receipt of the decision, a protestor MUST submit to the Purchasing Manager its written notice of intent to appeal the decision to the BCC. The Purchasing Manager or their designee will notify the protestor of the date they may appear to present their appeal to the BCC. Protestor MUST submit to the Purchasing Manager fifteen (15) copies of any documents protestor intends to present to the BCC and all documents MUST be submitted ten (10) calendar days prior to the BCC meeting. The decision of the BCC will be final. The BCC is not required to consider protests unless this procedure is followed.
- B. Bidder filing the protest shall be required, to post a bond with a good and solvent surety authorized to do business in this state, or submit other security, defined as a cashiers check, money order or certified check, to COUNTY who shall hold the bond or other security until a determination is made on the protest. A bond posted or other security submitted with the protest must be in an amount equal to the lesser of:
 - (1) 25% of the total value of the bid submitted by Bidder filing the notice of protest; or
 - (2) \$250,000
- C. The notice of protest filed in accordance with the provisions of this section operates as a stay of action in relation to the awarding of CONTRACT until the BCC makes a determination on the protest.
- D. A Bidder who submits an unsuccessful bid may not seek any type of judicial intervention until the BCC has made a determination on the protest and awards CONTRACT.
- E. Neither the BCC nor its authorized representative is liable for any costs, expenses, attorney's fees, loss of income or other damages sustained by a Bidder who submits a bid, whether or not the person files the protest pursuant to this section.
- F. If the protest is upheld by the BCC, the bond posted or other security submitted with the notice of protest must be returned to Bidder who posted the bond or submitted the security. If the protest is rejected by the BCC, COUNTY may make a claim against the bond or other security in an equal amount to the expenses incurred by COUNTY because of the unsuccessful protest. Any money remaining after the claim has been satisfied must be returned to the person who posted the bond or submitted the security.

31. METHOD OF AWARD

Award will be made to the lowest responsive and responsible Bidder on a grand total basis, contingent upon the submission of all requested documents within the timelines specified, unless an extension is approved by COUNTY.

32. LETTER OF AWARD

Award of this bid will be by "Letter of Award" issued by the Purchasing and Contracts Division. CONTRACT shall include this Bid Document, any associated Addendums, and the Bid Form as signed by SUCCESSFUL BIDDER.

33. INITIAL TERM

This is a one (1) time purchase.

34. ADDITIONAL REQUIREMENTS

Although particular COUNTY departments may be identified in the solicitation, unless otherwise documented in CONTRACT, other COUNTY departments may utilize the resulting CONTRACT upon approval by COUNTY Purchasing and Contracts Division. Each COUNTY Department or Division will issue a separate identifying Purchase Order.

35. STATE OF NEVADA LEGAL HOLIDAYS

SUCCESSFUL BIDDER is advised that below there are ten (10) firm legal holidays and eleven (11) when December 31st falls on Friday.

- Martin Luther King's Birthday
- Presidents' Day
- Memorial Day
- Independence Day
- Labor Day
- Nevada Admission Day
- Veteran's Day
- Thanksgiving Day and the Friday After
- Christmas Day
- New Year's Day

SUCCESSFUL BIDDER is required to verify dates with COUNTY'S representative prior to the commencement of work.

II -GENERAL CONDITIONS

BID NO. 603599-15

CURRENT PRODUCTION MODEL WATER TENDER TANKER

1. ASSIGNMENT OF CONTRACTUAL RIGHTS

SUCCESSFUL BIDDER will not assign, transfer, convey or otherwise dispose of CONTRACT or its right, title, or interest in, or to the same, or any part thereof, without previous written consent of COUNTY and any sureties.

2. AUDITS

The performance of CONTRACT by SUCCESSFUL BIDDER is subject to review by COUNTY to insure CONTRACT compliance. SUCCESSFUL BIDDER agrees to provide COUNTY any and all information requested that relates to the performance of CONTRACT. All requests for information will be in writing to SUCCESSFUL BIDDER. Time is of the essence during the audit process. Failure to provide the information requested within the timeline provided in the written information request may be considered a material breach of contract and be cause for suspension or termination of CONTRACT.

3. AUTHORITY

COUNTY is bound only by COUNTY agents acting within the actual scope of their authority. COUNTY is not bound by actions of one who has apparent authority to act for COUNTY. The acts of COUNTY agents which exceed their contracting authority do not bind COUNTY.

4. BIDS ARE NOT TO CONTAIN CONFIDENTIAL / PROPRIETARY INFORMATION

Bids must contain sufficient information to be evaluated without reference to any confidential or proprietary information. In accordance with NRS 239.010, Bidders shall not include any information in their bid that they would not want to be released to the public. Any bid submitted that is marked "Confidential" or "Proprietary," or that contains materials so marked, may be returned to Bidder and may not be considered for award.

5. CLARK COUNTY'S PROPERTY

All property owned by COUNTY and furnished to SUCCESSFUL BIDDER for the purpose of performance under this Bid will be identified and marked as COUNTY'S property and adequately insured by SUCCESSFUL BIDDER for COUNTY'S protection. In the event that COUNTY'S property becomes lost or damaged to any extent while in SUCCESSFUL BIDDER'S possession from any cause, including faulty workmanship or negligent acts by SUCCESSFUL BIDDER, its agents or its employees, SUCCESSFUL BIDDER agrees to replace such property or reimburse COUNTY for the value or expense of replacement, whichever is greater, in accordance with COUNTY request.

6. COLLECTION AND PAYMENT OF SALES TAX

In accordance with NRS 372.123, any Bidder that sells tangible personal property to any commercial business in the State of Nevada is required to possess a Nevada Sales Tax Permit and shall collect and pay the taxes as defined in NRS Chapters 372 and 374. Permit information can be obtained by contacting the Nevada State Department of Taxation at (702) 486-2300.

7. COLLUSION AND ADVANCE DISCLOSURES

Pursuant to NRS 332.820 evidence of agreement or collusion among Bidders and prospective Bidders acting to illegally restrain freedom of competition by agreement to bid a fixed price, or otherwise, shall render the bids of such Bidders void.

Advance disclosures of any information to any particular Bidder which gives that particular Bidder any advantage over any other interested Bidders, in advance of the bid opening, whether in response to advertising or an informal request for bids, made or permitted by a member of the governing body or an employee or representative thereof, shall operate to void all bids received in response to that particular request for bids.

8. CONSUMPTION ESTIMATES

The quantities appearing in the Bid Form are approximate only and are prepared for the solicitation of bids. Payment to SUCCESSFUL BIDDER will be made only for the actual quantities of items furnished in accordance with the bid and it is understood that the scheduled quantities of items to be furnished may be increased, decreased or omitted without, in any way, invalidating bid prices.

9. CONTRACT AMENDMENTS

Notwithstanding any provision herein to the contrary, and pursuant to NRS 104.2306, and recognizing the constraints inherent in public bidding, COUNTY reserves the right to request modification at any time to the scope, frequency, estimated quantities or the timing of SUCCESSFUL BIDDER'S obligations under CONTRACT, in whatever manner COUNTY determines, in good faith, to be reasonably necessary and to be in the best interests of the public. Both parties agree that, should any modifications to CONTRACT be made during CONTRACT term, a written amendment detailing those elements shall be executed by SUCCESSFUL BIDDER and the BCC or their authorized representative.

10. DISCLOSURE OF OWNERSHIP / PRINCIPALS

Any Bidder recommended for award of CONTRACT by the Board of County Commissioners is required to provide the information on the attached "Disclosure of Ownership/Principals" form. The form shall be submitted to COUNTY within twenty-four (24) hours after request. Failure to fill out the subject form by Bidders shall be cause for rejection of the bid.

11. DRUG-FREE WORKPLACE

SUCCESSFUL BIDDER agrees to comply with all applicable state and federal laws regarding a drug-free workplace. SUCCESSFUL BIDDER shall make a good faith effort to ensure that all of its employees, while working on COUNTY property, will not purchase, use, be under the influence of, or possess illegal drugs or alcohol or abuse prescription drugs in any way.

12. EMPLOYMENT OF UNAUTHORIZED ALIENS

In accordance with the Immigration Reform and Control Act of 1986, SUCCESSFUL BIDDER agrees that it will not employ unauthorized aliens in the performance of CONTRACT.

13. FEDERAL, STATE, LOCAL LAWS

All Bidders shall comply with all Federal, State and local laws relative to conducting business in Clark County. The laws of the State of Nevada will govern as to the interpretation, validity, and effect of this bid, its award, and any contract entered into.

14. FISCAL FUNDING OUT

COUNTY reasonably believes that funds can be obtained sufficiently to make all payments during the term of CONTRACT. If COUNTY does not allocate funds to continue the purchase of the product or service, in accordance with NRS 354.626, CONTRACT shall be terminated when appropriated funds expire.

15. FORCE MAJEURE

SUCCESSFUL BIDDER shall be excused from performance hereunder during the time and to the extent that it is prevented from obtaining, delivering, or performing, by acts of God, fire, war, loss or shortage of transportation facilities, lockout or commandeering of raw materials, products, plants or facilities by the government. SUCCESSFUL BIDDER shall provide COUNTY satisfactory evidence that nonperformance is due to cause other than fault or negligence on its part.

16. GOVERNING LAW/VENUE OF ACTION

CONTRACT shall be construed and enforced in accordance with the laws of the State of Nevada. Any action at law or other judicial proceeding for the enforcement of any provision shall be instituted in the County of Clark, State of Nevada.

17. GOVERNING ORDER OF BIDDING AND CONTRACT DOCUMENTS

The bidding and CONTRACT documents include various divisions, sections, and conditions which are essential parts for the work to be provided by SUCCESSFUL BIDDER. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for complete work. In case of discrepancy, the following precedence will govern:

- A. Amendment
- B. General Conditions
- C. Addenda
- D. Instructions to Bidders
- E. Federal Requirements (If Applicable)
- F. Special Conditions
- G. Technical Specifications

18. INDEMNITY

SUCCESSFUL BIDDER agrees, by entering into CONTRACT, regardless of the coverage provided by any insurance policy, to pay all costs necessary to indemnify, defend, and hold COUNTY harmless from any and all claims, demands, actions, attorney's fees, costs, and expenses based upon or arising out of any acts, errors, omissions, fault or negligence of SUCCESSFUL BIDDER or its principals, employees, subcontractors or other agents while performing services under CONTRACT. SUCCESSFUL BIDDER shall indemnify, defend, and hold harmless COUNTY for any attorney's fees or other costs of defense, even if the allegations of the claim are groundless, false or fraudulent.

19. INVOICING

Invoicing for bid items are to be sent to the location as identified in the purchase order(s). Invoices are to be sent within thirty (30) calendar days of the delivery of the product or completion of the work. Payment of invoices will be made within thirty (30) calendar days, unless otherwise specified, after receipt of an accurate invoice that has been reviewed and approved by the applicable department's authorized representative. In accordance with NRS 244.250 COUNTY shall not provide payment on any invoice SUCCESSFUL BIDDER submits after six (6) months from the date SUCCESSFUL BIDDER provides goods, performs services, or provides deliverables or milestones.

All invoices should include the following information:

- A. Company Name
- B. Complete Address (including street, city, state, and zip code)
- C. Telephone Number
- D. Contact Person
- E. Itemized description of products delivered (including quantities) or services rendered (including dates)
- F. Clark County Purchase Order Number
- G. Company's Tax Identification Number
- H. Bid Number
- I. Itemized pricing and total amount due (excluding Sales and Use Tax)
- J. Percentage Discounts/ Payment Terms (if offered)
- K. Company's Invoice Number
- L. Clark County Work Order Number(s)

SUCCESSFUL BIDDER is responsible to insure that all invoices submitted for payment are in strict accordance with the price(s) offered on the Bid Form. If overcharges are found, COUNTY may declare SUCCESSFUL BIDDER in breach of contract, terminate CONTRACT, and designate SUCCESSFUL BIDDER as non-responsible if responding to future invitations to bid.

20. INVOICE AUDITS

SUCCESSFUL BIDDER shall provide to COUNTY, within ten (10) business days of COUNTY'S request, a report to validate that the price(s) charged are in accordance with the price(s) offered on SUCCESSFUL BIDDER'S Bid Form. The format of the report will depend on the pricing structure provided on the Bid Form. The report shall be subject to review and approval by COUNTY'S using department(s) and Internal Audit Department. Discrepancies found in the report will require SUCCESSFUL BIDDER to update the report no later than five (5) business days after notification by COUNTY. In the event that SUCCESSFUL BIDDER undercharged COUNTY, COUNTY shall reimburse SUCCESSFUL BIDDER within ten (10) business days. In the event that SUCCESSFUL BIDDER overcharged COUNTY, SUCCESSFUL BIDDER shall reimburse COUNTY within ten (10) business days. If overcharges are found, COUNTY may declare SUCCESSFUL BIDDER in breach of contract, terminate CONTRACT, and designate SUCCESSFUL BIDDER as non-responsible if responding to future invitations to bid.

21. NON-DISCRIMINATION

The BCC is committed to promoting full and equal business opportunity for all persons doing business in Clark County. SUCCESSFUL BIDDER acknowledges that COUNTY has an obligation to ensure that public funds are not used to subsidize private discrimination. SUCCESSFUL BIDDER recognizes that if they or their subcontractors are found guilty by an appropriate authority of refusing to hire or do business with an individual or company due to reasons of race, color, religion, sex, sexual orientation, gender identity or expression, age, disability, national origin, or any other protected status, COUNTY may declare SUCCESSFUL BIDDER in breach of contract, terminate CONTRACT, and designate SUCCESSFUL BIDDER as non-responsible.

22. NON-ENDORSEMENT

As a result of the selection of SUCCESSFUL BIDDER to supply goods or services, COUNTY is neither endorsing nor suggesting that SUCCESSFUL BIDDER'S service is the best or only solution. SUCCESSFUL BIDDER agrees to make no reference to COUNTY in any literature, promotional material, brochures, sales presentations, or the like, without the express written consent of COUNTY.

23. OUT OF STATE SUPPLIERS

Out of state suppliers shall accept collect calls or provide a toll free telephone number for the placement of orders.

24. PARTIAL PAYMENTS

Partial payment requests will be accepted only at the sole discretion of COUNTY.

25. PATENT INDEMNITY

A. SUCCESSFUL BIDDER hereby indemnifies and shall defend and hold harmless COUNTY, its officers, employees, agents, its officers, and employees, respectively, from and against all claims, losses, costs, damages, and expenses, including attorney's fees, incurred by COUNTY, respectively, as a result of or in connection with any claims or actions based upon infringement or alleged infringement of any patent and arising out of the use of the equipment or materials furnished under CONTRACT by SUCCESSFUL BIDDER, or out of the processes or actions employed by, or on behalf of SUCCESSFUL BIDDER in connection with the performance of CONTRACT. SUCCESSFUL BIDDER shall, at its sole expense, promptly defend against any such claim or action unless directed otherwise by COUNTY; provided that COUNTY or its construction manager shall have notified SUCCESSFUL BIDDER upon becoming aware of such claims or actions, and provided further that SUCCESSFUL BIDDER'S aforementioned obligations shall not apply to equipment, materials, or processes furnished or specified by COUNTY.

B. SUCCESSFUL BIDDER shall have the right, in order to avoid such claims or actions, to substitute at its expense non infringing equipment, materials, or processes, or to modify such infringing equipment, materials and processes so they become non infringing, or obtain the necessary licenses to use the infringing equipment, material or processes, provided that such substituted and modified equipment, materials and processes shall meet all the requirements and be subject to all the provisions of CONTRACT.

26. PUBLIC RECORDS

COUNTY is a public agency as defined by state law, and as such, is subject to the Nevada Public Records Law (Chapter 239 of the Nevada Revised Statutes). Under the law, all of COUNTY'S records are public records (unless otherwise declared by law to be confidential) and are subject to inspection and copying by any person. All bid documents are available for review following the bid opening.

27. PURCHASE ORDERS

The Purchasing and Contracts Division will issue a purchase order(s) which will authorize SUCCESSFUL BIDDER to deliver and invoice for the product(s) or service(s) offered.

28. RIGHT OF INSPECTION AND REJECTION

All goods and services purchased under this bid will be subject to inspections, tests and approval/acceptance by COUNTY. It is acknowledged that many of the goods contained in closed packages may not be inspected until such time as they are used, and that the inspections and rejection rights will continue until those packages are opened and inspected, notwithstanding prior payment. If specifications or warranties are not met, material and equipment will be returned at SUCCESSFUL BIDDER'S expense. Nonconforming goods may be returned to SUCCESSFUL BIDDER freight collect at which time risk of loss will pass to SUCCESSFUL BIDDER upon COUNTY'S delivery to common carrier or retrieved by SUCCESSFUL BIDDER at which time risk of loss will pass to SUCCESSFUL BIDDER at time of retrieval.

29. SEVERABILITY

If any terms or provisions of CONTRACT shall be found to be illegal or unenforceable, then such term or provision shall be deemed stricken and the remaining portions of CONTRACT shall remain in full force and effect.

30. SUBCONTRACTS

Services specified in CONTRACT shall not be subcontracted by SUCCESSFUL BIDDER, without the written approval of COUNTY. Approval by COUNTY of SUCCESSFUL BIDDER'S request to subcontract or acceptance of or payment for subcontracted work by COUNTY shall not in any way relieve SUCCESSFUL BIDDER of responsibility for the professional and technical accuracy and adequacy of the services performed. SUCCESSFUL BIDDER shall be and remain liable for all damages to COUNTY caused by negligent performance or non-performance of services performed under CONTRACT by SUCCESSFUL BIDDER'S subcontractor.

31. SUBCONTRACTOR / INDEPENDENT CONTRACTOR

SUCCESSFUL BIDDER represents that it is fully experienced and properly qualified to perform the class of work provided for herein, and that it is properly licensed, equipped, organized and financed to perform such work. SUCCESSFUL BIDDER shall act as an independent SUCCESSFUL BIDDER and not as the agent of COUNTY in performing CONTRACT. SUCCESSFUL BIDDER shall maintain complete control over its employees and all of its Subcontractors. Nothing contained in CONTRACT or any subcontract awarded by SUCCESSFUL BIDDER shall create any contractual relationship between any such Subcontractor and COUNTY. SUCCESSFUL BIDDER shall perform all work in accordance with its own methods subject to compliance with CONTRACT.

32. SUSPENSION BY THE COUNTY FOR CONVENIENCE

- A. COUNTY may, without cause, order SUCCESSFUL BIDDER in writing to suspend, delay or interrupt the work in whole or in part for such period of time as COUNTY may determine.
- B. In the event COUNTY suspends performance of SUCCESSFUL BIDDER for an aggregate period in excess of sixty (60) calendar days, SUCCESSFUL BIDDER shall be entitled to an equitable adjustment of the compensation payable to SUCCESSFUL BIDDER under this Bid to reimburse SUCCESSFUL BIDDER for additional costs occasioned as a result of such suspension of performance by COUNTY. Equitable adjustment shall be based on appropriated funds and approval by COUNTY.
- C. No equitable adjustment will be made if performance is, was or would have been so suspended, delayed or interrupted by another cause for which SUCCESSFUL BIDDER is responsible.

33. TAXES

COUNTY is a political subdivision of the State of Nevada and under the provisions of Nevada Revised Statute (NRS) 372.325 is exempt from the payment of Sales and Use Tax (Employee Identification Number 88-6000028). A copy of the tax exempt letter is available upon request. The bid price(s) must be net, exclusive of these taxes.

34. TERMINATION FOR CAUSE

If SUCCESSFUL BIDDER fails to perform in accordance with the agreed terms, conditions, or warranties applicable to CONTRACT, COUNTY may **immediately** terminate all or part of CONTRACT upon written notice of intent to terminate without any liability by COUNTY to SUCCESSFUL BIDDER. In the event of termination for cause, COUNTY may cancel any delivery or service and purchase the product or service elsewhere on such terms or in such manner as COUNTY may deem appropriate and SUCCESSFUL BIDDER shall be liable to COUNTY for any excess cost or other expenses incurred by COUNTY.

35. TERMINATION FOR CONVENIENCE

COUNTY reserves the right to terminate CONTRACT in whole or part at any time whenever COUNTY shall determine that such a termination is in the best interest of COUNTY without penalty or recourse upon thirty (30) calendar days written notice of intent to terminate. In the event that COUNTY elects to terminate CONTRACT, the termination request will be submitted to the BCC or the Clark County Administrative Services Department for approval.

36. TITLE AND RISK OF LOSS

The title and risk of loss of material or service shall not pass to COUNTY until material is delivered to the specific location, quantities are verified, and the material is inspected for damage or service is completed as specified.

37. USE BY OTHER GOVERNMENT ENTITIES

Nevada Revised Statutes 332.195 allows local governments to join or use the contracts of other local governments or the State of Nevada, with the authorization of contracting Supplier.

38. WARRANTY

SUCCESSFUL BIDDER warrants that the goods and services covered under this bid will conform to applicable specifications, instructions, drawings, data and samples, will be merchantable and of good material and workmanship, free from defects and will be fit and sufficient for the purposes intended. SUCCESSFUL BIDDER shall guarantee all workmanship, materials, and equipment they have furnished for a period of one (1) year after the final acceptance of the equipment or materials or for the length of the current manufacturer's warranty, whichever is longer. If during the guarantee period, any defect or faulty materials are found, it shall immediately, upon notification by COUNTY, proceed at its own expense to replace and repair same, together with any damage to all finishes, fixtures, equipment, and furnishings that may be damaged as a result of this defective equipment or workmanship. Acceptance or receipt of payment for goods or services shall not constitute a waiver of any warranty.

III - SPECIAL CONDITIONS

BID NO. 603599-15 CURRENT PRODUCTION MODEL WATER TENDER TANKER

1. DOCUMENTATION SUBMITTAL REQUIRED BY APPARENT LOW BIDDER

Apparent low Bidder shall furnish the following information and documents within twenty-four (24) hours of COUNTY'S request:

- A. Copies of all certificates of factory or in-house training classes for SUCCESSFUL BIDDER'S employees assigned to perform services on COUNTY'S equipment or property;
- B. Address and contact information of local factory authorized station or representative;
- C. A copy of the product's printed specifications advertising literature or catalogs as specified.
- D. A copy of the product's standard warranty.
- E. Completed "Disclosure of Ownership" form.
- F. A copy of current applicable Clark County Business License.

2. SERVICE AND INSPECTION INSTRUCTIONS - COMPLETION OF CONTRACT

Prior to delivery, the product shall be completely inspected and serviced by the delivering dealer or the manufacturer's pre-delivery service center. A copy of the manufacturer's standard pre-delivery service check list shall be completed for the product, signed by a representative of the organization performing the inspection/service and delivered with the product.

The product may be inspected at time of delivery, by an authorized representative of COUNTY, for workmanship, appearance, proper functioning of all equipment and systems, and conformance to all other requirements of this specification. In the event deficiencies are detected, the product will be rejected to make the necessary repairs, adjustments or replacements. Payment or the commencement of a discount period (if applicable) will not be made until the corrective action is made the product is re-inspected and accepted. If the product is accepted at delivery and later rejected because of deficiencies, it shall be the dealer's responsibility to pick up the product, make the necessary corrections and redeliver the product for re-inspection and acceptance at no additional cost to COUNTY.

3. DEALER'S REPORT OF SALE - COMPLETION OF CONTRACT

Dealer's Report of Sale shall be addressed to:

Clark County Automotive
4241 Stephanie Street
Las Vegas, NV 89122

4. TITLE FEES

The SUCCESSFUL BIDDER shall pay all title fees.

5. NOTICE OF DELIVERY

COUNTY shall be given twenty-four (24) hours notice prior to delivery in order to establish a time, date and location. Notify Riccardo Terzo of Clark County Fire Department, at (702) 455-7704. At the time of delivery SUCCESSFUL BIDDER shall provide the necessary documents and keys, as specified on the attachment, as per type of vehicle(s) being delivered. If the required documents and keys are not available at the time of delivery the vehicle(s) **will not be accepted.**

DOCUMENTS AND KEYS REQUIRED AT DELIVERY

VEHICLE TYPE	DEALERS REPORT OF SALE IN-STATE	OR	CERTIFICATE OF ORIGIN OUT OF STATE	ODOMETER STATEMENT	PURCHASE ORDER (COPY)	INVOICE	KEYS (PER BID)	MANUAL (PER BID)
HEAVY DUTY TRUCKS AND EQUIPMENT IN EXCESS OF 12,000 LBS. LICENSED	X	OR	X	X	X	X	X	X

NOTE: Vehicles without the indicated documents and keys will not be accepted.

6. FUEL
Vehicle(s) shall be delivered with a full tank of fuel.
7. MILEAGE
Vehicle(s) shall be delivered with less than fifty (50) miles on the odometer.
8. KEYS
There shall be three (3) sets of keys for each vehicle and all locking compartments or vandal covers provided at the time of delivery.
9. COMPONENT INSTALLATION
All components supplied shall be factory or dealer installed and shall be as advertised in current published literature unless otherwise stated (**Literature shall be provided upon request**).
10. DEALER'S NAMEPLATES AND DECALS
All vehicle(s) shall be delivered free of dealer nameplates, license plate holders or advertisement decals.
11. ORDER CONFIRMATION
SUCCESSFUL BIDDER shall provide, within ten (10) business days of receipt of purchase order, a confirmation from the manufacturer showing the vehicles have been ordered. The confirmation may be provided via facsimile to:

Clark County Purchasing Department
Attn: Sandra Mendoza, Purchasing Analyst II
Fax: (702) 386-4914
12. MANUALS
There shall be one part, one repair, and three operator manuals; or a PC friendly CD manual provided for each vehicle at time of delivery.
13. LOCATION AND HOURS
Deliveries shall be made to the Clark County Fire Department, 4425 West Tropicana Avenue, Las Vegas, Nevada 89103. Monday through Friday (excluding COUNTY'S holidays), between the hours of 7:00 a.m. and 3:00 p.m.
14. MAXIMUM DELIVERY TIME
Maximum delivery time is 120 calendar day(s) after receipt of chassis. Chassis to be ordered seven (7) days upon receipt of purchase order. Failure to offer a delivery time within the maximum number of days specified may be considered a substantial deviation and be cause for rejection. Time is of the essence and failure to meet the delivery time specified shall constitute a breach of contract and may result in termination of CONTRACT.
15. OUT OF AREA DELIVERY REQUIREMENTS
If the successful Bidder is located outside of the Las Vegas Valley, it is required to have an Authorized Dealer located in the Las Vegas Valley who will act as its representative. All vehicles will be delivered to this local Authorized Dealer Representative and not directly to Clark County. This local Authorized Dealer Representative will be responsible for the Pre-delivery inspection (PDI), all dealer prep, delivery, and any necessary documentation and paperwork, including State of Nevada VIN inspection.
16. F.O.B. DESTINATION - FREIGHT PRE-PAID
SUCCESSFUL BIDDER shall pay all freight charges. SUCCESSFUL BIDDER shall file all claims and bears all responsibility for the products from the point of origin to COUNTY'S destination. All prices shall be F.O.B. the delivery points as required. All prices shall include delivery, as well as any necessary unloading.
17. PARTIAL SHIPMENTS
Partial shipments will not be permitted.
18. TRAINING
Training, in the form of orientation, shall be provided to COUNTY'S personnel by a qualified factory representative or the SUCCESSFUL BIDDER'S personnel, in the proper operation techniques, including care and maintenance of the product. This training shall take place at Clark County Fire Department, 4425 West Tropicana Avenue, Las Vegas, Nevada 89103, at the SUCCESSFUL BIDDER'S expense.
19. FAILURE TO DELIVER
In the event that SUCCESSFUL BIDDER fails to deliver the product or service in accordance with the terms and conditions of CONTRACT, COUNTY shall have the option to either terminate CONTRACT or temporarily procure the product or service from another supplier. If the product or service is procured from another supplier, SUCCESSFUL BIDDER shall pay to COUNTY any difference between the bid price and the price paid to the other supplier.

IV - TECHNICAL SPECIFICATIONS

BID NO. 603599-15 CURRENT PRODUCTION MODEL WATER TENDER TANKER

Name of Firm

INTENT:

It is the intent of these specifications to provide a vehicle that will conform to the specifications, and be suitable for continuous use by COUNTY. The vehicle offered shall be new, unused, the current production model and conform to the specifications provided below.

The vehicle shall comply with all Federal and State of Nevada Emission Control Regulations, and Safety Standards in effect at the time of delivery to COUNTY.

These specifications shall be construed as minimum requirements. Should the manufacturer's current published data or specifications exceed these, they shall be considered as minimum and be furnished by Bidder.

Any deviation taken at the time of or after bid submittal may render the bid non-responsive. If a Bidder is unable to meet the Technical Specifications, Bidder MUST complete the attached **Exhibit A** and submit it to the Purchasing Analyst at least five (5) business days prior to the scheduled **PRE-BID CONFERENCE**. It shall be the sole responsibility of the Bidder to ensure that the Purchasing Analyst has been properly notified, **PRIOR TO THE PRE-BID CONFERENCE** of the Bidder's deviation to the Technical Specifications.

It is the sole responsibility of the BIDDER to ensure that the Purchasing Analyst has been properly notified of BIDDER'S inability to meet the specification, prior to the **PRE-BID CONFERENCE**.

BIDDERS MUST RETURN THE ORIGINAL OR A PHOTOCOPY OF THIS FORM AND MAKE AN ENTRY FOR EACH SPECIFICATION IN THE SPACE PROVIDED OPPOSITE THE SPECIFICATIONS, INDICATING ANY VARIANCES IN THE SPECIFICATION. IF THERE IS NOT ENOUGH SPACE, ATTACH AN ADDITIONAL SHEET OF PAPER.

SPECIFICATION NO. 1

GENERAL DESCRIPTION

It is the intent of these specifications to describe the minimum requirements for diesel powered truck cab and chassis with 4000 gallon Water Tender Tanker, capable of pump-and-roll mode, Hale water pump minimum capacity of 750gpm

SPECIFICATION NO. 2

DRAWINGS

The drawings will show such items as the chassis being utilized, lights, horns, sirens, pump panels, paint/graphics and all compartment locations and dimensions. The blueprint will be a visual interpretation of the unit as it is to be constructed. The buying authority will sign and approve all drawings. One print will be retained by the Fire Department, the dealer will retain one print, and one print, will be returned to the manufacturer.

SPECIFICATION NO. 3

INTENT OF SPECIFICATIONS

It shall be the intent of these specifications to provide a complete apparatus equipped as hereinafter specified. With a view to obtaining the best results and the most acceptable apparatus for service in the Department, these specifications cover only the general requirements as to the type of construction and tests to which the apparatus must conform, together with certain details as to finish, equipment and appliances with which the successful bidder must conform. Minor details of construction and materials where not otherwise specified are left to the discretion of the contractor, who shall be solely responsible for the design and construction for all features. The National Fire Protection Association Standard 1901, current edition, unless otherwise specified in these specifications, shall prevail.

SPECIFICATION NO. 4

PRE-CONSTRUCTION MEETING

Within 45 days of purchase order release there will be a pre-construction meeting for up to four (4) representatives of the Buying authority at the facility where the apparatus is being constructed. The trip(s) will be prior to construction of the Apparatus. Factory and Sales representatives will be available at the time of trip. Transportation, lodging and meals, will be the Responsibility of the successful bidder.

FINAL INSPECTION: There will be a final inspection for up to four (4) representatives of the buying authority at the facility where the apparatus is being constructed. The inspection trip will be when the apparatus is complete. Factory and Sales representatives will be available at the time of inspection. Transportation, lodging and meals will be the responsibility of the manufacturer.

SPECIFICATION NO. 5

PERFORMANCE TESTS AND REQUIREMENTS

A road test shall be conducted with the apparatus fully loaded and a continuous run of ten miles or more will be made, 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. The successful bidder shall furnish a Weight Certificate showing weights on front axle, rear axles and total weight for the completed apparatus at time of delivery.

- A. 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.
- B. From a steady space of 15 MPH the vehicle shall accelerate to 35 MPH within 30 seconds. This shall be accomplished without moving the gear selector.
- C. The service brakes shall be capable of stopping the fully loaded vehicle in 35 feet at 20 MPH on level dry concrete highway.
- D. The apparatus, fully loaded, shall be capable of obtaining a minimum speed of 50 MPH on a level dry concrete highway with the engine not exceeding its governed RPM (fully loaded).
- E. If optioned, the apparatus shall be tested and approved by the Underwriter's Laboratories Incorporated in accordance with their standard practices for pumping engines.
- F. The Contractor shall furnish copies of the Pump Manufacturer's Certification of hydrostatic test, the Engine Manufacturer current certified brake horsepower curve, and the Manufacturer's record of pumper construction details when delivered.

If optioned, the vendor, at their expense, shall have the Underwriter's Laboratories Incorporated conduct the tests required by the Underwriter Laboratories Incorporated (Guide for the Certification of Fire Department Pumper subject 822 dated 1995 or latest). A copy of all tests shall accompany the Apparatus.

The contractor shall supply the final manufacturer's furnished certification of GVWR and GAWR on a nameplate affixed to the vehicle.

A permanent plate shall be mounted in the driver's compartment to specify the quantity and type of the following fluids used in the vehicle: Engine oil, engine coolant, and chassis transmission fluid, pump transmission lubrication fluid, pump primer fluid (if used) and drive axle lubrication fluid.

A permanent plate in the driver's compartment shall be installed, specifying the seating capacity of the enclosed cab.

Signs that state "OCCUPANTS MUST BE SEATED AND BELTED WHEN APPARATUS IS IN MOTION" shall be provided and will be visible from each seated position. An accident prevention sign shall be located at the rear step area of the apparatus. It shall warn all personnel that standing on the step while apparatus is in motion shall be prohibited.

A nameplate indicating the chassis transmission shift selector position to be used when pumping shall be provided in the driving compartment and located so that it can be easily read from the driver's position.

SPECIFICATION NO. 6

GENERAL CONSTRUCTION

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

The GAWR and GVWR of the chassis shall be adequate to carry the fully equipped apparatus including all tanks filled, the specified hose load, unequipped personnel weight, ground ladders and a miscellaneous equipment allowance per NFPA criteria.

It shall be the responsibility of the purchaser to provide the contractor with the weight of equipment to be carried if it is in excess of the allowance as set forth by NFPA.

The unequipped personnel weight shall be calculated at 250 lbs. per person times the maximum number of persons to ride on the apparatus.

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

The front to rear weight distribution of the fully loaded vehicle shall be within the limits set by the chassis manufacturer. The front axle loads shall not be less than the minimum axle loads specified by the chassis manufacturer, under full loads and all other loading conditions.

The difference in weight on the end of each axle, from side to side, when the vehicle is fully loaded and equipped shall not exceed 7 percent.

The apparatus shall be so designed that the various parts are readily accessible for lubrication, inspection, adjustment and repair.

Where special tools manufactured or designed by the contractor and are required to provide routine service on any component of the apparatus built or supplied by the contractor, such tools shall be provided with the apparatus.

SPECIFICATION NO. 7

FIVE (5) YEAR DRIVETRAIN WARRANTY

A drivetrain warranty shall be offered by the commercial chassis manufacture for a period of five (5) years from the date of delivery

SPECIFICATION NO. 8

TWO (2) YEAR APPARATUS BUMPER TO BUMPER WARRANTY

A warranty shall be offered for each new fire apparatus manufactured for a period of two (2) years from the date of delivery

SPECIFICATION NO. 9

TEN (10) YEAR APPARATUS STRUCTURAL WARRANTY – ALUMINUM BODY WARRANTY

A structural warranty shall be provided by the apparatus manufacturer for products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of ten (10) years.

SPECIFICATION NO. 10

TEN (10) YEAR PLUMBING WARRANTY

A Stainless Steel Plumbing/Piping warranty shall be offered for each new fire apparatus manufactured for a period of ten (10) years from the date of delivery.

SPECIFICATION NO. 11

TEN (10) YEAR PAINT WARRANTY

A ten (10) year paint warranty shall be provided by the apparatus manufacture.

SPECIFICATION NO. 12

PUMP WARRANTY

Hale Products Inc. hereby warrants to the original buyer that products manufactured by Hale are free of defects in material and workmanship for a period of five (5) years from the date the product is first placed in service

SPECIFICATION NO. 13

FLUID DATA PLAQUE

A fluid data plaque containing required information shall be provided based on the applicable components for this apparatus, meeting current NFPA Standards as follows:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Drive axle lubrication fluid
- Power steering fluid
- Pump transmission lubrication fluid
- Other NFPA applicable fluid levels or data as required.

Location shall be in the driver's compartment or on the driver's door.

SPECIFICATION NO. 14

DIMENSIONS DATA PLAQUE & "NO HELMET" LABEL

The cab dash area shall have a highly visible plaque indicating the maximum overall height, length, and GVWR of the vehicle in the destination areas unit of measure (SAE or METRIC).

A label stating "DO NOT WEAR HELMET WHILE SEATED" shall be installed in the cab within the view of all occupants.

SPECIFICATION NO. 15

"NO RIDE" LABEL

A "NO RIDE" label shall be located on the vehicle at the rear step area or other applicable areas. The label shall warn personnel that riding in or on these areas while the vehicle is in motion is prohibited.

SPECIFICATION NO. 16

PERSONNEL PAYLOAD CAPACITY

A label shall be installed in cab to denote that two (2) personnel may be carried. For engineering purposes, an allowance of 500# shall be provided for personnel.

SPECIFICATION NO. 17

NFPA COMPLIANCE STATEMENT

The apparatus shall comply with the 2009 edition of the NFPA #1901 standards and section contained therein

SPECIFICATION NO. 18

FREIGHTLINER COMMERCIAL CHASSIS CURRENT MODEL YEAR

<u>Data Code</u>	<u>Description</u>	<u>Weight Front</u>	<u>Weight Rear</u>
PRL-09D	SD PRL-09D (EFF:08/05/14)		
DRL-006	SPECPRO21 DATA RELEASE VER 006		
001-177	114SD CONVENTIONAL CHASSIS	8,005	6,680
004-216	CURRENT MODEL YEAR SPECIFIED		
002-004	SET BACK AXLE - TRUCK	480	-480
019-002	STRAIGHT TRUCK PROVISION		
003-001	LH PRIMARY STEERING LOCATION		
AA1-002	TRUCK CONFIGURATION		
AA6-001	DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)		
A85-020	FIRE SERVICE		
A84-1EV	EMERGENCY VEHICLES BUSINESS SEGMENT		
AA4-002	LIQUID BULK COMMODITY		
AA5-002	TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
AB1-008	MAXIMUM 8% EXPECTED GRADE		
AB5-001	SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE		
995-1AE	FREIGHTLINER LEVEL II WARRANTY		
A66-99D	EXPECTED FRONT AXLE(S) LOAD : 20000.0 lbs.		
A68-99D	EXPECTED REAR DRIVE AXLE(S) LOAD : 52000.0 lbs.		
A63-99D	EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 72000.0 lbs.		
AA3-003	TANK BODY		
101-2P1	CUM ISL 450 HP @ 2100 RPM; 2200 GOV RPM, 1250 LB/FT @ 1400 RPM, RECREATION/FIRE/EMERGENCY	-850	-70
79A-068	68 MPH ROAD SPEED LIMIT		
79B-000	CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT		
79K-012	PTO MODE ENGINE RPM LIMIT - 1500 RPM		
79P-002	PTO RPM WITH CRUISE SET SWITCH - 700 RPM		
79Q-003	PTO RPM WITH CRUISE RESUME SWITCH - 800 RPM		
79S-001	PTO MODE CANCEL VEHICLE SPEED - 5 MPH		
79U-007	PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND		
80G-002	PTO MINIMUM RPM - 700		
80J-001	REGEN INHIBIT SPEED THRESHOLD - 0 MPH		
99C-013	2013 ONBOARD DIAGNOSTICS/2010 EPA/CARB/GHG14		
99D-011	2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR)		
13E-001	STANDARD OIL PAN		
105-001	ENGINE MOUNTED OIL CHECK AND FILL		
014-1BX	SIDE OF HOOD AIR INTAKE WITH NFPA COMPLIANT EMBER SCREEN AND FIRE RETARDANT DONALDSON AIR CLEANER		

Data Code	Description	Weight Front	Weight Rear
124-1E7	DR 12V 275 AMP 40-SI BRUSHLESS PAD ALTERNATOR WITH REMOTE BATTERY VOLTAGE SENSE	10	
292-098	(2) ALLIANCE MODEL 1231, GROUP 31, 12 VOLT MAINTENANCE FREE 2250 CCA THREADED STUD BATTERIES	-50	-10
290-1CD	BATTERY BOX WITH ALUMINUM COVER MOUNTED SHORT SIDE TO RAIL	15	
281-001	STANDARD BATTERY JUMPERS		
282-003	SINGLE BATTERY BOX FRAME MOUNTED LH SIDE BACK OF CAB		
291-017	WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
289-002	POLISHING OF BATTERY BOX COVER		
293-058	POSITIVE LOAD DISCONNECT WITH CAB MOUNTED CONTROL SWITCH MOUNTED OUTBOARD DRIVER SEAT	8	
107-032	CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE		
152-039	GVG, FIRE AND EMERGENCY SERVICE VEHICLES ENGINE WARNING		
128-076	CUMMINS EXHAUST BRAKE INTEGRAL WITH VARIABLE GEOMETRY TURBO WITH ON/OFF DASH SWITCH	20	
016-1C3	RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE		
28F-002	ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND DASH MOUNTED REGENERATION REQUEST SWITCH		
239-001	STANDARD EXHAUST SYSTEM LENGTH		
237-052	RH STANDARD HORIZONTAL TAILPIPE		
23U-001	6 GALLON DIESEL EXHAUST FLUID TANK	-40	-20
30N-003	100 PERCENT DIESEL EXHAUST FLUID FILL		
23Y-001	STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING		
43X-002	LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
43Y-001	STANDARD DIESEL EXHAUST FLUID TANK CAP		
273-018	HORTON DRIVEMASTER ON/OFF FAN DRIVE		
276-002	AUTOMATIC FAN CONTROL WITH DASH SWITCH AND INDICATOR LIGHT, NON ENGINE MOUNTED		
110-003	CUMMINS SPIN ON FUEL FILTER		
118-008	COMBINATION FULL FLOW/BYPASS OIL FILTER		
266-017	1300 SQUARE INCH ALUMINUM RADIATOR	-20	
103-004	ANTIFREEZE TO -34F, NOAT EXTENDED LIFE COOLANT		
171-007	GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
172-001	CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES		

Data Code	Description	Weight Front	Weight Rear
270-008	AUXILIARY ENGINE COOLING USING WATER FROM FIRE PUMP	10	
132-004	ELECTRIC GRID AIR INTAKE WARMER		
155-058	DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH	-10	
342-1KD	ALLISON 3000 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION	-80	-20
343-322	ALLISON VOCATIONAL PACKAGE 170 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL RDS AND EVS		
84B-003	ALLISON VOCATIONAL RATING FOR FIRE TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES		
84C-022	PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 5, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
84D-022	SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 5, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
353-022	VEHICLE INTERFACE WIRING WITH BODY BUILDER CONNECTOR MOUNTED BACK OF CAB		
34C-001	ELECTRONIC TRANSMISSION CUSTOMER ACCESS CONNECTOR FIREWALL MOUNTED		
341-018	MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
345-003	PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED		
97G-004	TRANSMISSION PROGNOSTICS - ENABLED 2013		
370-015	WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK		
346-003	TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK		
35T-001	SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)		
400-1BB	DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE	210	
402-030	MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES		
403-026	FIRE AND EMERGENCY SEVERE SERVICE, NON-ASBESTOS FRONT LINING		
419-023	CONMET CAST IRON FRONT BRAKE DRUMS		
409-021	SKF SCOTSEAL PLUS XL FRONT OIL SEALS		
408-001	VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL		
416-022	STANDARD SPINDLE NUTS FOR ALL AXLES		
405-002	MERITOR AUTOMATIC FRONT SLACK ADJUSTERS		
406-001	STANDARD KING PIN BUSHINGS		
536-055	TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR	130	

Data Code	Description	Weight Front	Weight Rear
539-003	POWER STEERING PUMP		
534-003	4 QUART POWER STEERING RESERVOIR	5	
533-001	OIL/AIR POWER STEERING COOLER	5	
40T-001	ORGANIC SAE 80/90 FRONT AXLE LUBE		
620-025	20,000# TAPERLEAF FRONT SUSPENSION	200	
619-005	MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION		
410-001	FRONT SHOCK ABSORBERS		
420-050	RT-52-185 52,000# T-SERIES TANDEM REAR AXLE		770
421-538	5.38 REAR AXLE RATIO		
424-001	IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		
386-074	MXL 176T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES	25	25
388-073	MXL 17T MERITOR EXTENDED LUBE INTERAXLE DRIVELINE WITH HALF ROUND YOKES		
452-005	DRIVER CONTROLLED TRACTION DIFFERENTIAL - REAR MOST TANDEM/TRIDEM REAR AXLE		20
878-021	(1) INTERAXLE LOCK VALVE AND (1) DRIVER CONTROLLED DIFFERENTIAL LOCK REAR-REAR AXLE VALVE		
87A-002	BUZZER AND BLINKING LAMP WITH EACH MODE SWITCH, INTERAXLE UNLOCK DEFAULT WITH IGNITION OFF		
87B-004	BLINKING LAMP WITH EACH MODE SWITCH, DIFFERENTIAL UNLOCK WITH IGNITION OFF, ACTIVE <5 MPH		
423-010	MERITOR 16.5X7 P CAM REAR BRAKES, DOUBLE ANCHOR, CAST SHOES		100
433-025	FIRE AND EMERGENCY SEVERE SERVICE NON-ASBESTOS REAR BRAKE LINING		
434-004	HIGH MOUNT CAM BRAKE CHAMBER POSITION		
451-030	WEBB HEAVY WEIGHT CAST IRON REAR BRAKE DRUMS		80
440-021	SKF SCOTSEAL PLUS XL REAR OIL SEALS		
426-075	HALDEX GOLDSEAL LONGSTROKE 2- DRIVE AXLES SPRING PARKING CHAMBERS		
428-003	HALDEX AUTOMATIC REAR SLACK ADJUSTERS		
41T-001	ORGANIC SAE 80/90 REAR AXLE LUBE		
622-1CM	HENDRICKSON RT523 REAR SUSPENSION @ 52,000#		880
621-016	HENDRICKSON RT/RTE - 7.19" SADDLE		
431-001	STANDARD U-BOLT PAD		
624-011	52 INCH AXLE SPACING		
628-005	STEEL BEAMS AND BRONZE CENTER BUSHINGS WITH BAR PIN ADJUSTABLE END CONNECTIONS		
623-005	FORE/AFT CONTROL RODS		
439-001	REAR SHOCK ABSORBERS - ONE AXLE		40
490-101	WABCO 4S/4M ABS WITH TRACTION CONTROL		
871-001	REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES		
904-001	FIBER BRAID PARKING BRAKE HOSE		

Data Code	Description	Weight Front	Weight Rear
412-001	STANDARD BRAKE SYSTEM VALVES		
46D-002	STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM		
413-002	STD U.S. FRONT BRAKE VALVE		
432-003	RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE		
480-083	WABCO SS-1200 PLUS AIR DRYER WITH INTEGRAL AIR GOVERNOR AND HEATER		
479-003	AIR DRYER MOUNTED INBOARD ON LH RAIL		
460-008	STEEL AIR BRAKE RESERVOIRS MOUNTED INSIDE RAIL		
607-001	CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD		
477-006	BW DV-2 AUTO DRAIN VALVE WITHOUT HEATER ON ALL TANK(S)		
335-004	UPGRADED CHASSIS MULTIPLEXING UNIT		
545-560	5600MM (220 INCH) WHEELBASE		
546-102	7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI	470	120
552-054	2275MM (90 INCH) REAR FRAME OVERHANG		
55W-008	FRAME OVERHANG RANGE: 81 INCH TO 90 INCH	-40	160
AC8-99D	CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 154.45 in		
AE8-99D	CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 151.45 in		
AE4-99D	CALC'D FRAME LENGTH - OVERALL : 340.12		
AM6-99D	CALC'D SPACE AVAILABLE FOR DECKPLATE : 154.45 in		
FSS-0LH	CALCULATED FRAME SPACE LH SIDE : 75.9 in		
FSS-0RH	CALCULATED FRAME SPACE RH SIDE : 108.12 in		
553-001	SQUARE END OF FRAME		
550-001	FRONT CLOSING CROSSMEMBER		
559-001	STANDARD WEIGHT ENGINE CROSSMEMBER		
562-001	STANDARD MIDSHIP #1 CROSSMEMBER(S)		
572-001	STANDARD REARMOST CROSSMEMBER		
565-002	HEAVY DUTY SUSPENSION CROSSMEMBER		
556-1E6	14 INCH CHROMED STEEL BUMPER		
558-033	REMOVABLE FRONT TOW HOOKS STORED ON THE CHASSIS FRAME	25	
574-001	BUMPER MOUNTING FOR SINGLE LICENSE PLATE		
551-007	GRADE 8 THREADED HEX HEADED FRAME FASTENERS		
970-040	TANK BODY 3001 TO 4500 GALLONS		
204-215	50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH	-10	
218-005	RECTANGULAR FUEL TANK(S)		
215-004	POLISHING OF FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS		
212-007	FUEL TANK(S) FORWARD		

Data Code	Description	Weight Front	Weight Rear
664-001	PLAIN STEP FINISH		
205-001	FUEL TANK CAP(S)		
122-084	ALLIANCE FUEL FILTER/WATER SEPARATOR WITH PRIMER PUMP	15	
216-020	EQUIFLO INBOARD FUEL SYSTEM		
202-016	HIGH TEMPERATURE REINFORCED NYLON FUEL LINE		
093-2BM	GOODYEAR G278 MSD 425/65R22.5 20 PLY RADIAL FRONT TIRES	180	
094-699	GOODYEAR G291 315/80R22.5 20 PLY RADIAL REAR TIRES		232
418-056	CONMET PRESET PLUS IRON FRONT HUBS		
450-056	CONMET PRESET PLUS IRON REAR HUBS		
502-1H5	ALCOA LVL ONE 82462X 22.5X12.25 10-HUB PILOT 4.68 INSET 10-HAND ALUMINUM DISC FRONT WHEELS	-24	
505-1E1	ALCOA LVL ONE 89464X 22.5X9.00 10-HUB PILOT 5.96 INSET ALUMINUM DISC REAR WHEELS		-128
524-001	POLISHED FRONT WHEELS; OUTSIDE ONLY		
525-001	POLISHED REAR WHEELS; OUTSIDE OF OUTER WHEELS ONLY		
829-1A2	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB		
650-008	AIR CAB MOUNTS		
648-002	NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE		
754-017	BOLT-ON MOLDED FLEXIBLE FENDER EXTENSIONS	10	
678-018	LH AND RH EXTERIOR GRAB HANDLES WITH SINGLE RUBBER INSERT		
645-002	BRIGHT FINISH RADIATOR SHELL/HOOD BEZEL		
646-042	STATIONARY BLACK GRILLE WITH BRIGHT ACCENTS		
65X-003	CHROME HOOD MOUNTED AIR INTAKE GRILLE		
644-004	FIBERGLASS HOOD		
727-1AF	SINGLE 14 INCH ROUND HADLEY AIR HORN UNDER LH DECK		
726-002	DUAL ELECTRIC HORNS		
728-001	SINGLE HORN SHIELD		
657-001	DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME		
575-001	REAR LICENSE PLATE MOUNT END OF FRAME		
312-067	HALOGEN COMPOSITE HEADLAMPS WITH BRIGHT BEZELS		
302-047	LED AERODYNAMIC MARKER LIGHTS		
311-012	DAYTIME RUNNING LIGHTS - LOW BEAM ONLY		
294-046	OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE WIRING WITH SEPARATE STOP/TURN WIRES TO 4 FEET BEYOND END OF FRAME		-5
300-015	STANDARD FRONT TURN SIGNAL LAMPS		
744-1BC	DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LH AND RH REMOTE		
797-001	DOOR MOUNTED MIRRORS		
796-001	102 INCH EQUIPMENT WIDTH		

Data Code	Description	Weight Front	Weight Rear
743-204	LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS		
74A-001	RH DOWN VIEW MIRROR		
729-001	STANDARD SIDE/REAR REFLECTORS		
677-998	NO CAB MOUNTED STEPS		
764-010	COMPOSITE EXTERIOR SUN VISOR	10	
768-043	63X14 INCH TINTED REAR WINDOW		
661-004	TINTED DOOR GLASS LH AND RH WITH TINTED OPERATING WING WINDOWS		
654-011	RH AND LH ELECTRIC POWERED WINDOWS	4	
663-013	TINTED WINDSHIELD		
659-019	2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED		
707-1AK	OPAL GRAY VINYL INTERIOR		
706-026	MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR		
708-026	MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR		
772-006	BLACK MATS WITH SINGLE INSULATION		
785-001	DASH MOUNTED ASH TRAYS AND LIGHTER		
742-007	(2) CUP HOLDERS LH AND RH DASH		
680-007	GRAY/CHARCOAL WING DASH		
860-004	SMART SWITCH EXPANSION MODULE		
700-002	HEATER, DEFROSTER AND AIR CONDITIONER		
701-001	STANDARD HVAC DUCTING		
703-005	MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH		
170-015	STANDARD HEATER PLUMBING		
130-033	DENSO HEAVY DUTY AIR CONDITIONER COMPRESSOR		
702-002	BINARY CONTROL, R-134A		
739-033	STANDARD INSULATION		
285-013	SOLID-STATE CIRCUIT PROTECTION AND FUSES		
280-007	12V NEGATIVE GROUND ELECTRICAL SYSTEM		
324-011	DOME DOOR ACTIVATED LH AND RH, DUAL READING LIGHTS, FORWARD CAB ROOF		
655-005	LH AND RH ELECTRIC DOOR LOCKS		
284-023	(1) 12 VOLT POWER SUPPLY IN DASH		
756-1E7	SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION DRIVER SEAT WITH NFPA 1901-2009 COMPLIANT SEAT SENSOR	50	
760-1E7	SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION PASSENGER SEAT WITH NFPA 1901-2009 COMPLIANT SEAT SENSOR	40	15
711-004	LH AND RH INTEGRAL DOOR PANEL ARMRESTS		
758-014	BLACK CORDURA PLUS CLOTH DRIVER SEAT COVER		
761-014	BLACK CORDURA PLUS CLOTH PASSENGER SEAT COVER		

Data Code	Description	Weight Front	Weight Rear
763-074	3 POINT HIGH VISIBILITY ORANGE RETRACTOR DRIVER AND RH FRONT PASSENGER SEAT BELTS WITH NFPA 1901-2009 COMPLIANT SENSOR AND DASH HARNESS		
532-002	ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN	10	
540-016	18 INCH (450MM) LEATHER WRAPPED STEERING WHEEL		
765-002	DRIVER AND PASSENGER INTERIOR SUN VISORS		
732-004	GRAY DRIVER INSTRUMENT PANEL		
734-004	GRAY CENTER INSTRUMENT PANEL		
87L-003	ENGINE REMOTE INTERFACE WITH PARK BRAKE AND NEUTRAL INTERLOCKS		
870-001	BLACK GAUGE BEZELS		
486-001	LOW AIR PRESSURE LIGHT AND BUZZER		
840-002	2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES		
198-006	ENGINE COMPARTMENT MOUNTED AIR RESTRICTION INDICATOR WITH GRADUATIONS, WITH WARNING LIGHT IN DASH		
149-017	ELECTRONIC CRUISE CONTROL WITH SWITCHES ON AUXILIARY GAUGE PANEL (B DASH PANEL)		
156-020	IGNITION SWITCH WITH NON REMOVABLE KEY		
811-011	ODOMETER/TRIP/HOUR/DIAGNOSTIC/VOLTAGE DISPLAY: 1X7 CHARACTER, 26 WARNING LAMPS, DATA LINKED, ICU3		
160-025	DIAGNOSTIC INTERFACE CONNECTOR, 9 PIN, SAE J1939, LOCATED BELOW DASH		
844-001	2 INCH ELECTRIC FUEL GAUGE		
148-070	ENGINE REMOTE INTERFACE WITH PRESET FAST IDLE		
163-001	ENGINE REMOTE INTERFACE CONNECTOR AT BACK OF CAB		
856-001	ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE		
864-001	2 INCH TRANSMISSION OIL TEMPERATURE GAUGE		
830-017	ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY		
49B-004	ENHANCED STABILITY CONTROL		
852-002	ELECTRIC ENGINE OIL PRESSURE GAUGE		
679-001	OVERHEAD INSTRUMENT PANEL		
35M-008	SMARTPLEX HUB MODULE WITH OVERHEAD SWITCH MOUNTING, DRIVER AND PASSENGER SIDES AND CENTER CONSOLE (18 SWITCH SLOTS)	44	
746-1B0	AM/FM/WB RADIO WITH CD PLAYER, BLUETOOTH AND MICROPHONE, USB, FRONT AND REAR AUXILIARY INPUTS AND J1939	10	
747-001	DASH MOUNTED RADIO		
750-002	(2) RADIO SPEAKERS IN CAB		
753-001	AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF	2	
748-006	POWER AND GROUND WIRING PROVISION		
749-001	ROOF/OVERHEAD CONSOLE CB RADIO PROVISION		

Data Code	Description	Weight Front	Weight Rear
810-027	ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER		
812-001	ELECTRONIC 3000 RPM TACHOMETER		
813-998	NO MPH AND/OR RPM GRAPH	-5	
162-002	IGNITION SWITCH CONTROLLED ENGINE STOP		
44R-003	3 ON/OFF LATCHING SMARTPLEX SWITCHES		
44T-003	3 ON/OFF/ON LATCHING SMARTPLEX SWITCHES		
44V-004	BATTERY ON SMARTPLEX INDICATOR LAMP		
44W-303	3-RED, 0-AMBER, 3-GREEN SMARTPLEX INDICATOR LAMPS		
264-014	(2) FOOT SWITCHES: (1) OFFICER AIR HORN AND (1) DRIVER AIR HORN		
836-015	DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY		
660-008	SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY		
304-001	MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH		
27D-004	ALTERNATING FLASHING HEADLAMP SYSTEM WITH BODY BUILDER CONTROLLED ENGAGEMENT		
882-009	ONE VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR		
299-013	SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE		
298-039	INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS		
065-000	PAINT: ONE SOLID COLOR		
980-90C	YELLOW ELITE L3452EB		
986-020	BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT		
976-995	SUNVISOR PAINTED SAME AS CAB COLOR		
996-001	A U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS		

T O T A L V E H I C L E S U M M A R Y

Weight Summary

	Weight Front	Weight Rear	Total Weight
Factory Weight [†]	8864 lbs.	8389 lbs.	17253 lbs.
<hr/> Total Weight [†]	<hr/> 8864 lbs.	<hr/> 8389 lbs.	<hr/> 17253 lbs.

(+) Weights shown are estimates only. If weight is critical, contact Customer Application Engineering.

114SD CONVENTIONAL CHASSIS

SET BACK AXLE - TRUCK

CUM ISL 450 HP @ 2100 RPM; 2200 GOV RPM, 1250 LB/FT @ 1400 RPM, RECREATION/FIRE/EMERGENCY

ALLISON 3000 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION

RT-52-185 52,000# T-SERIES TANDEM REAR AXLE

HENDRICKSON RT523 REAR SUSPENSION @ 52,000#

DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE

20,000# TAPERLEAF FRONT SUSPENSION

114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB

5600MM (220 INCH) WHEELBASE

7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI

2275MM (90 INCH) REAR FRAME OVERHANG

SPECIFICATION NO. 19

FRONT TOW HOOKS

Two (2) painted "hook type" bolt-on towing units shall be provided at front of chassis.

SPECIFICATION NO. 20

REMOTE AIR INLET

An air inlet with check valve shall be provided to maintain the air pressure in the braking system of the vehicle from a remote source. The inlet shall require manual disconnection from the vehicle.

Location: Left-hand side cab step area.

SPECIFICATION NO. 21

MASTER ELECTRIC SWITCH

A battery disconnect switch shall be located conveniently to the driver of the apparatus. The switch shall disconnect the power supply from the battery system.

SPECIFICATION NO. 22

BATTERY CHARGER/AUTO EJECT 20AMP / 110VOLT

One (1) Kussmaul model 20 amp 120 volt "auto-eject" shore power receptacle with indicator light shall be installed drivers side. A matching male plug shall be provided and shipped loose with the apparatus. Battery Charger shall be A 45 amp IOTA battery charger wired to the 12 volt battery system.

SPECIFICATION NO. 23

CAB CONSOLE

A fabricated aluminum electrical console and enclosure shall be provided to house cab mounted electrical switching devices and equipment. The console shall be located between the driver's and the officer's seating. There shall be Two (2) 12VDC power sources for customer installed radio equipment. They shall be 30 amp and constant hot. They shall terminate (1) behind rear switch panels- Constant HOT- Use 8 gauge wire and (1) to front console- Constant HOT- Use 8 gauge wiring. There shall be (2) 12VDC power source shall power customer radios equipment. It shall be 30 amp ignition switch (1) terminate inside the center console. (1) shall terminate behind rear switch panels use 8 gauge wiring. (2) Grounding studs (1) behind rear switch panel (1) center console.

SPECIFICATION NO. 24

TWO DOOR CAB INTERIOR CEILING CLEAR LIGHTS

Two (2) 5" diameter ceiling mounted lights with a push button switch shall be provided in the cab. The lens color shall be clear and the light shall be mounted on the cab ceiling.

SPECIFICATION NO. 25

LED GROUND ILLUMINATION LIGHTS

Two (2) automatic ground illumination LED lights shall be installed. One light will be mounted to illuminate each cab door area.

SPECIFICATION NO. 26

ENGINE COMPARTMENT LIGHT

A light with a switch shall be mounted in the engine enclosure.

SPECIFICATION NO. 27

TWO DOOR CAB TRIM STEP

A left and right side cab trim package shall be installed on the two door cab. The trim package shall be made of .125" aluminum diamond plate. The trim package shall incorporate a running board which shall have a non-slip surface in compliance with NFPA standards.

SPECIFICATION NO. 28

REAR MUD FLAPS

There shall be a set of mud flaps installed behind the rear chassis wheels.

SPECIFICATION NO. 29

REAR TOW EYE PLATES

Two (2) rear tow eyes plates constructed of 3/4" steel plate shall be fastened directly to the rear chassis frame rails. The tow plates shall be equipped with 3" inside diameter holes (eye).

SPECIFICATION NO. 30

DOT REQUIRED EQUIPMENT

A DOT highway safety kit shall be provided on the vehicle. The kit will contain three (3) collapsible reflective safety triangles.

SPECIFICATION NO. 31

RETAINER FOR IGNITION KEY

A retaining cable shall be provided so the vehicle's ignition key cannot be removed from the vehicle.

SPECIFICATION NO. 32

VEHICLE DATA RECORDER

The apparatus shall be equipped with a vehicle data recorder (VDR). This device shall keep a record of the vehicle speed, acceleration/deceleration (from the speedometer), engine rpm speed, engine throttle position, anti-lock brake system (ABS) events, seat occupation status, seat belt status, master optical warning switch position, time (24hr clock) and Date.

SPECIFICATION NO. 33

SEAT BELT INDICATOR SYSTEM

The apparatus shall be equipped with a seat belt indicator system. The system shall display the seat belt condition for each seating position in the cab of the apparatus. A single position display that rotates through each seating position shall be supplied within the view of the officer and driver.

SPECIFICATION NO. 34

VALVE STEM TIRE PRESSURE INDICATOR

The apparatus shall be equipped with a tire pressure indicator located on the valve stem of each tire.

SPECIFICATION NO. 35

NFPA TILT REQUIREMENT

The apparatus shall not be equipped with an electronic stability control system due to engine manufacturer limitations. The apparatus shall meet the NFPA tilt requirement through rear track width-center of gravity calculation allowed by NFPA.

SPECIFICATION NO. 36

NFPA INNER DOOR STRIPING (2 DOOR)

There shall be 96 square inches of reflective material located inside each cab door. The reflective material shall be visible to traffic approaching from the rear of the apparatus.

SPECIFICATION NO. 37

FIRE PUMP SPECIFICATIONS

A Hale Model MBP 750 GPM single stage centrifugal fire pump shall be designed to mount between the chassis frame rails and shall be truck transmission power take-off driven.

The pump and related parts shall be of fine grain alloy cast iron. All moving parts in contact with water shall be of high quality bronze or stainless steel. Pump impeller shall be hard, fine grain bronze, hand ground and individually balanced and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

Impeller clearance rings shall be bronze, easily renewable. The pump and drive shafts shall be corrosion resistant alloy steel, heat treated. Each shaft shall be rigidly supported by two deep groove ball bearings and shall have a retaining oil seal. The drive unit shall be of positive gear drive type for low maintenance. The drive gear shall be of heat treated alloy steel, spur-cut design.

GEARBOX

The gearbox shall be manufactured and tested at the pump manufacturer's factory. Pump gearbox shall be of sufficient size to withstand the torque of the engine in pump operating conditions. The gearbox shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.

The gearbox drive shaft shall be of heat-treated chromium steel and shall withstand the torque of the engine in pump operating conditions. All gears shall be of highest quality electric furnace chrome nickel steel. Bores shall be ground to size and teeth integrated, crown-shaved and hardened, to give an extremely accurate gear for long life, smooth, quiet running and higher load carrying capability. An accurately cut helical design shall be provided. (No exceptions.)

PUMP MOUNTING

The pump shall be bolted to steel angles and channel that are bolted directly to the chassis side rails, using Grade 8 bolts.

PTO

"Hot Shift" power-take-off installed on the transmission PTO opening with the controls located in the chassis cab, with RED warning light to note engagement. The drive shaft and universals shall be sized for intended usage and pump rating.

SPECIFICATION NO. 38

FIRE PUMP PRIMER

The fire pump shall be equipped with a Class 1 model #ESP oil-less electrically driven priming pump. The unit shall be a positive displacement vane type. A push button priming control shall be located at the pump operator's panel.

SPECIFICATION NO. 39

SIDE MOUNT FIRE PUMP UNDER TANK

The side mount pump system shall be mounted underneath the apparatus water tank. The pump system controls shall be located in front of the L1 compartment, and will give apparatus operator full control of all pump system functions.

A minimum of two (2) clear led lights with clear lenses shall be mounted under a light shield above the side mount operators pump panel. The lights shall be switched with the pump panel light switch. The light shield shall be full width of the pump panel and or a continuation of the L1 compartment

All intakes and discharges shall be controlled from the operators' side control area, as well as primer, pressure controls, tank controls, and other vital instruments. No controls shall be mounted on the officers' access side or rear of the vehicle. The quarter turn ball valves shall be controlled on pump panel.

Pump panel controls and instruments shall all be labeled with permanent type labels. The labels and nameplates shall be color coordinated per NFPA standards.

SPECIFICATION NO. 40

SIDE PUMP PANEL

The pump panel shall be brushed constructed of a brushed alluminum finish and installed on the operator's side of the pump enclosure.

SPECIFICATION NO. 41

PUMP TEST

The apparatus shall be tested and rated per the requirements of NFPA 1901 utilizing an independent third party. The apparatus shall be provided with all documentation of the independent certification at the time of delivery.

SPECIFICATION NO. 42

PUMP RATING - 750 GPM

The pump shall be certified to meet the following performance from draft, through one (1) 20 foot length of 4.5 inch suction hose with a 10 foot lift at a maximum elevation of 2000 feet above sea level:

- o 750 GPM @ 150 PSI
 - o 750 GPM @ 165 PSI
 - o 525 GPM @ 200 PSI
 - o 375 GPM @ 250 PSI
-

SPECIFICATION NO. 43

PUMP TEST LABEL

A fire pump test label shall be provided at the pump operator's position that provides the rated discharge and pressure together with the speed of the engine as determined by the certification test. The no-load governed speed of the engine as stated by the engine manufacturer shall also be provided. The label shall be provided with all information at the factory and be attached to the apparatus prior to delivery.

SPECIFICATION NO. 44

TOTAL PRESSURE GOVERNOR

Apparatus shall be equipped with a Class1 "Total Pressure Governor" (TPG) that is connected to the Electronic Control Module (ECM) mounted on the engine. Programmable presets for RPM and Pressure settings shall be easily configurable using the TPGs straightforward menu structure. The "TPG" shall also include indication of engine RPM, system voltage, engine oil pressure and engine temperature with audible alarm output for all.

The "TPG" will operate as a pressure sensor (regulating) governor (PSG) utilizing the engines J1939 data for optimal resolution and response. The "TPG" uses the J1939 data bus for engine information, requiring no additional sensors to be installed.

SPECIFICATION NO. 45

TFT INTAKE RELIEF VALVE

A TFT model A1810#40-20 pressure dump valve shall be provided and mounted on the suction side of the pump. TFT's Pressure Relief Valve operates in an adjustment range from 90 to 300 psi (6 to 21 bar) with easy to see increments of 90, 125, 150, 200, 250, and 300 psi. *The pressure relief valve will be present at the factory for 125 psi.* Each pressure relief valve includes an OFF position. The pressure relief valve compliant with the current NFPA standard. The aluminum casting is hardcoat anodized, and maximum corrosion protection.

SPECIFICATION NO. 46

FIRE PUMP COOLING BYPASS LINE

The fire pump shall be equipped with a cooling line from the pump to the water tank. This re-circulation line shall be controlled by a pump panel control valve with nameplate label noting it as the "fire pump cooler".

SPECIFICATION NO. 47

CHASSIS ENGINE HEAT EXCHANGER COOLING SYSTEM

The apparatus shall be equipped with a heat exchanger for supplementary chassis engine cooling during fire pump operations. A manually opened valve, mounted at the operator's panel, shall direct water from the fire pump to the heat exchanger that is mounted in the engine radiator cooling hose. The system shall provide cooling water from the fire pump to circulate around the engine radiator coolant without mixing or coming in direct contact with the engine coolant.

A nameplate label shall be installed on the pump panel noting "engine cooling system" with "on-off" opening directions noted.

SPECIFICATION NO. 48

FIRE PUMP MASTER DRAIN

The fire pump plumbing system and fire pump shall be piped to a single pump panel mounted Class 1 master pump drain assembly. The master drain valve shall be a bronze master drain with a rubber disc seal and a hand wheel control on the pump panel. The master drain shall also provide for low point drainage of the fire pump and auxiliary devices.

SPECIFICATION NO. 49

LOW POINT DRAINS

The plumbing system shall be equipped with low point manually operated drain valves to allow total draining of the fire pump and piping system. These valves shall be accessible from the side of the vehicle and labeled on exact location.

SPECIFICATION NO. 50

INTAKE AND DISCHARGE LINE BLEEDER VALVES

Quarter turn bleeder valves shall be installed on all gated intake lines and all discharge lines over 2" in size. Front discharges, pre-connect hose lines, and deck gun/monitor lines shall be equipped with automatic drain valves.

SPECIFICATION NO. 51

FIRE PUMP PLUMBING SYSTEM

The fire pump plumbing system shall be built completely of stainless steel piping. No galvanized piping is used in any of the plumbing system. Victaulic couplings shall be installed to permit flexing of the plumbing system and allow for quick removal of piping or valves for service.

Tank connections, front discharges, and other piping shall use high-pressure flexible piping with a 1200 PSI burst pressure rating. Flexible hose couplings shall be threaded stainless steel or Victaulic connections.

SPECIFICATION NO. 52

SURFACE FINISH OF FIRE PUMP AND PLUMBING SYSTEM

The plumbing system shall not be painted. The piping and valves shall remain natural color and the fire pump shall remain the color as shipped by the pump manufacturer.

SPECIFICATION NO. 53

INTAKE AND DISCHARGE VALVES

All valves used in the plumbing installation shall be Akron quarter turn full flow type.

SPECIFICATION NO. 54

HOSE THREADS

The hose threads shall be National Standard (NST) on all base threads on the apparatus intakes and discharges, unless otherwise specified. (NST and NH are the same thread)

SPECIFICATION NO. 55

4.5" UNGATED INTAKE - PUMP UNDER TANK SYSTEM

One (1) 4.5" ungated suction intake shall be installed on the driver's side operator panel to supply the fire pump from an external water supply. There will be no suction supply on the officer's side of the apparatus. The threads shall be 4.5" NST male of brass, chrome plated brass, or stainless steel material.

The intake shall be provided with a removable screen.

SPECIFICATION NO. 56

LEFT SIDE PANEL 2-1/2" GATED INTAKE

A 2-1/2" gated suction intake shall be installed on left side pump panel to supply the fire pump from an external water supply. The control valve shall be a quarter turn ball valve and shall have 2.5" NST female thread of brass, chrome plated brass, or stainless steel material.

The intake shall be provided with a removable screen and a 2-1/2" NST rocker plug with retaining cable or chain installed. The intake shall be equipped with a 3/4" quarter turn Class 1 drain and bleeder valve, controlled at the base of the pump panel.

SPECIFICATION NO. 57

WATER TANK TO PUMP LINE

A 3" water tank to fire pump line shall be provided with a full flow quarter turn ball valve, 4" piping, and with flex hose and stainless steel hose clamps.

The tank to pump line shall be equipped with a check valve to prevent pressurization of the water tank.

The line shall be flow tested during the fire pump testing and shall meet requirements of NFPA #1901 standards.

SPECIFICATION NO. 58

PUMP DISCHARGE DESCRIPTION

All 2.5" or larger discharge outlets shall be capable of providing the NFPA discharge capacity. Each 2.5" or larger discharge shall be controlled from the pump operator location. Each discharge will have an associated pressure gauge.

All 2.5" or larger pump panel discharges shall be equipped with an integral, 30 degree, male "droop snoot" outlet.

All discharges shall have chrome plated, vented caps with retaining chains.

SPECIFICATION NO. 59

FIRE PUMP TO WATER TANK FILL LINE

A 2" fire pump to water tank refill and pump bypass cooler line shall be provided. The valve shall be a full flow quarter turn ball valve with 2" piping and flex hose to tank.

SPECIFICATION NO. 60

FRONT BUMPER SPRAY BAR DISCHARGE

A discharge shall be provided and piped to the front bumper area to two spray bar nozzles - one on each side. Plumbing to the front bumper shall be with 2.0" flexible high pressure hose, with abrasion protection and secure mounting clamps. The hose connection shall be 1.5". Low point drain(s) shall be provided where required.

An electric or air 2" quarter turn ball valve shall be provided with the controller in the cab. A nameplate label shall be provided at the valve control.

SPECIFICATION NO. 61

MID BODY SPRAY BAR DISCHARGE

A discharge shall be provided and piped to the mid body area to two spray bar nozzles - one on each side. Plumbing shall be with 2.0" flexible high pressure hose, with abrasion protection and secure mounting clamps. The hose connection shall be 1.5". Low point drain(s) shall be provided where required.

An electric or air 2" quarter turn ball valve shall be provided with the controller in the cab. A nameplate label shall be provided at the valve control.

SPECIFICATION NO. 62

REAR BUMPER SPRAY BAR DISCHARGE

A discharge shall be provided and piped to the rear bumper area to two spray bar nozzles - one on each side. Plumbing shall be with 2.0" flexible high pressure hose, with abrasion protection and secure mounting clamps. The hose connection shall be 1.5". Low point drain(s) shall be provided where required.

An electric or air 2" quarter turn ball valve shall be provided with the controller in the cab. A nameplate label shall be provided at the valve control.

SPECIFICATION NO. 63

FORWARD LEFT SIDE 2-1/2" DISCHARGE #1

A 2-1/2" discharge shall be provided at the forward left side pump panel area. The discharge shall have 2-1/2" NST male threads.

A Class 1 quarter turn 3/4" bleeder valve shall be installed.

SPECIFICATION NO. 64

FORWARD RIGHT SIDE 2-1/2" DISCHARGE #2

A 2-1/2" discharge shall be provided at the forward right side pump panel area. The discharge shall have 2-1/2" NST male threads. The quarter turn ball valve shall be controlled on pump panel with a Class 1 twist-to-lock pull type remote control valve control.

A Class 1 quarter turn 3/4" bleeder valve shall be installed. A nameplate label shall be provided on the control handle.

SPECIFICATION NO. 65

PRECONNECT DISCHARGE #3

One (1) pre-connect hose discharge shall be installed on the driver's side compartment top, supplied from quarter turn 2.5" diameter ball valve. The outlet shall be equipped with 2.5" NPT female chucksan swivel x 2-1/2" male threads. It shall include a Class I automatic 3/4" bleeder valve.

The pre-connect hose beds shall be constructed of aluminum diamond plate and accommodate 200 feet of hose including nozzle.

SPECIFICATION NO. 66

COVER FOR PRECONNECT / CROSSLAY HOSE BED

Preconnect / cross lay hose bed shall be equipped with an aluminum diamond plate hinged cover. The cover shall have rubber bumpers, latching devices, and lift up handle on each end of the cover.

SPECIFICATION NO. 67

ELKHART SIDEWINDER BUMPER MONITOR

An Elkhart Model #8494-01 Sidewinder monitor shall be installed at the front bumper of the apparatus. The unit shall have a joystick mounted in the chassis cab. The unit shall include a nozzle (15-30-45 GPM).

SPECIFICATION NO. 68

FRONT BUMPER MONITOR DISCHARGE

A 2" discharge shall be piped to the front center bumper area with 2" NPT male threads. The plumbing shall be flexible high pressure hose mounted with adequate support brackets and abrasion resistant mountings. Low point drains shall be installed where necessary.

The quarter turn ball valve shall be operated with a 12 volt electric motor and electric operator and position indicator in the cab. A Class 1 3/4" automatic drain valve shall be installed on the line. A nameplate label shall be provided near the valve control.

SPECIFICATION NO. 69

LINE PRESSURE GAUGES (PSI)

Each discharge shall have one (1) 2.5" diameter Class 1 discharge pressure gauge (0-400 PSI) shall be provided adjacent to each discharge control handle.

The line gauge shall be fully filled with pulse and vibration dampening interlube to lubricate the internal mechanisms. This shall prevent lens condensation and will insure proper operation to minus 40 degrees F.

The case shall be temperature compensated with an internal breathing diaphragm to permit filled cases and to allow a rigid lens with a distortion free viewing area.

A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage. The face of the gauge shall be white, with black letters.

SPECIFICATION NO. 70

PUMP PANEL LIGHTS

Pump panel lights with clear lenses shall be installed under a light hood on the pump panel. A total of four (4) LED lights shall be provided, two (2) each side.

SPECIFICATION NO. 71

4.5" CLASS ONE MASTER PUMP DISCHARGE AND INTAKE GAUGES

A set of 4-1/2" diameter Class 1 master gauges (discharge gauge and intake gauge 30-0-400 PSI) with engraved, color coded; metal label shall be installed on the pump instrument panel.

The master and line gauges shall be fully filled with pulse and vibration dampening interlube to lubricate the internal mechanisms. This shall prevent lens condensation and will insure proper operation to minus 40 degrees F. The case shall be temperature compensated with an internal breathing diaphragm to permit filled cases and to allow a rigid lens with a distortion free viewing area.

To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube shall be filled with low temperature material and be sealed from the water system using an isolation Sub-Z diaphragm located in the stem. A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage. The face of the gauge shall be white, with black letters.

SPECIFICATION NO. 72

TEST TAPS FOR GAUGES

Test taps for pump intake and pump pressure shall be provided on the pump panel and be properly labeled.

SPECIFICATION NO. 73

INTELL WATER TANK LEVEL GAUGES ITL-40

Three (3) Class 1 Intell ITL-40 LED water tank level gauges shall be installed one the pump panel, one on passenger side of tank, one in the cab on center console.

SPECIFICATION NO. 74

WATER TANK SPECIFICATIONS

The bottom and sides shall be constructed of a minimum of 3/4" black UV stabilized copolymer polypropylene. The top shall be of 1/2" black UV stabilized copolymer material.

The tank shall undergo extensive testing prior to installation in the truck. The process shall include an electronic spark and water fill test.

The tank shall have a combination vent and manual fill tower. The tank overflow shall be 6" diameter and shall dump behind the rear wheels to permit maximum traction. The tower shall have a hinged cover and screen.

There shall be two (2) standard tank openings; one for the tank to pump suction line and one for a tank fill line.

Baffles, both longitudinal and latitudinal shall be interlocking and welded to minimize water surge during travel. Openings in the baffles shall allow water flow during filling or pumping operations. The tank shall be mounted on hard rubber cushions to isolate the tank from road shock and vibration. The tank shall be completely removable from the apparatus body structure.

SPECIFICATION NO. 75

4000 GALLON WATER TANK

The water tank capacity shall be 4000 US Gallons

SPECIFICATION NO. 76

PAINT FOR WET SIDE TANK

The exterior portions of the tank (not including the hose bed) shall be painted job color.

SPECIFICATION NO. 77

CENTER FILL TOWER LOCATION

The fill tower on the tank shall be located at the center of the top of the tank.

SPECIFICATION NO. 78

WATER TANK DRAIN VALVE

The water tank shall have a 1-1/2" diameter drain valve, controlled under apparatus.

SPECIFICATION NO. 79

WATER TANK CLEAN OUT PLUG

The water tank shall have a 3.0" diameter clean out plug installed in the sump.

SPECIFICATION NO. 80

2.5" WATER TANK FILL VALVE

The water tank shall have a 2-1/2" diameter quarter turn ball valve, controlled on left side pump panel. The inlet shall include a direct operating control handle, inlet screen, chrome plated 2-1/2" female swivel and plug and chain.

SPECIFICATION NO. 81

2.5" WATER TANK FILL VALVE

The water tank shall have a 2-1/2" diameter quarter turn ball valve, controlled on right side. The inlet shall include a direct operating control handle, inlet screen, chrome plated 2-1/2" female swivel and plug and chain.

SPECIFICATION NO. 82

2.5" REAR LEFT SIDE WATER TANK FILL VALVE

The water tank shall have a 2-1/2" diameter quarter turn ball valve, controlled on left side rear of body. The inlet shall include a direct operating control handle, inlet screen, chrome plated 2-1/2" female swivel and plug and chain.

SPECIFICATION NO. 83

MANUALLY OPERATED SWIVELING QUICK DUMP

A Newton 10", manually operated, swiveling quick dump valve constructed of mild steel shall be provided. The dump will have a swivel that will allow water to be dumped on each side of the truck and in the rear. There will be a manually operated extension chute on the dump valve. Controls shall be located on the chute. The location shall be the center rear of the apparatus.

SPECIFICATION NO. 84

APPARATUS BODY CONSTRUCTION

The body will be fabricated from 3/16" aluminum diamond plate. The tandem axle body will consist of aluminum compartments mounted to a subframe that is fastened to the chassis frame.

The frame cross member extrusions shall be 2" x 4" aluminum #6061-T6 alloy with 1/4" outer wall thickness and a 3/8" center wall thickness. These cross members shall extend the full width of the body to support the tank and compartments.

The cross members shall be welded to a solid aluminum #6061-T6 alloy frame sill extrusion that is 3/4" x 3" and is shaped in contour with the chassis frame rails. Also, there shall be a 2" x 2" aluminum #6061-T6 alloy with 1/4" wall thickness (to secure the tank to the subframe).

SPECIFICATION NO. 85

APPARATUS BODY COMPARTMENTS: LOW LEFT SIDE

The left side of the apparatus shall have two (2) compartments, one (1) ahead of the rear wheel and one (1) aft of the rear wheel.

1. **L1 compartment:**

There shall be one (1) compartment located ahead of the rear wheel that is half height. A single vertically hinged compartment doors shall be provided. The doors shall be 3/16" aluminum diamond plate. Shall include LED compartment lighting

2. **L2 compartment:**

There shall be one (1) compartment located behind the rear wheel that is half height. A single vertically hinged compartment doors shall be provided. The door exterior shall be 3/16 aluminum diamond plate. Shall include LED compartment lighting

SPECIFICATION NO. 86

TWO COMPARTMENTS - LOW RIGHT SIDE

The right side of the apparatus shall have two (2) compartments, one (1) ahead of rear wheel and one (1) aft of the rear wheel.

1. **R1 compartment:**

There shall be one (1) compartment located ahead of the rear wheel that is half height. A vertically hinged double center opening compartment door shall be provided. The door exterior shall be 3/16 aluminum diamond plate. Shall include LED compartment lighting

2. **R2 compartment:**

There shall be one (1) compartment located behind the rear wheel that is half height. A single vertically hinged compartment doors shall be provided. The door exterior shall be 3/16 aluminum diamond plate. Shall include LED compartment lighting.

SPECIFICATION NO. 87

10" REAR BODY STEP

A 10" deep rear step shall be provided at the rear of the apparatus, bolted in place and easily removable for replacement. The tailboard shall be constructed of aluminum diamond plate with an NFPA compliant stepping surface.

The maximum height of the step shall be in compliance to current NFPA #1901 standards. A label shall be provided warning personnel that riding on the rear step while the apparatus is in motion is prohibited.

SPECIFICATION NO. 88

REAR STEP LIGHTS

Two (2) LED recessed step lights shall be installed. The lights shall be installed on rear of unit to illuminate rear step, one each side.

SPECIFICATION NO. 89

LEFT REAR ACCESS LADDER

The left rear top of the body shall be accessible from the ground by a bolted on railing type ladder. The ladder steps shall be constructed of non-slip aluminum extrusion welded to rails that are mounted to the body with removable brackets. There shall be integral LED lighting installed under each rung of the ladder.

The ladder shall be approximately 10" wide, with steps spaced at 18" maximum distance. The ladder shall comply with current NFPA 1901 standards. The location shall be the driver's side rear of the apparatus.

SPECIFICATION NO. 90

LOW VOLTAGE ELECTRICAL SYSTEM SPECIFICATIONS

The following specifications describe the low voltage electrical system on the specified tandem tanker truck type fire apparatus. The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The electrical equipment installed by the apparatus manufacturer shall conform to current automotive electrical system standards, the latest Federal DOT standards, and the requirements of the applicable NFPA standards.

The apparatus shall have multiplexing system, to provide diagnostic capability. The system shall have the capability of delivering multiple signals via a CAN bus, utilizing specifications set forth by SAE J1939. The electrical system shall be pre-wired for computer modem accessibility to allow service personnel to easily plug in a modem to allow remote diagnostics, troubleshooting, or program additions. The multi-plexed system shall use twisted-pair shielded wire shall be provided within the electrical system for noise reduction. For superior system integrity, the networked system shall meet the following minimum requirement components:

- Power management center
- Load shedding power management
- Solid-state circuitry
- Switch input capability
- Responsible for lighting device activation
- Self-contained diagnostic indicators
- Power distribution module

All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops in all wiring from the power source to the using device shall not exceed 10 percent. The wiring and wiring harness and insulation shall be in conformance to applicable SAE and NFPA standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties. All exposed wiring shall be run in a loom with a minimum 289 degree Fahrenheit rating. All wiring looms shall be properly supported and attached to body members. The electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

The wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection and shall be installed in accordance with the device manufacturer's instructions. Electrical connections shall be with mechanical type fasteners and large rubber grommets where wiring passes through metal panels.

The wiring between the cab and body shall be split using Deutsche type connectors or an enclosed in a terminal junction panel area. This system will permit body removal with minimal impact on the apparatus electrical system. All connections shall be crimp-type with heat shrink tubing with insulated shanks to resist moisture and foreign debris such as grease and road grime. Weather-resistant connectors shall be provided throughout to ensure the integrity of the electrical system.

Any electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. In addition, the main body junction panel shall house the automatic reset breakers and relays where required.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless they are enclosed in an electrical junction box or covered with a removable electrical panel. The wiring shall be secured in place and protected against heat, liquid contaminants and damage. Wiring shall be uniquely identified at least every two feet (2') by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of applicable NFPA standards.

The electrical circuits shall be provided with low voltage overcurrent protective devices. Such devices shall be accessible and located in required terminal connection locations or weather resistant enclosures.

The overcurrent protection shall be suitable for electrical equipment and shall be automatic reset type and meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected. The system shall have electro-magnetic interference suppression provided as required in applicable SAE standards.

LOW VOLTAGE ELECTRICAL SYSTEM SPECIFICATIONS (CONTINUED)

The electrical system shall include the following:

- a. Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. A corrosion preventative compound shall be applicable to all terminal plugs located outside of the cab or body.
- b. The electrical wiring shall be harnessed or be placed in a protective loom.
- c. Heat shrink material and sealed connectors shall be used to protect exposed connections.
- d. Holes made in the roof shall be caulked with silicone. Large fender washers shall be used when fastening equipment to the underside of the cab roof.
- e. Any electrical component that is installed in an exposed area shall be mounted in a manner that will not allow moisture to accumulate in it.
- f. A coil of wire must be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.
- g. All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.

The warning lights shall be switched in the chassis cab with labeled switching in an accessible location. Individual rocker switches shall be provided only for warning lights provided over the minimum level of warning lights in either the stationary or moving modes. All electrical equipment switches shall be mounted on a switch panel mounted in the cab convenient to the operator. The warning light switches shall be of the rocker type. For easy nighttime operation, an integral indicator light shall be provided to indicate when the circuit is energized. All switches shall be appropriately identified as to their function.

A single warning light switch shall activate all required warning lights. This switch will allow the vehicle to respond to an emergency and "call for the right of way". When the parking brake is activated, a "blocking right of way" system shall be automatically activated per requirements of NFPA. All "clear" warning lights shall be automatically shed on actuation of parking brake.

SPECIFICATION NO. 91

NFPA REQUIRED TESTING OF ELECTRICAL SYSTEM

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

1. Reserve capacity test:

The engine shall be started and kept running until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for ten (10) minutes. All electrical loads shall be turned off prior to attempting to restart the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a test fail.

2. Alternator performance test at idle:

The minimum continuous electrical load shall be activated with the engine running at idle speed. The engine temperature shall be stabilized at normal operating temperature. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.

3. Alternator performance test at full load:

The total continuous electrical load shall be activated with the engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system shall be permitted during this test. However, an alarm sounded by excessive battery discharge, as detected by the system required in NFPA Standard, or a system voltage of less than 11.7 volts dc for a 12 volt nominal system, for more than 120 seconds, shall be considered a test failure.

4. Low voltage alarm test:

Following the completion of the above tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm activates. The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts dc for a 12 volt nominal system shall be considered a test failure. The battery system shall then be able to restart the engine. Failure to restart the engine shall be considered a test failure.

NFPA REQUIRED DOCUMENTATION

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

SPECIFICATION NO. 92

TANDEM AXLE DOT LIGHTING / REFLECTOR PACKAGE

The lighting and reflector package on the tandem axle body shall conform to DOT standards. LED lighting shall be used.

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

SPECIFICATION NO. 93

STOP/TAIL, TURN AND BACK-UP LIGHTS

The rear of the apparatus body shall be equipped with two (2) Whelen Model #600PLAST4 series LED lights. The rear "tail" & stop lights shall be red, the turn lights shall be amber with a black arrow and the back-up lights shall be clear. A total of six (6) individual lights shall be provided.

Two (2) chrome housings shall be provided to contain the lights. The stop/tail lights shall be in the top position, the turn light shall be in the second position and the backup light shall be in the third position from the top. The lower position is reserved for the warning lights.

SPECIFICATION NO. 94

REAR SIGNAGE / LICENSE PLATE BRACKET WITH LED LIGHT

There shall be a LED rear license plate bracket for unit designation purposes provided.

SPECIFICATION NO. 95

PUMP PANEL AREA GROUND LIGHTS

Two (2) LED lights shall be installed under the pump panel. One (1) light shall be located on the driver's side and one (1) light located on the officer's side.

SPECIFICATION NO. 96

REAR STEP GROUND LIGHTS

Two (2) LED lights shall be installed under the rear step. These lights shall automatically activate when the vehicle is in park or neutral.

SPECIFICATION NO. 97

PASSENGER SIDE SCENE LIGHTS

Two (2) Whelen model 900 7"x 9" 12 volt LED scene lights shall be provided. The lights shall be installed on the passenger upper side area of the tank one towards the front and one towards rear.

Switches labeled REAR SIDE LIGHT'S shall be located in the cab and at pump panel.

SPECIFICATION NO. 98

REAR SCENE LIGHTS

Two (2) Whelen model 900 LED 7"x 9" scene lights shall be provided. The lights shall be installed with one located on each side of the rear upper area of the tank. Switches labeled REAR SCENE LIGHT'S shall be located in the cab and at pump panel.

SPECIFICATION NO. 99

DRIVERS SIDE SCENE LED TELESCOPIC LIGHTS

Two (2) Whelen Pioneer Plus, model KR-SB-3PCP2-S-I LED light fixtures shall be supplied. The rectangular extruded light fixture with die cast end caps shall measure 14" wide x 4-5/8" high x 3" deep and have a white powder coat finish. The light fixture shall have dual panel (4) clusters of LED lamps (1 flood and 1 spot) with molded vacuum metalized reflector that draws 13 amps at 12.8 Vdc. The lights shall be mounted with an aluminum adapter plate attached to the pole with a switch box and a locking swivel joint with a 3/4" diameter NPT threaded base to allow the lights to be manually tilted up/down and locked in position by the operator. Handle standard.

The light assembly shall be internally mounted as specified. The pole shall allow for 360-degree rotation of the light. A locking knob shall hold the pole at the desired height.

Location: One light shall be located on the driver's side forward area and one light shall be located on the driver's side rearward area.

Switches labeled DRIVERS SIDE LIGHT'S shall be located in the cab and at POLE BASE.

SPECIFICATION NO. 100

REAR DECK LIGHT - FLOOD

Unity Model #AG-S-4413 flood light, with a 50 watt halogen bulb, shall be installed and shall have a "on-off" switch located on the light.

Location shall be determined at pre construction.

SPECIFICATION NO. 101

BACK-UP ALARM

An automatic electric back-up alarm shall be wired to the back-up light circuit, and mounted under the rear of the apparatus body.

SPECIFICATION NO. 102

HAZARD WARNING LIGHT

A flashing LED light with a red lens, located in the driving compartment, shall be illuminated automatically whenever any cab door or equipment compartment door is open. An audible alarm shall also be located in the driving compartment and will activate with the hazard light.

The light shall be marked, "DO NOT MOVE APPARATUS WHEN LIGHT IS ON".

SPECIFICATION NO. 103

WHELEN LED 56" LIGHT BAR

A Whelen Justice Series LED 56" light bar shall be installed. The light bar shall have four (4) red corner LED's, six (6) forward facing red LED's, and two (2) forward facing white LED's. The lightbar lenses shall be clear.

SPECIFICATION NO. 104

UPPER REAR ROTARY BEACON LIGHTS

Two (2) Whelen Model L31HRFN rotary LED lights shall be installed.

Lens color shall be clear with red lights

Location shall be: Upper rear corners of body.

SPECIFICATION NO. 105

LED FRONT GRILLE WARNING LIGHTS

Two (2) Whelen Model M6RC Super LED Red warning lights shall be installed.

Lens color shall be: clear

Location shall be: Front grille

SPECIFICATION NO. 106

LED FRONT CORNER WARNING LIGHTS

Two (2) Whelen Model M6RC Super LED Red warning lights shall be installed.

Lens color shall be: clear

Location shall be: Front corner

SPECIFICATION NO. 107

LED LOWER SIDE BODY WARNING LIGHTS

Four (4) Whelen Model M6RC Super LED Red warning lights shall be installed.

Lens color shall be: clear

Location shall be: two (2) each lower side body

SPECIFICATION NO. 108

LED REAR LOWER WARNING LIGHTS

Two (2) Whelen Model M6RC Super LED Red warning lights shall be installed.

Lens color shall be: clear

Location shall be: One (1) each rear lower

SPECIFICATION NO. 109

ELECTRIC SIREN AND CONTROL

One (1) Whelen Model #295SLSA1 electronic siren shall be mounted in the center console. This unit shall feature an electronic air horn, wail, yelp, hi-lo and shall have a hard wired PA microphone.

SPECIFICATION NO. 110

WHELEN SA315P ELECTRIC SIREN SPEAKER

A Whelen Model #SA315P speaker shall be installed. The speaker shall be wired to the electric siren located in the cab.

SPECIFICATION NO. 111

EQUIPMENT PAYLOAD WEIGHT ALLOWANCE

In compliance with NFPA #1901 standards, the apparatus shall be engineered to provide an allowance of 1000 pounds of fire department provided loose equipment.

SPECIFICATION NO. 112

UNIT RADIO ANTENNA

Two (2) Antenna base mounts shall be installed rear of the light bar and terminate at center console

SPECIFICATION NO. 113

DUAL HARD SUCTION MOUNTING RACK

Two (2) mounted aluminum hard suction hose racks with spring loaded hose clamps shall be provided. The rack shall be mounted to the left side of the tank and shall hold two (2) 10' hoses.

SPECIFICATION NO. 114

PAINT / DECAL SPECIFICATIONS:

Apparatus paint shall match Clark County Fire Department yellow N3452 Dupont.

DECALS / STIPES

Provide and install Clark County matched door legends, reflective S stripes, 10" equipment number (72) shall be provided for all four sides. Up to sixty (60) 3" letters provided. A Scotch lite reflective stripe for the cab and body shall be supplied. The straight stripe shall conform to current NFPA standards. The color of the material and location shall be approved by Clark County Fire Department. The stripe shall be 4" minimum in width.

SPECIFICATION NO. 115

CHASSIS PAINT

The truck cab shall be painted by the OEM manufacturer. The cab will not be re-painted. A container of touch up paint matching the apparatus' primary color shall be shipped with the apparatus. Clark County Fire Department yellow N3452 Dupont

SPECIFICATION NO. 116

REAR BODY CHEVRON STRIPING

A Scotchlite reflective stripe for the rear body lower area, not including the tank, shall be supplied. The chevron striping shall cover the rear body panels. The chevron striping will be made up of 6" reflective red stripe that alternates with a 6" reflective yellow stripe. The stripe shall be in an inverted "V" pattern, also known as an "A" pattern.

LOOSE EQUIPMENT

SPECIFICATION NO. 117

TWO LENGTHS 3.00" x 10.0' SUCTION HOSE

Provide two (2) lengths of 3.00" x 10.0' suction hose shall be provided. The hose shall be constructed from flexible PVC with lightweight fittings. The overall length shall be 10 feet and be provided with a 2-1/2" NST female long handle coupling and a 2-1/2" NST male rocker lug coupling.

LOOSE EQUIPMENT

SPECIFICATION NO. 118

HOLMATRO EXTRICATION EQUIPMENT

Provide the following Holmatro extrication equipment:

1. SR20PC2 DUO Pump Petrol driven Spider duo pump, CORE version, with two tool connections.
 2. SP4240, Spreader
 3. CU4050CNCT11, Cutter
 4. XR4360C, Extendo Ram
 5. C15OU Core hose orange
 6. C15BU Core hose blue
-

CLARK COUNTY, NEVADA

V - BID FORM

BID NO. 603599-15

CURRENT PRODUCTION MODEL WATER TENDER TANKER

Name of Firm

This bid is submitted in response to COUNTY'S Invitation to Bid and is in accordance with all conditions and specifications in this document.

Item No.	Description	Quantity	Unit Price	Extended Total
1.	<p><u>Current Production Model Water Tender Tanker</u></p> <hr/> <p>(Model Year) (Manufacturer) (Make)</p> <p>Delivery _____ Calendar Days (maximum 120 days after receipt of chassis)</p>	1 Each	\$ _____	\$ _____
GRAND TOTAL				\$ _____

ATTACHMENTS TO BID FORM

FAILURE TO SUBMIT REQUIRED ATTACHMENTS AS LISTED BELOW MAY RESULT IN REJECTION OF BID.

- Attachment 1**, Subcontractor Information, is attached.

Bidder is responsible to ascertain the number of Addenda issued and hereby acknowledges receipt of the following Addendum: **FAILURE TO ACKNOWLEDGE ALL ADDENDA ISSUED AND USE THE CORRECT BID FORM AS REQUIRED, MAY RESULT IN REJECTION OF BID.**

Addendum No. _____	Addendum No. _____	Addendum No. _____
Addendum No. _____	Addendum No. _____	Addendum No. _____
Addendum No. _____	Addendum No. _____	Addendum No. _____

Bidder hereby offers and agrees to furnish the material(s) and service(s) in compliance with all terms, conditions, specifications, and amendments in the Invitation to Bid and any written exceptions in the offer. We understand that the items in this Invitation to Bid, including, but not limited to, all required certificates are fully incorporated herein as a material and necessary part of the contract.

The undersigned hereby states, under penalty of perjury, that all information provided is true, accurate, and complete, and states that he/she has the authority to submit this bid, which will result in a binding contract if accepted by Clark County, Nevada.

I certify, under penalty of perjury, that I have the legal authorization to bind the firm hereunder:

SIGNATURE OF AUTHORIZED REPRESENTATIVE	LEGAL NAME OF FIRM		
NAME AND TITLE OF AUTHORIZED REPRESENTATIVE (PRINT OR TYPE)	ADDRESS OF FIRM		
PHONE NUMBER OF AUTHORIZED REPRESENTATIVE	CITY, STATE ZIP		
FAX NUMBER OF AUTHORIZED REPRESENTATIVE			
EMAIL ADDRESS	DATE		
BUSINESS LICENSE INFORMATION:			
CURRENT STATE	LICENSE NO.	ISSUE DATE:	EXPIRATION DATE:
CURRENT COUNTY:	LICENSE NO.	ISSUE DATE:	EXPIRATION DATE:
CURRENT CITY:	LICENSE NO.	ISSUE DATE:	EXPIRATION DATE:

FOR INFORMATIONAL PURPOSES ONLY:

The above referenced firm is a MBE WBE PBE SBE VET DVET ESB as defined below.

STATE OF NEVADA BUSINESSES

MINORITY OWNED BUSINESS ENTERPRISE (MBE):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more minority persons of Black American, Hispanic American, Asian-Pacific American or Native American ethnicity.

WOMEN OWNED BUSINESS ENTERPRISE (WBE):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more women.

PHYSICALLY-CHALLENGED BUSINESS ENTERPRISE (PBE):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more disabled individuals pursuant to the federal Americans with Disabilities Act.

SMALL BUSINESS ENTERPRISE (SBE):

An independent and continuing Nevada business for profit which performs a commercially useful function, is not owned and controlled by individuals designated as minority, women, or physically-challenged, and where gross annual sales does not exceed \$2,000,000.

VETERAN OWNED BUSINESS ENTERPRISE (VET):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51 percent owned and controlled by one or more U.S. Veterans.

DISABLED VETERAN OWNED BUSINESS ENTERPRISE (DVET):

A Nevada business at least 51 percent owned/controlled by a disabled veteran.

EMERGING SMALL BUSINESS (ESB):

Certified by the Nevada Governor's Office of Economic Development effective January, 2014. Approved into Nevada law during the 77th Legislative session as a result of AB294.

ATTACHMENT 1
BID NO. 603599-15
CURRENT PRODUCTION MODEL WATER TENDER TANKER

SUBCONTRACTOR INFORMATION

It is our intent to utilize the following MBE, WBE, PBE, SBE, VET, DVET and ESB subcontractors in association with CONTRACT:

1. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

2. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

3. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

4. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

5. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

6. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

No MBE, WBE, PBE, SBE, VET, DVET or ESB subcontractors will be used.

**INSTRUCTIONS FOR COMPLETING THE
DISCLOSURE OF OWNERSHIP/PRINCIPALS FORM**

Purpose of the Form

The purpose of the Disclosure of Ownership/Principals Form is to gather ownership information pertaining to the business entity for use by the Board of County Commissioners ("BCC") in determining whether members of the BCC should exclude themselves from voting on agenda items where they have, or may be perceived as having a conflict of interest, and to determine compliance with Nevada Revised Statute 281A.430, contracts in which a public officer or employee has interest is prohibited.

General Instructions

Completion and submission of this Form is a condition of approval or renewal of a contract or lease and/or release of monetary funding between the disclosing entity and the appropriate Clark County government entity. Failure to submit the requested information may result in a refusal by the BCC to enter into an agreement/contract and/or release monetary funding to such disclosing entity.

Detailed Instructions

All sections of the Disclosure of Ownership form must be completed. If not applicable, write in N/A.

Business Entity Type – Indicate if the entity is an Individual, Partnership, Limited Liability Company, Corporation, Trust, Non-profit Organization, or Other. When selecting 'Other', provide a description of the legal entity.

Non-Profit Organization (NPO) - Any non-profit corporation, group, association, or corporation duly filed and registered as required by state law.

Business Designation Group – Indicate if the entity is a Minority Owned Business Enterprise (MBE), Women-Owned Business Enterprise (WBE), Small Business Enterprise (SBE), Physically-Challenged Business Enterprise (PBE), Veteran Owned Business (VET), Disabled Veteran Owned Business (DVET), or Emerging Small Business (ESB) . This is needed in order to provide utilization statistics to the Legislative Council Bureau, and will be used only for such purpose.

- **Minority Owned Business Enterprise (MBE):** An independent and continuing business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more minority persons of Black American, Hispanic American, Asian-Pacific American or Native American ethnicity.
- **Women Owned Business Enterprise (WBE):** An independent and continuing business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more women.
- **Physically-Challenged Business Enterprise (PBE):** An independent and continuing business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more disabled individuals pursuant to the federal Americans with Disabilities Act.
- **Small Business Enterprise (SBE):** An independent and continuing business for profit which performs a commercially useful function, is not owned and controlled by individuals designated as minority, women, or physically-challenged, and where gross annual sales does not exceed \$2,000,000.
- **Veteran Owned Business Enterprise (VET):** An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51 percent owned and controlled by one or more U.S. Veterans.
- **Disabled Veteran Owned Business Enterprise (DVET):** A Nevada business at least 51 percent owned/controlled by a disabled veteran.
- **Emerging Small Business (ESB):** Certified by the Nevada Governor's Office of Economic Development effective January, 2014. Approved into Nevada law during the 77th Legislative session as a result of AB294.

Business Name (include d.b.a., if applicable) – Enter the legal name of the business entity and enter the "Doing Business As" (d.b.a.) name, if applicable.

Corporate/Business Address, Business Telephone, Business Fax, and Email – Enter the street address, telephone and fax numbers, and email of the named business entity.

Nevada Local Business Address, Local Business Telephone, Local Business Fax, and Email – If business entity is out-of-state, but operates the business from a location in Nevada, enter the Nevada street address, telephone and fax numbers, point of contact and email of the local office. Please note that the local address must be an address from which the business is operating from that location. Please do not include a P.O. Box number, unless required by the U.S. Postal Service, or a business license hanging address.

Number of Clark County Nevada Residents employed by this firm. (Do not leave blank. If none or zero, put the number 0 in the space provided.)

List of Owners/Officers – Include the full name, title and percentage of ownership of each person who has ownership or financial interest in the business entity. If the business is a publicly-traded corporation or non-profit organization, list all Corporate Officers and Directors only.

For All Contracts – (Not required for publicly-traded corporations)

- 1) Indicate if any individual members, partners, owners or principals involved in the business entity are a Clark County full-time employee(s), or appointed/elected official(s). If yes, the following paragraph applies.

In accordance with NRS 281A.430.1, a public officer or employee shall not bid on or enter into a contract between a government agency and any private business in which he has a significant financial interest, except as provided for in subsections 2, 3, and 4.

- 2) Indicate if any individual members, partners, owners or principals involved in the business entity have a second degree of consanguinity or affinity relation to a Clark County full-time employee(s), or appointed/elected official(s) (reference form on Page 2 for definition). If **YES**, complete the Disclosure of Relationship Form. Clark County is comprised of the following government entities: Clark County, Department of Aviation (McCarran Airport), and Clark County Water Reclamation District. Note: The Department of Aviation includes all of the General Aviation Airports (Henderson, North Las Vegas, and Jean). **This will also include Clark County Detention Center.**

A professional service is defined as a business entity that offers business/financial consulting, legal, physician, architect, engineer or other professional services.

Signature and Print Name – Requires signature of an authorized representative and the date signed.

Disclosure of Relationship Form – If any individual members, partners, owners or principals of the business entity is presently a Clark County employee, public officer or official, or has a second degree of consanguinity or affinity relationship to a Clark County employee, public officer or official, this section must be completed in its entirety.

DISCLOSURE OF RELATIONSHIP

List any disclosures below:
(Mark N/A, if not applicable.)

NAME OF BUSINESS OWNER/PRINCIPAL	NAME OF COUNTY* EMPLOYEE/OFFICIAL AND JOB TITLE	RELATIONSHIP TO COUNTY* EMPLOYEE/OFFICIAL	COUNTY* EMPLOYEE'S/OFFICIAL'S DEPARTMENT

* County employee means Clark County, Department of Aviation, Clark County Detention Center or Clark County Water Reclamation District.

“Consanguinity” is a relationship by blood. “Affinity” is a relationship by marriage.

“To the second degree of consanguinity” applies to the candidate’s first and second degree of blood relatives as follows:

- Spouse – Registered Domestic Partners – Children – Parents – In-laws (first degree)
- Brothers/Sisters – Half-Brothers/Half-Sisters – Grandchildren – Grandparents – In-laws (second degree)

For County Use Only:

If any Disclosure of Relationship is noted above, please complete the following:

Yes No Is the County employee(s) noted above involved in the contracting/selection process for this particular agenda item?

Yes No Is the County employee(s) noted above involved in any way with the business in performance of the contract?

Notes/Comments:

Signature

Print Name
Authorized Department Representative