Invitation for Bid

Saluda County Fire Service is soliciting bids from qualified vendors for a 3000Gallon/1500 GPM Poly Tanker water supply fire apparatus that is NFPA compliant.

To be considered a valid bid, the bid must include the mandatory bid form included in the bid package and be received in a sealed envelope marked "Fire Service" at the following physical address 400 W. Butler Street, Saluda, SC 29138, no later than 3:00 P.M., Thursday, September 25, 2025. Bid packages can be obtained on our website "SaludaCounty.SC.Gov" or by contacting:

Heather Griffin

h.griffin@saludacounty.sc.gov

For questions contact:

Austin Rodgers
austin@grfconstruction.com

This request for bid does not commit Saluda County to award a contract or to procure or contract for the services. Saluda County reserves the right to reject, in whole or in part, any and all bids, to negotiate with any or all responsible and responsive offerors, and, in its sole discretion, to determine the responsiveness of the bids. Bids which do not meet the mandatory requirements, will be considered non-compliant and rejected if it is in the best interest of the county to do so.

3000 Gallon/1500 GPM Poly Tanker
Ridge Spring Fire Department
Saluda County, SC

201 Green Street
Ridge Spring, SC 29129

August 18, 2025

Federal & State Regulations, NFPA Standards and Import Tariffs

In the event that any applicable Federal or State Regulations (DOT, FMVSS, EPA, etc.), National Fire Protection Association Standards or import tariffs are enacted during the course of this contract, and which requires a change in the contract specifications and purchase price in order for the Apparatus and Equipment to comply with such regulation, the parties will execute a change order describing the change in the specifications and increasing the purchase price by an amount equal to the increased costs of producing the Apparatus and Equipment.

Manufacturer Complies: Yes ☐ No ☐

Intent of Specifications

It is the intent of these specifications to cover the design, manufacture, and delivery to the purchaser of a complete fire apparatus equipped as specified herein. These specifications include the general requirements of design, material content and construction as well as certain equipment that will be provided by the contractor. Not all details of the design, material content and construction of the fire apparatus are herein specified. Any such design, material content and construction not specified herein are left to the sole discretion of the seller contractor.

Manufacturer Complies: Yes ☐ No ☐

Compliance with NFPA 1900

The National Fire Protection Association Standard "NFPA 1900 - Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances - 2024 Edition" (hereinafter referred to as NFPA 1900) in effect at the time of the purchase will be used as a reference and its requirements will be met by the apparatus manufacturer. The apparatus will be constructed in accordance with federal and state laws at the time of bid. Any federal, state, or NFPA amended changes that will affect the cost of producing said apparatus will be charged to the purchaser. Mandatory minor apparatus equipment as stated in the applicable paragraphs of the NFPA standard will **not** be provided unless specifically stated and listed in purchaser's written specifications.

Manufacturer Complies: Yes ☐ No ☐

Purchaser's NFPA 1900 Responsibilities

In accordance with NFPA 1900, 2024 edition, it will be the responsibility of the purchaser to specify the following details of the apparatus.

- Its required performance, including where operations at or above elevations of 2000 ft. or on grades greater than 6 percent are required.
- The maximum number of firefighters riding within the apparatus.
- Specific electrical loads that are to be part of the minimum continuous electrical load defined in the latest version of NFPA 1900 at the time of bid.
- Any hose, ground ladders, or equipment to be carried by the apparatus that exceed the minimum requirements of the NFPA 1900 standard in effect at the time of the bid. Equipment weight and location on the apparatus are the responsibility of the purchaser as a prerequisite of defining the loaded vehicle's vertical center of gravity for rollover stability calculations, when required.

Manufacturer Complies: Yes ☐ No ☐

Acquaintance with Specifications - Meets Requirements

The fire apparatus as depicted in this proposal meets or exceeds the requirements of the bid specifications. The purchaser is required to review our Contractor's Specifications contained herein. Because of the intricacies in fire apparatus design, engineering and manufacturing, the Contractor's Specifications, along with any mutually approved changes, will prevail in the event of a discrepancy between the purchaser's original bid specifications and the contractor's specifications.

Manufacturer Complies: Yes ☐ No ☐

Proposal Drawings

Included with this proposal are line drawings of the apparatus being proposed. These drawings will be drawn to scale on a CAD system to ensure an accurate and professional drawing. The drawings show five (5) views of the vehicle: front, rear, both sides and top. The drawings show the wheelbase and overall dimensions of the apparatus, proposed compartment sizes and features, booster tank position and the location of all emergency warning equipment, work lights, seating and other major items that are to be provided on the apparatus.

Manufacturer Complies: Yes ☐ No ☐

No performance Bond Required

Manufacturer Complies: Yes ☐ No ☐

Change Orders

To ensure the proper engineering and construction of the purchaser's custom fire apparatus in a timely manner, the contractor will consider the order final and complete at placement of the order into Engineering. *Change orders requested after order placement are discouraged.* If approved, change orders are subject to fees and escalating multipliers. It will be understood and agreed that any changes, if approved, after the order has been released to Engineering, will constitute a valid cause for production delay and without penalty to the contractor.

Manufacturer Complies: Yes ☐ No ☐

Pre-Construction Conference – Travel Included

One (1) "Pre-Construction" conference trip for four (4) representatives of the purchaser will be included in the bid. The conference will take place at a Company facility or an authorized representative's facility of the Company during normal business hours, Monday - Friday. The reasonable and customary costs of transportation, meals and lodging will be included. A manufacturer's sales representative will accompany the purchaser on the conference trip. It will be the responsibility of the awarded vendor to provide all transport to and from the purchaser's location.

Manufacturer Complies: Yes ☐ No ☐

In-Process Digital Pictures

In-process digital pictures will be taken of the apparatus during the manufacturing process. Depending upon the type of apparatus, the pictures may include any or all of the following: cab interior and exterior, pump operator's panel, tank/body, or any other pictures as requested by the purchaser.

Manufacturer Complies: Yes ☐ No ☐

Final Inspection Trip - Travel Included – Travel Included

One (1) "Final" inspection trip for four (4) representatives of the purchaser will be included in the bid. The inspection will take place at a Company facility or an authorized representative's facility of the Company during normal business hours, Monday - Friday. The reasonable and customary costs of transportation, meals and lodging will be included. A manufacturer's sales representative will accompany the Purchaser on the inspection trip. It will be the responsibility of the awarded vendor to provide all transport to and from the purchaser's location.

Manufacturer Complies: Yes ☐ No ☐

Pre-Delivery Road Trip and Final Factory Checklist

Prior to delivery, the completed apparatus will be thoroughly inspected by the factory. This inspection will include a road test of the apparatus. During the factory inspection and road testing, a checklist will be utilized by factory personnel to document the inspection and road test results. The checklist will include:

- Documentation of the make, model and serial numbers of all major components such as the engine, transmission, pump, axles, etc.
- Complete, comprehensive operational check of all chassis/drive train components and fluid levels.
- A comprehensive review of the entire exterior and interior of the apparatus for fit and finish, checked against the purchaser's pre-construction meeting approval specifications, and any ensuing change orders.
- A thorough test of all driving systems under actual highway and city driving conditions.

Manufacturer Complies: Yes ☐ No ☐

Final Delivery

The fire apparatus will be delivered over the road and under its own power to ensure proper break-in of all driving components while still under warranty. A pre-delivery road test of 50 miles minimum will be conducted by the manufacturer.

Manufacturer Complies: Yes ☐ No ☐

Familiarization – Pumper/Tanker

An experienced and qualified distributor or sales representative will familiarize Fire Department personnel (as designated by the purchaser) with the proper operation, care and maintenance of the apparatus delivered.

The representative must be a qualified, trained agent of the local authorized distributor or sales representative, or a direct employee of the manufacturer of the apparatus.

Manufacturer Complies: Yes ☐ No ☐

SERVICE AND WARRANTY SUPPORT

Manufacturer support will be provided by an authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within one hundred and twenty-five (125) miles from the fire department.

Manufacturer Complies: Yes ☐ No ☐

Documentation- NFPA Requirements

All NFPA required documentation, and certifications will be supplied with the apparatus at the time of delivery.

Manufacturer Complies: Yes ☐ No ☐

General Design Requirements - Commercial Chassis, Poly Body, Class 6-8

The specified apparatus will be assembled on a heavy-duty commercial truck chassis designed and manufactured specifically for Class 6-8 service in North America.

A polypropylene tank and body will be provided. The polypropylene tank and body, with its unique unibody design and specially formulated copolymer material, will offer superior strength, elasticity, shock and corrosion resistance in both extremely hot and cold climates.

Manufacturer Complies: Yes ☐ No ☐

Gross Vehicle Weight - with Certificate at Delivery

The manufacturer will be responsible for proper weight distribution upon the chassis and axles. The apparatus, when loaded, will have not less than 25% nor more than 45% of the weight on the front axle and not less than 55% nor more than 75% on the rear axle. A certified weight certificate showing weights on the front axle, rear axle and total weight for the completed apparatus with the water and fuel tanks full, but without personnel, equipment and hose will be provided at the time of delivery.

In accordance with NFPA 1900, it will be the responsibility of the purchaser to notify the manufacturer in the purchaser's specifications of any hose, ground ladders, or equipment to be carried by the apparatus that exceeds the minimum requirements of the NFPA 1900 standard in effect at the time of the bid.

Manufacturer Complies: Yes ☐ No ☐

General Construction, Quality and Workmanship

The design and construction of the apparatus will embody standard automotive heavy vehicle engineering practices. The apparatus will be designed, engineered and constructed with due consideration for the severe service nature of the fire service. All parts of the apparatus will be installed in accordance with the OEM specifications.

Distribution of load between the front and rear axles will be engineered so that all specified equipment, including a filled water tank (if applicable), full complement of personnel and fire hose (if applicable) will be carried without damage to the apparatus. Weight balance and distribution will be in accordance with the recommendations of the National Fire Protection Association and current standard automotive practices.

The apparatus will be designed to conform to applicable ANSI and NFPA 1900 standards. The following design criteria will be applicable to this specification to the extent specified herein:

- American Society for Testing Materials (ASTM)- A-36, Specification for Structural Steel
- Society of Automotive Engineers, Inc. (SAE)- SAE Handbook
- American Welding Society (AWS)- AWSO14.4-77 Classification and Application of Welded Joints for Machinery and Equipment
- American Society for Non-Destructive Testing (ASNT)

All sensitive components will be protected against adverse weather conditions. Any exposed metal surface which is not painted or otherwise coated will have a bright finish. Corrosion protection will be provided between any dissimilar metals joined on the construction of this apparatus.

Manufacturer Complies: Yes ☐ No ☐

NFPA 1900 Stepping Surface Certification

The manufacturer will provide at time of delivery of the apparatus, a certification that all materials used for exterior surfaces designated as stepping, standing and walking areas, all interior steps and all interior floors meet the slip resistance requirements of the applicable edition and section of NFPA 1900.

Manufacturer Complies: Yes ☐ No ☐

Pump Test and Certification

The fire pump will be third party tested at the apparatus manufacturer's facility and will conform to NFPA requirements and standards. Copies of all tests and the manufacturer's record of pump construction details will be provided with the delivery documentation.

Manufacturer Complies: Yes ☐ No ☐

Performance Requirements and Test – NFPA 1900

A road test will be conducted with the apparatus loaded per NFPA recommendations (unless otherwise specified) and a continuous run of ten (50) miles or more will be made during which time the apparatus will show no loss of power or overheating. The transmission drive shaft or shafts and rear axles will run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus.

The apparatus must be capable of accelerating to 35 mph from a standing start within 25 seconds on a level highway without exceeding the maximum governed rpm of the engine.

The fully loaded vehicle will be capable of obtaining a speed of 50 mph on a level highway with the engine not exceeding its governed rpm (full load).

The apparatus will be able to maintain a speed of 20 mph on any grade up to and including 6%.

The service brakes will be capable of stopping the fully loaded vehicle in 35 feet at 20 mph on a level highway.

Manufacturer Complies: Yes ☐ No ☐

Commercial Chassis with Pumper/Tanker Body

The chassis will be suitable for heavy duty service with all components having adequate strength and capacity for the intended load to be sustained and the type of service required.

Chassis specifications are provided as an attachment.

Manufacturer Complies: Yes ☐ No ☐

Approach/Departure Angles

An angle of approach and an angle of departure of at least 8 degrees will be maintained at the front and the rear of the vehicle when it is loaded to the estimated in-service weight, as defined by the current NFPA 1900 - 2024 edition.

Manufacturer Complies: Yes ☐ No ☐

Chassis Preparation

Prior to construction, various chassis attachments such as battery boxes, air reservoirs, mufflers, tail pipes, filters, and other bolt on frame attachments may be relocated to permit full utilization of the chassis for equipment compartments.

Manufacturer Complies: Yes ☐ No ☐

Bumper Extension - 20", Standard

A bumper extension will be installed at the front of the cab and will include painted tow eyes. The front of the bumper will be approximately 20" from the front face of the cab. A gravel pan made of 3/16" aluminum treadplate will be installed between the front bumper and the cab. The bumper extension will be designed and constructed so that the apparatus can be pulled by the extension.

Manufacturer Complies: Yes ☐ No ☐

Front Bumper - Painted

The fabricated quarter inch steel bumper will be painted to match the lower cab color.

Manufacturer Complies: Yes ☐ No ☐

Front Bumper – Left, Right, and Center

The front bumper will accommodate a flush mounted Federal Q Siren on the left side. Two Grover air horns will be placed, one each, center and outside of the frame rails. Two siren speakers will be placed, one each, in the 45-degree right and left corners of the front bumper and will be covered with stainless steel covers.

Manufacturer Complies: Yes ☐ No ☐

Front Bumper Trough - Center

A bumper trough will be installed in the center of the bumper extension. It will be constructed of smooth 3/16 aluminum and be easily removable from the gravel pan. This trough will accommodate a 1.5-inch discharge and will hold at least 150 feet if 1.75-inch hose. A latch and gas shock will be provided for the cover, along with drain holes for the trough.

Front Bumper Trough - Right

A bumper trough, size to be determined at the preconstruction meeting, will be installed on the right side of the bumper extension. It will be constructed of smooth 3/16 aluminum and be easily removable from the gravel pan. A latch and gas shock will be provided for the cover, along with drain holes for the trough.

Manufacturer Complies: Yes ☐ No ☐

Front Bumper Trough - Left

A bumper trough, size to be determined at the preconstruction meeting, will be installed on the left side of the bumper extension. It will be constructed of smooth 3/16 aluminum and be easily

removable from the gravel pan. A latch and gas shock will be provided for the cover, along with drain holes for the trough.
Manufacturer Complies: Yes ☐ No ☐

Turtle Tile - Front Bumper Troughs

Black Turtle Tile will be provided on the floor of all front bumper troughs.
Manufacturer Complies: Yes ☐ No ☐

Rear Tow Plate Assembly

A custom fabricated rear tow plate assembly will be installed at the rear of the chassis frame. The assembly will be of the "outrigger" design, constructed of .25" heat treated steel flat stock and "U" channel. The assembly will incorporate two (2) elongated flat tow plates with a minimum 2" diameter eye opening.

The entire rear subframe/tow eye assembly will be designed and adequately reinforced to permit horizontal towing of the fully loaded vehicle directly from the rear or up to 45 degrees to each side of center without flexing or damage to the vehicle chassis frame or body. The complete assembly will be painted black unless specified otherwise.
Manufacturer Complies: Yes ☐ No ☐

Hub Caps- (2) S/S "Baby Moon", Front Axle

Stainless steel, "Baby Moon" type hub caps, will be provided on the front axle. The hub cap style will match the requirements of the front axle wheel seals.
Manufacturer Complies: Yes ☐ No ☐

Lug Nut Covers- Aluminum Wheels, Front Axle

Chrome plated lug nut covers will be provided for the front axle.
Manufacturer Complies: Yes ☐ No ☐

Hub Caps- (2) S/S, 'High Hat", Rear Axles

Stainless steel "High Hat" type hub caps will be provided on the rear axles.
Manufacturer Complies: Yes ☐ No ☐

Lug Nut Covers- Aluminum Wheels, Rear Axles

Chrome plated lug nut covers will be provided for two (2) rear axle(s).
Manufacturer Complies: Yes ☐ No ☐

Tire Pressure Indicators- Accu-Pressure H.D. Safety Caps, Single Axle

Each wheel will be equipped with Accu-Pressure Heavy Duty Safety Caps: valve stem inflation pressure sensitive monitor that will provide a visual color indication of when the tire pressure is below the manufacturers recommended level. The chrome safety cap will show green when the tire is properly inflated and red once the tire becomes underinflated by 10%.
Manufacturer Complies: Yes ☐ No ☐

Transmission Programming – EVS down shift mode in 3rd Gear

The transmission with be programmed for a downshift mode (w/engine brake). This will provide earlier transmission downshifts to 3rd gear from 6th gear, resulting in improved engine braking

performance.
Manufacturer Complies: Yes ☐ No ☐

Nameplate - Lubrication Capacity

A permanent plate will be installed in the driver's compartment which will specify the quantity and type of lubrication fluids used in the following chassis or apparatus components: engine, chassis transmission, pump transmission, pump primer and rear axle differential. Engine coolant type and quantity will also be stated.
Manufacturer Complies: Yes ☐ No ☐

Sign- Vehicle Dimensions and Weight

A sign will be provided in the front cab area indicating the height of the completed apparatus in feet and inches, length of the completed apparatus in feet and inches, and the gross vehicle weight rating (GVWR) in pounds.
Manufacturer Complies: Yes ☐ No ☐

Two-Way Radio Antenna Mount - Universal with Cable

One (1) universal antenna mount(s), with approximately 17 feet of coax cable and weatherproof cap with be provided for the two-way radio equipment. The mount(s) with be installed on the cab roof. The cable with be routed to the center console, or as requested by the purchaser, with any excess cable secured in an accessible location. All installation locations and cable routing will be confirmed with the purchaser during the pre-construction meeting.
Manufacturer Complies: Yes ☐ No ☐

Mud Flaps - Rear

Heavy duty mud flaps will be provided and installed to the rear of the tandem axles/wheels. Flaps will be 24" wide and be made of 3/16" heavy duty semi-flexible vinyl material to prevent "sailing".
Manufacturer Complies: Yes ☐ No ☐

Seat Belt Monitor/VDR- For Kenworth

A seat belt monitor will be installed in the cab, as mandated by NFPA 1900. A vehicle data recorder will be installed and integrated with the seat belt monitoring system.
Manufacturer Complies: Yes ☐ No ☐

Electrical Wiring - 12V Hardwire (Commercial Chassis)

The apparatus will be equipped with a fully integrated power management and signal distribution system.

CIRCUIT PROTECTION

Circuit protection devices will be utilized to protect each electrical circuit. All circuit protection devices will be sized according to 125% of the anticipated load to prevent wire and component damage when subjected to extreme current overload.
Circuit breakers will be Type-I automatic reset (continuously resetting) and conform to SAE J553 or J258 unless operational requirements and/or safety concerns dictate Type-III manual reset type conforming to SAE J1625. Automotive-type fuses conforming to SAE J554, J1284, J1888 or J2077 will be utilized when required to protect electronic equipment.
Manufacturer Complies: Yes ☐ No ☐

POWER CONTROL RELAYS AND SOLENOIDS

Power control relays and solenoids will have a direct current (dc) rating of 125 percent of the anticipated current load.
Manufacturer Complies: Yes ☐ No ☐

Electrical - 12V General Electrical Wiring Requirements

12-Volt Electrical System

The apparatus will be equipped with a heavy-duty 12-volt electrical system. All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All electrical wiring and components installed in the apparatus will be suitable for use in severe duty emergency vehicle applications.
Manufacturer Complies: Yes ☐ No ☐

OEM Chassis Wiring

Where appropriate, the chassis OEM electrical wiring, harnesses, connections and components will be utilized.
Manufacturer Complies: Yes ☐ No ☐

General Wiring and Wire Harness Construction

Unless otherwise specified by the component supplier, all insulated wire and cable will conform to SAE J1127 *Low Voltage Battery Cable* type SGX or STX, or SAE J1128 *Low Voltage Primary Cable* type SXL, GXL, or TXL.

Circuit feeder wires will 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.

Conductor materials and stranding, other than copper, will be permitted if all applicable requirements for physical, electrical, and environmental conditions are met as dictated by the end application.

The overall covering of conductors will be moisture-resistant loom or braid that has a minimum continuous rating of 194°F (90°C) except where good engineering practice dictates special consideration for loom installations exposed to higher temperatures.

The overall covering of jacketed cables will be moisture resistant and have a minimum continuous temperature rating of 194°F (90°C) except where good engineering practice dictates special consideration for cable installations exposed to higher temperatures.
Manufacturer Complies: Yes ☐ No ☐

Circuit Identification
All wiring will be uniquely identified by a circuit number and color coding. The identification will be referred to in a wiring diagram and will be provided to the department with final delivery documents. Wires less than 8 AWG will be permanently identified at least every 2.0 inches (50.8 mm) by a circuit and function code. Cables equal to or larger than 8 AWG and wires included in jacketed cables will be permanently identified by circuit number at all terminations.
Manufacturer Complies: Yes ☐ No ☐

Wiring Connections
All wiring connections and terminations will use a method that provides a positive mechanical and electrical connection. The wiring connections and terminations will be installed in accordance with the device manufacturer's instructions. Secondary locks will be utilized on all connectors that are secondary lock capable.

Exterior exposed wire connectors will be environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Seal plugs will be installed in all unused sealed connector cavities.

All ungrounded electrical terminals will have covers or be in enclosures to protect against corrosion, excessive heat, excessive vibration, physical damage, liquid contaminants, dust, and other environmental factors.

Wiring splices will be crimp-type, molded, or sonic weld type. Adhesive lined heat shrink tubing will be used to seal and insulate splice joints.
Manufacturer Complies: Yes ☐ No ☐

Wire and Cable Routing
Wiring routed through holes in sheet metal or castings will have edges protected by an appropriately sized grommet.

Wiring will be routed to avoid metal edges, screws, trim fasteners, and abrasive surfaces. When such routes are not possible, protective devices (shields, caps, etc.) will be used to protect the wires. When wires must cross a metal edge the edge will be covered with a protective shield.

Wiring will be routed to provide at least 3 inches (76.2 mm) clearance to moving parts, unless positively fastened or protected by a conduit.
Wire routes should avoid areas where temperatures exceed 180° F (82.2° C) and a minimum clearance of 6 inches (152.4 mm) will be maintained from exhaust system components. Where compliance with this requirement is not possible, high temperature insulation and heat shields will be utilized.

When wiring is routed between two members where relative motion can occur the wiring will be secured to each member, with enough wire slack to allow flexing without damage to the wires.

Wiring to all circuit components (switches, relays, etc.) in exposed locations will provide a drip loop to prevent moisture from being conducted into the device via the wire connection.

Routing wires into areas exposed to wheel wash will be avoided if possible. When such routings cannot be avoided, adequate clipping or protective shields will protect the wires from stone and ice damage.

Wiring will be secured in its intended location with appropriately sized bolt-on clips and nylon wire ties. Electrical components designed to be removed for maintenance will include a sufficient length of wire to allow the component to be pulled away from the mounting area for inspection and service work. Bulkhead type connectors or sealed fittings will be used to prevent the entry of liquid contaminants into weather tight enclosures.
Manufacturer Complies: Yes ☐ No ☐

Spare Wires
Wiring harnesses from/to major power and signal distribution areas of the apparatus will include spare wires for future expansion of the system.
Manufacturer Complies: Yes ☐ No ☐

Electrical System Components
Serviceable components will be readily accessible. Switches, relays, terminals and connectors will have a dc rating of 125% of the maximum current for which the circuit is protected.

A distributed power and signal system will be utilized on the apparatus to minimize power supply voltage drops. Power and signal distribution areas in the cab will be concentrated in two (2) areas.

A lower cab power and signal distribution center will be in the center forward portion of the cab "dash". It will be hinged and opened by unlocking two (2) top mounted, double hinged, lift and pull latches. This area will contain relays and circuit breakers installed in a logical and serviceable fashion.

An upper power distribution and signal distribution area will be in the forward portion of the cab ceiling, above the engine tunnel. Components in this area will be permanently labeled and easily accessible by opening a hinged cover.

All electrical components or devices installed in an exposed area on the outside of the cab or body will be mounted in such a manner, or protected by a gasket, caulking or other means, so that moisture will not accumulate in it.
Manufacturer Complies: Yes ☐ No ☐

Corrosion Protection
Externally exposed, non-plug type, electrical connections will be given a hand applied or sprayed application of an industrial standard insulation coating with a minimum rating of 2100 volts per mil thickness. Insulation will protect the connection from water induced electrical corrosion and accidental short circuiting. Should the connection be loosened or removed during the manufacturing process another coating will be applied after it has been refastened or replaced.
Manufacturer Complies: Yes ☐ No ☐

Low Voltage Electrical System Performance Testing

An operational test will be conducted to ensure that all installed electrical equipment is properly connected and is in working order. The apparatus alternator will be tested with the total continuous electrical load applied and engine running up to the engine manufacturer's governed speed for a minimum of 2 hours. Additionally, all warning lights will be run continuously during the three (3) hour NFPA pump certification test (or at another time for not less than three (3) hours). Activation of the load management system (if furnished) will be permitted during this test. An alarm sounded by excessive battery discharge, as detected by the low voltage warning system, or a system voltage of less than 11.8 V dc at the battery for more than 120 seconds, will be considered a test failure.

Manufacturer Complies: Yes ☐ No ☐

Cab Center Console and Switch Panel

A center console, painted to match the cab interior, will be provided and built using 1/8 smooth aluminum and will include map/equipment storage based on information provided by the purchaser at the preconstruction meeting. The emergency radio and mic, siren head and mic, a control for the rear dump, two cup holders, two flashlight chargers, and two charging ports for auxiliary equipment will be located on the center console.

Manufacturer Complies: Yes ☐ No ☐

Emergency & Work Light Switch Panel- Commercial Chassis

All emergency light and work area lighting control switches will be mounted in a removable panel located on the center console. The light switches will be "rocker" type with an internal indicator light (where applicable) to show when the switch is energized. All switches will be properly identified by an illuminated label for night driving.

A master warning light switch and individual switches will be provided to allow pre-selection of emergency lighting.

Manufacturer Complies: Yes ☐ No ☐

Door Ajar/Hazard Warning Indicator- LED

A 2" round red flashing LED light with chrome flange will illuminate automatically whenever the apparatus parking brake is not fully engaged and any of the following conditions exist:

- Any passenger or equipment compartment door is open.
- Any dump tank or equipment rack is not in the stowed position.
- Powered light tower is extended (if applicable).
- Any other device permanently attached to the apparatus is open, extended, or deployed in a manner that is likely to cause damage to the apparatus if the apparatus is moved.

Manufacturer Complies: Yes ☐ No ☐

Load Manager/Sequencer

A load manager and sequencer will be installed as needed. The load manager will be designed to meet all the requirements of NFPA 1900.

If needed, the load manager will consist of a sequencer and load shedding controller operating up to 10 vehicle installed relays. Upon closing a master switch to initiate the sequencing, the 10

outputs will be energized sequentially at approximately ½ second intervals and upon shutdown they are de-energized similarly.

In addition, the load manager will monitor the vehicle's battery voltage. When electrical loads exceed alternator output, outputs are individually de-energized. The load manager will be programmed to shed a predetermined sequence and number of loads. This program will be determined at the time of order placement. An indicator is included to signal when the load manager is active and when it is in the load shedding mode.
Manufacturer Complies: Yes ☐ No ☐

Master Battery Disconnect Switch and Indicator Light

A master battery disconnect switch with green indicator light will be installed in the cab on the driver's side.
Manufacturer Complies: Yes ☐ No ☐

Air Comp/Battery Charger- Kussmaul Pump Plus, Bar Graph Display

A Kussmaul combination air compressor/battery charger will be installed. The 12-volt compressor will automatically replace air lost due to leakage in the brake system without any interference to engine mounted air compressor functions. The 12-volt automatic battery charger will maintain a single battery bank with charging capabilities to 40 amps maximum output.

A selector switch will be provided on the charger to operate the compressor either as a DC compressor or as an AC compressor. The switch will be placed in the AC position.
Manufacturer Complies: Yes ☐ No ☐

Display
A remotely located bar graph display will indicate the state of charge of the batteries whenever the system is connected to 120 VAC. This display will be located on the driver side pump panel.
Manufacturer Complies: Yes ☐ No ☐

Auto Eject Plug – Shoreline Power

A shoreline power connector, located on the driver side pump panel, will be provided for the battery charger. The shoreline power connector will be provided with a spring-loaded cover to prevent water from entering when the shoreline is not connected. A label will be permanently affixed at the power inlet that indicates the line voltage in volts and the current rating in amps.
Manufacturer Complies: Yes ☐ No ☐

Auto Eject Cover Color- Red

The auto eject cover color will be red.
Manufacturer Complies: Yes ☐ No ☐

Rear View Camera System - (1) Rosco #STSK7165, 7" LCD, Rear

A Rosco rear view color camera system, model STSK7165, will be provided and installed. The system will consist of the following items:

- One (1) STSM270 7" Quad Screen HD LCD monitor,
- One (1) STSC101A backup color camera with built-in microphone & night vision, 150-degree lens and 17 infrared LEDs.
- One (1) 65-foot cable

- One (1) STSH341 Harness
- Mounting brackets and hardware

Camera Monitor Will be Hung from the Overhead, Driver's Side

The camera monitor will be hung from the overhead console, placed to the driver's side of the removable panel.

Rear Camera Location - Surface Mount, Rear Center Upper Bulkhead

The rear-view camera will be surface mounted on the rear upper, close to center.

Manufacturer Complies: Yes ☐ No ☐

Rear Marker Lights - TecNiq #S34, (7) Red LED/Red Lens

Seven (7) TecNiq S34, red LED markers and clearance lights with red lens will be installed at the rear of the body. A three light identification cluster will be surface mounted on the rear step vertical flange.

Two lights will be placed at each lower rear body corner, facing each side. Two lights will be placed in the upper rear body corners, facing the rear.

Manufacturer Complies: Yes ☐ No ☐

Body Side Directional Lights - TL 60042Y, LED, Midship, Under Body

One (1) Truck-Lite model 60042Y LED, amber body side directional light will be provided and installed forward of the rear axle on each side of the vehicle. The lights will have black flanges and will be installed under the body with a stainless-steel bracket.

Manufacturer Complies: Yes ☐ No ☐

License Plate Bracket & LED Light

A steel license plate bracket, painted black, will be installed on the rear of the vehicle. Mounted on the license plate bracket will be a chrome light bracket containing a 12-volt LED lamp that will illuminate the license plate.

Manufacturer Complies: Yes ☐ No ☐

D.O.T. Reflectors - Body Only

Reflectors will be placed on the body as required by Federal standards. Four (4) Signal Stat model 32DB red reflectors will be located on the rear face and sides of the body. The reflectors will be rectangular in shape.

Manufacturer Complies: Yes ☐ No ☐

STBU Lights – Whelen M- Series, Colored Lens

Two (2) Whelen M62BTT LED red brake/taillights will be mounted at the rear of the apparatus, one on each side. All brakes lights will be programmed for "steady burn" operation in compliance with FMVSS No. 108.

Two (2) Whelen M62T LED amber arrow turn lights, will be mounted at the rear of the apparatus, one on each side.

Two (2) Whelen clear M62T LED back up lights, will be mounted at the rear of the apparatus, one on each side.

Manufacturer Complies: Yes ☐ No ☐

Bezels – Whelen Chrome Flange Stop/Turn/Back

Whelen M6FCV4 chrome plated bezels will be provided on each side of the outer lower rear of the body for the stop/tail, turn, and backup lights along with the lower-level warning lights.
Manufacturer Complies: Yes ☐ No ☐

Step Lights - (4) Cab, LED

Four (4) TecNiq model EON, LED step lights will be provided, two (2) at each cab entrance door. They will be mounted one (1) above and one (1) below each intermediate step.
Manufacturer Complies: Yes ☐ No ☐

Step Light Flange - TecNiq, Polished Stainless Steel

The flange for the step lights will be polished stainless steel.
Manufacturer Complies: Yes ☐ No ☐

Ground Lights - (2) Cab, LED

Two (2) weatherproof TecNiq #E10 LED lights will be provided underneath the cab, according to NFPA requirements.
Manufacturer Complies: Yes ☐ No ☐

Ground Lights - (2) Body Rear Step, LED

Two (2) weatherproof TecNiq #E10 LED ground lights will be provided underneath the body rear step, per NFPA requirements.
Manufacturer Complies: Yes ☐ No ☐

Ground Lights - Additional, LED

In addition to the standard, NFPA required ground lights, four (4) weatherproof TecNiq #E10 LED ground lights will be provided underneath the vehicle.
Manufacturer Complies: Yes ☐ No ☐

Additional Ground Light Location

The additional ground light locations will be determined at the preconstruction meeting.
Manufacturer Complies: Yes ☐ No ☐

Body Compartment Lights - ROM LED Strips, Vertical Mount

Six body compartment(s) will have a ROM LED lighting strip installed on both sides of the door. The lighting strips will be mounted vertically along both sides of the door framing in all specified body compartments. The LED lights will be mounted in an anodized aluminum track. A switch, installed in the door frame, will be used to activate the lights and will be tied to a door ajar light in the cab.
Manufacturer Complies: Yes ☐ No ☐

Lightbar – Whelen Freedom IV 72", LED

A Whelen Freedom IV 72" LED light bar will be mounted on the cab roof. The light bar will feature six (6) red lights, two (2) red/white dual color, two (2) white lights. All lights will be forward and side facing with clear lens. Final color placement will be determined at time of order. All white warning lights will be disabled when the apparatus is in park.
Manufacturer Complies: Yes ☐ No ☐

Perimeter – Whelen M6 Red LED

Eight (8) Whelen M6R red LED light(s) with chrome plated flange(s) will be provided on the apparatus. Two (2) Whelen M6D red/white LED light(s) with chrome plated flange(s) will be provided on the apparatus. The white warning lights will be disabled in park. Each light will have a clear lens and internal flasher.

Manufacturer Complies: Yes ☐ No ☐

Perimeter Warning Light Locations

Location of each perimeter warning light will be:

2 on each side of the front face of the vehicle grill
1 split lens (red/white) on each side of the bumper extension
1 on each side of the body, above and between the rear tandem axle wheel well
1 on each side of the rear of the body, below the backup lights in the STBU bezel

Manufacturer Complies: Yes ☐ No ☐

Upper Perimeter – Whelen M9 Red LED

Six (6) Whelen M9R red LED light(s) with chrome plated flange(s) will be provided on the apparatus. Each light will have a clear lens and internal flasher.

Manufacturer Complies: Yes ☐ No ☐

Upper Perimeter Warning Light Locations

Location of each upper perimeter warning light will be:

1 each side as far forward on the upper part of the body
1 each side as far rearward on the upper part of the body
1 on each side of the rear of the body on the upper corners

Manufacturer Complies: Yes ☐ No ☐

Lower Perimeter - Whelen Rub Rail LED

Four (4) Whelen TLIR red LED light(s) with chrome plated flange(s) will be provided in the body rub rail on the apparatus. Each light will have a clear lens and internal flasher.

Manufacturer Complies: Yes ☐ No ☐

Lower Perimeter Warning Light Locations

Location of each lower perimeter warning light will be:

1 each side forward of the rear axle in the rub rail
1 each side aft of the rear axle in the rub rail

Manufacturer Complies: Yes ☐ No ☐

Traffic Advisor - Whelen Super-LED, 36"

A Whelen TANF65 500 series Super-LED® Traffic Advisor will be provided. The light bar will be 36" wide and consist of six (6) Super-LED® lamp modules mounted in a low-profile flat style housing. All outer lenses will be amber colored. The light will be controlled by a TACTL5 control head mounted in the cab.

Manufacturer Complies: Yes ☐ No ☐

Traffic Arrow Control Head - Recessed in Lower Dash

The control head for the traffic arrow will be recess mounted in the lower dash.
Manufacturer Complies: Yes ☐ No ☐

Traffic Advisor Wiring

The traffic advisor will be wired to the battery switch.
Manufacturer Complies: Yes ☐ No ☐

Installation - Traffic Advisor, Surface Mount on Rear

The traffic advisor will be surface mounted on the center rear of the body near the top.
Manufacturer Complies: Yes ☐ No ☐

Air Horns - Dual

Two (2) Grover chrome air horns will be furnished. A pressure protection valve will be installed in-line to prevent loss of all air from the vehicle air brake system. The air horns will range from 18" to 24" in length and will be as long as possible, dependent upon other selected options and extension length.
Manufacturer Complies: Yes ☐ No ☐

Air Horn Locations - One on Each Side of Bumper

There will be an air horn on each side of the bumper outside of frame rails. One (1) Linemaster Model 491 momentary foot operated switch to activate the air horns will be installed on the cab floor. The foot switch will not be deactivated when the parking brake is set. The foot switch will be located on the driver side, outboard the steering column.
Manufacturer Complies: Yes ☐ No ☐

Electronic Siren – Whelen 200 Watt Siren and Speakers

Whelen 295SL100 200 Watt Siren with two 100-watt composite speakers will be provided. Siren control head will be mounted in center console. The siren speakers will be mounted in the extended front bumper in the 45-degree corners with polished stainless steel or chrome covers.
Manufacturer Complies: Yes ☐ No ☐

Federal Q Siren – Provided and Located on Front Bumper Driver Side

A flush mount Federal Q Siren will be provided on the driver side front bumper. One siren brake switch will be installed within reach of the apparatus driver. One (1) Linemaster Model 491 momentary foot operated switch to activate the siren will be installed on the cab floor. The foot switch will be deactivated when the parking brake is set. A foot switch will be located on the driver side, outboard the steering column.
Manufacturer Complies: Yes ☐ No ☐

Electronic Siren Head Location

The electronic siren head controls will be located on the center console.
Manufacturer Complies: Yes ☐ No ☐

Mic Clip

The siren mic clip will be installed on the center console per purchaser's instruction.
Manufacturer Complies: Yes ☐ No ☐

Pump Module, Side Mount

The pump module body will be a self-supported structure mounted independently from the body and chassis cab. The pump module will be constructed entirely of extrusions and aluminum plates. The framework will be formed from beveled aluminum alloy extrusions and will be electrically seam welded at each joint using 5356 aluminum alloy welding wire. The main framework to be 3.00 x 3.00 x 0.18, or 3.00 x 1.5 webbed 0.25, 6063-T5 aluminum extrusion. The pump module design must allow normal frame deflection through isolation mounts without imposing stress on the pump module structure or side running boards. The pump module will consist of a welded framework, properly braced to withstand chassis frame flexing. The pump module support will be bolted to the frame rails of the chassis.

Manufacturer Complies: Yes ☐ No ☐

Side Panels- ATP Finish

The pump module panels will be 14-gauge brushed stainless steel. The panels will be an integral part of the module.

Manufacturer Complies: Yes ☐ No ☐

Color Coded Labels

A set of color coded and function described labels will be provided on the pump panels for the pump operator's controls, gated inlets, discharge outlets, drains, intake gauge, and pressure gauges (as applicable).

Manufacturer Complies: Yes ☐ No ☐

Pump Panel Light

The pump control panel will be illuminated by the LED lights. These lights will be activated by a push/pull switch on the control panel.

Manufacturer Complies: Yes ☐ No ☐

Pump Panel ID Plate

A permanently affixed plate will be installed at the pump operators position that will provide the rated discharge and pressures together with the speed of the engine as determined by the certification test for each unit, the position of the parallel/series pump used, and the no load governed speed of the engine as stated by the engine manufacturer on a certified brake horsepower curve.

Manufacturer Complies: Yes ☐ No ☐

Fire Pump - Hale, 1500 GPM PTO

The pump will be of a size and design to mount on the chassis rails of commercial and custom truck chassis and have the capacity of 1500 gallons per minute (U.S. GPM), NFPA 1900 rated performance. The entire PTO pump will be assembled and tested at the pump manufacturer's factory. The pump will be driven by a drive line from the truck transmission. The engine will provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance. The entire pump will be hydrostatically tested to a pressure of 600 PSI. The pump will be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest version NFPA 1900. The pump will be free from objectionable pulsation and vibration. The pump body and related parts will be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI (2069 bar). All metal moving parts in contact with water will be of high-quality bronze or stainless steel. Pumps utilizing castings made of lower tensile strength cast iron will not be acceptable.

The pump body will be vertically split on a single plane for easy removal of entire impeller assembly including clearance rings and the pump shaft will be rigidly supported by two bearings for minimum deflection. The bearings will be heavy-duty, deep groove ball bearings in the gearbox and they will be splash lubricated. The pump impeller will be hard, fine grain bronze of the mixed flow design; accurately machined, hand-ground and individually balanced. The vanes of the impeller intake eye will be hand ground and polished to a sharp edge and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower. The pump impeller will be hard, fine grain bronze of the mixed flow design; accurately machined hand ground and individually balanced. The vanes of the impeller intake eyes will be hand ground and polished to a sharp edge and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower. Impeller clearance rings will be bronze, easily renewable without replacing impeller or pump volute body. The pump shaft will be heat-treated, electric furnace, corrosion resistant stainless steel. The pump shaft must be sealed with double-lip oil seal to keep road dirt and water out of gearbox.
Manufacturer Complies: Yes ☐ No ☐

Gearbox

The pump gearbox will be of sufficient size to withstand up to 16,000 lb/ft (7,257 kg/m) drive through torque of the engine system. The drive unit will be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature. The gearbox drive shafts will be of heat-treated chrome nickel steel and at least 2-¾" (6.99 cm) in diameter, on both the input and output drive shafts. The drive shaft will withstand the full torque of the engine. All drive and pump gears will be manufactured of the highest quality electric furnace chrome nickel steel. All bores will be ground to size, teeth integrated and hardened, to create an extremely accurate gear for long life, smooth, quiet running, and higher load carrying capability. An accurately cut spur design will be provided to eliminate all possible end thrust (no exceptions). The pump ratio will be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected. If the gearbox is equipped with a power shift, the shifting mechanism will be a heat-treated, hard anodized aluminum power cylinder, with stainless steel shaft. An in-cab control for rapid shifts will be provided that locks in road or pump. All apparatus' built with automatic transmissions will be provided with three (3) green warning lights to indicate to the operator(s) when the pump has completed the shift from road to pump position. The warning lights will be located as stated: two (2) in the truck driving compartment and one (1) on the pump operator's panel adjacent to the throttle control. For manual transmissions, one (1) green warning light will be provided for the driving compartment. All lights will have appropriate identification/instruction plates.

Certification

The pump will perform and meet the following tests:

100% of rated capacity @150 PSI net pump press.

100% of rated capacity @ 165 PSI net pumps press.

70% of rated capacity @ 200 PSI net pump press.

50% of rated capacity @ 250 PSI net pump press.

Pumps will be tested at the manufacturer under full NFPA suction conditions.
Manufacturer Complies: Yes ☐ No ☐

Priming Pump

The priming pump will be a positive displacement, oil-less rotary vane electric motor driven pump conforming to NFPA 1900 rated performance requirements. The pump body will be manufactured of heat-treated anodized aluminum for wear and corrosion resistance. The pump will be capable of producing a minimum of 24 Hg vacuum at 2,000 feet (609.6m) above sea level. The electric motor will be a 12 VDC totally enclosed unit. The priming pump will not require lubrication. The priming pump will operate by a single pull control valve mounted on the pump operator's panel. The control valve will be manufactured using bronze construction.

Manufacturer Complies: Yes ☐ No ☐

Steamer Inlets

Two 6" steamer inlets will be provided, one (1) on the left side and one (1) on the right side. Both inlets will have long handle chrome vented caps and a screen.

Manufacturer Complies: Yes ☐ No ☐

Pump Anodes – Anode Pro System

The Fire Pump will be equipped with replaceable anodes. These anodes will be constructed with alloy meeting MIL-A-24779 (no exceptions). The pump will have one anode on each intake section and one anode on the discharge section of the Fire Pump. The anodes will have a central stainless-steel core to prevent anode breakage that can lead to clogged nozzles (no exceptions).

Each anode will have an internal probe that detects when the anode has worn to the point where the anode no longer provides adequate protection for the pump. The internal probe will be connected to a monitoring box via a single wire and a sealed weatherpak connection. Each anode will have an NPT thread to allow replacement and proper sealing and removal for replacement.

A monitor box will be provided and mounted in a protected space such as the engineers' compartment or behind the pump panel to indicate the status of the anodes. The monitor box itself will have three individual LEDs that monitor the anodes every 4-5 seconds and indicates the status on the box panel. A clearly labeled monitor panel will have a separate indicator LED for each anode. The LEDs will indicate green when the anode is still working and will flash red when the individual anode needs replacement. The monitor box housing will be constructed of non-metallic material and will utilize a sealed pass-thru connector to prevent leakage contaminants into the anode monitor box. The circuit board for the monitor box will be conformal coated to resist corrosion.

The monitor box (Anode Pro) will operate on 12VDC and will be wired to battery on or ignition switches. The power connection will be a two pin weatherpak sealed connector. The AnodePro will be grounded directly to the Fire Pump body. The anode connections will be color coded, and all wiring will conform to NFPA 1900 requirements.

Manufacturer Complies: Yes ☐ No ☐

Thermal Protection Device – TRV-L

A thermal protection device will be included on the pump that monitors pump water temperature and opens to relieve water to cool the pump. The thermal protection device will be set to relieve water when the temperature of the pump water exceeds 120o F (49 C). The components of the thermal protection device will be manufactured of brass and stainless steel and be compatible with most foam concentrates. The thermal protection device will have 1-1/4-inch NPT threads

for easy adaptability to existing pump discharge openings. The discharge line will be 3/8-inch diameter tubing vented to atmosphere or back to the booster tank. The thermal protection device will have a hydrostatic test rating of 600 PSIG.

Manufacturer Complies: Yes ☐ No ☐

Pressure Relief Valve

There will be one (1) suction side stainless steel pressure relief pump valve provided on the pump system.

Manufacturer Complies: Yes ☐ No ☐

Master Gauges

Class 1 4-½ inch gauges will be provided. The master discharge gauge will indicate pressure from 0 to 600 PSI. The master intake gauge will indicate pressure from -30hg to 600 PSI. The gauges will be Interlube filled pressure gauges and handle pressures from 0 to 400 PSI. The pressure gauge will be fully filled with pulse and vibration dampening Interlube® to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40 degrees Fahrenheit. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube will be filled with low temperature material and be sealed from the water system using an insulating Sub Z diaphragm located in the stem.

Manufacturer Complies: Yes ☐ No ☐

Pressure Governor- Total Pressure Governor (TPG+)

The apparatus will be equipped with a Class1 "Total Pressure Governor Plus" (TPG+) that is connected to the Engine Control Module (ECM) mounted on the engine. The "TPG+" will operate as a pressure sensor (regulating) governor (PSG) utilizing the engine's J1939 data for optimal resolution and response when supported by the engine manufacturer. If J-1939 engine control is not supported, then analog remote throttle control will be provided by the "TPG+". The "TPG+" will function as a Master Pump Discharge and Intake Gauge.

The "TPG+" will utilize control algorithms that minimize pressure spikes during low or erratic water supply situations. The "TPG+" will be backwards compatible to any engine that supplies J1939 RPM, Temperature and Oil Pressure information providing the ability to maintain a consistent fleet fire-fighting capability and reduce operator cross training and confusion. The "TPG+" will have the ability to use either a 300 PSI or a 600 PSI discharge pressure transducer and a 300 PSI intake pressure transducer. PSG system diagnostics will be built in and accessible by technicians. Programmable presets for RPM and Pressure settings will be easily configurable. The straightforward menu structure will allow the "TPG+" configuration to match existing apparatus operation as closely as possible.

The "TPG+" will also include indication of engine RPM, system voltage, engine oil pressure and engine/transmission temperature with audible alarm output for all. The "TPG+" uses the J1939 data bus for engine information, requiring no additional sensors to be installed. The TPG+ will monitor and display pump and engine hours. The "TPG+" will use J1939 broadcast warnings for the alarm as a standard and allow the "user" to select warning values if "SOP's" dictate.

The following continuous displays will be provided:

- Pump hours
- Engine oil pressure
- Engine coolant temperature

- Battery voltage
- Digital master gauges
- Presets – One at a time
- Multi-Display Function

Manufacturer Complies: Yes ☐ No ☐

Pump Cooler and Engine Cooler Valves

A pump cooler and engine cooler valve will be installed and properly labeled on the pump operator's panel. The valves will be a quarter inch muti-turn valves installed through the instrument panel.

Manufacturer Complies: Yes ☐ No ☐

Master Pump Drain

The pump will be equipped with a master pump drain to allow draining of the lower pump cavities, volute and selected water carrying lines and accessories. The master drain valve assembly will consist of a stainless-steel plunger in a bronze body with multiple ports. The valve will be designed so that the pump discharge pressure prevents it from opening accidentally.

Manufacturer Complies: Yes ☐ No ☐

Plumbing System

All auxiliary suction and discharge plumbing related fittings, waterways and manifolds will be fabricated with stainless steel pipe, brass, or high-pressure flexible piping with stainless steel couplings. Where waterway transitions are critical (elbows, tees, etc..) no threaded fittings will be allowed to promote the smooth transition of water flow to minimize friction loss and turbulence. All piping components and valves will be non-painted. All piping welds will be wire brushed and cleaned for inspection and appearance.

The high-pressure flexible piping will be black SBR synthetic rubber hose with 300 PSI working pressure and 1200 PSI burst pressure for flexible piping sizes 1-1/2" through 4". Sizes ¾", 1" and 5" are rated at 250 PSI working pressure and 1000 PSI burst pressure. All sizes are rated at 30 in HG vacuum. Reinforcement consists of two piles of high tensile strength tire cord for all sizes and helix wire installed in sizes 1" through 5" for maximum performance in tight bend applications. The material has a temperature rating of -40 degrees Fahrenheit to +210 degrees Fahrenheit.

The stainless-steel full flow couplings are precision machined from high tensile strength stainless steel. All female couplings are brass. Mechanical grooved and male ¾" and 1" couplings are brass. A high tensile strength stainless steel female with serrations on the I.D. will be utilized to assure maximum holding power when fastening couplings to hose.

Manufacturer Complies: Yes ☐ No ☐

Valves - Akron Brass

Akron Brass 8800 Series heavy-duty swing out valves will be provided. The valve body will be brass construction, with a ball of 304 stainless steel.

Manufacturer Complies: Yes ☐ No ☐

Wiring Harness

The Class 1 electrical wiring harness will be manufactured using GXL wire as SAE- J1128 rated performance requirements. The electrical wiring harness will be covered by a black split convoluted loom, rated at a minimum of 275° F. All terminals will meet the minimum pull test as required by the manufacturers pull test and crimp measurement data. All splices will be manufactured using the ultra-sonic splice process. The harness will be 100% connected to a Dynalab® circuit tester to ensure continuity and correct assembly.

Manufacturer Complies: Yes ☐ No ☐

U.L. Test Points

Two (2) U.L. test points will be mounted on the pump panel for testing of the vacuum and pressures. The test points will be a single piece with individual ports for suction and discharge.

Manufacturer Complies: Yes ☐ No ☐

Air Horn Button on Pump Panel

An air horn control button will be provided at the pump operator's control panel. This button will be red in color and properly labeled and put within easy reach of the operator.

Manufacturer Complies: Yes ☐ No ☐

Valve Controls - Side Mount

Locking push/pull control rods will be provided for valve actuation. The chrome plated zinc handles will have a recessed area for identification tags. The controls will be lockable in any position.

Manufacturer Complies: Yes ☐ No ☐

Discharge Gauges

Individual Class 1 2.5 (6.35cm) line gauges for each 2" (5.08cm) or larger discharge will be provided and mounted adjacent to the discharge valve control handle. The gauges will indicate pressure from 0 to 400 PSI. The pressure gauge will be fully filled with pulse and vibration dampening Interlube® to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40 degrees F. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube will be filled with low temperature material and be sealed from the water system using an isolating Sub Z diaphragm located in the stem. A colored bezel will be supplied for resistance to corrosion and to protect the lens and case from damage.

Manufacturer Complies: Yes ☐ No ☐

Water Tank Level Gauge – ITL 40 (Multi-Color)

The apparatus will be equipped with a Class1 "ITL-40" Tank Level Gauge for indicating water or foam level. The Tank Level Gauge will indicate the liquid level or volume on an easy-to-read LED display and show increments of 1/8 of a tank.

Each tank level gauge system will include:

1) A pressure transducer that is mounted on the outside of the tank in an easily accessible area. Sealed foam tanks will require zero pressure vacuum vents.

2) A super bright LED display viewable from 180 degrees with a visual indication at nine accurate levels.

3) A set of weather resistant connectors to connect to the digital display, to the pressure transducer and to the apparatus power. Additional (slave) displays (if requested) are to be easily

integrated and will receive data from the same source as the Master Display. No additional transducers will be required.
4) The system will include the ability to display "text messages".
5) The system will include built-in diagnostic capabilities.
Manufacturer Complies: Yes ☐ No ☐

Large Tank Level Displays - (3) LED – Body

There will be three (3) additional water level indicator(s), Whelen, Model PSTANK2, LED module with chrome trim, installed one (1) on each side, on the forward upper area of the body, one (1) at the rear of the apparatus. This light module(s) will include four (4) colored levels and will function as follows:

- First green module indicates a full water level
- Second blue module indicates a water level above 3/4 full
- Third amber module indicates a water level above 1/2 full
- Last red module indicates a water level above 1/4 full

Above 1/4 this light will be steady burning. The light module will flash all red indicating the water level is empty. The flash rate will be determined by the main water level tank sensor. This module will be activated when the parking brake is applied.
Manufacturer Complies: Yes ☐ No ☐

Water Tank Level Gauge - Cab

An additional water level gauge will be provided. This gauge will have four (4) indicator modules and will be installed in the cab. The flash rate will be determined by the main water tank sensor.
Manufacturer Complies: Yes ☐ No ☐

Tank-to-Pump Line 3"

One (1) manually controlled tank-to-pump line will be provided for connection between a water tank and the fire pump. The valve will be a 3" quarter turn ball type.
Manufacturer Complies: Yes ☐ No ☐

Tank Fill Line 2"

One (1) 2" discharge with a stainless-steel valve will be plumbed to the tank. The valve will be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2" valve outlet terminates with 2" grooved connection. The valve will be controlled with a chrome-plated push/pull locking "T" handle mounted on the pump panel.
Manufacturer Complies: Yes ☐ No ☐

Discharge Drains

All 2" or larger discharge outlets will be equipped with a ¾" or larger quarter-turn valve.
Manufacturer Complies: Yes ☐ No ☐

Discharge - Front Bumper, 1-1/2"

One (1) 1-1/2" discharge outlet with 1-1/2" plumbing and 1-1/2" self-locking valve will be supplied to the front bumper discharge on the apparatus. The valve will be a quarter turn ball

type, self-locking, fixed pivot design and will be operated with a manual control from the pump operator's panel.
Manufacturer Complies: Yes ☐ No ☐

Discharges - Left Side, 2-1/2"

Two (2) 2-1/2" discharge outlet with 2-1/2" pipe and ball valve will be supplied on the left-side panel. The valve will be a quarter turn ball type, self-locking, fixed pivot design and will be operated with manual controls from the pump operator panel. The discharge will be equipped with a 30-degree elbow terminating with 2-1/2" NH threads, a vented chrome cap and a retaining chain.
Manufacturer Complies: Yes ☐ No ☐

Discharge- Right Side, 2-1/2"

One (1) 2-1/2" discharge outlet with 2-1/2" pipe and ball valve will be supplied on the right-side panel. The valve will be a quarter turn ball type, self-locking, fixed pivot design and will be operated with manual control from the pump operator panel. The discharge will be equipped with a 30-degree elbow terminating with 2-1/2" NH threads, a vented chrome cap and a retaining chain.
Manufacturer Complies: Yes ☐ No ☐

Discharge- Right Side, 4"

One (1) 4" discharge outlet with 3" pipe and ball valve will be supplied on the right-side panel. The valve will be a quarter turn ball type, self-locking, fixed pivot design and will be operated with manual controls from the pump operator panel. The discharge will be equipped with a 30-degree elbow terminating with 5" Storz fitting, with cap and a retaining chain.
Manufacturer Complies: Yes ☐ No ☐

Deck Gun Discharge

One (1) 3" discharge with a stainless-steel valve will be located on the top of the pump. The valve will be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 3" outlet will be equipped with an integral, stainless-steel flange terminating with 3" Victaulic. The discharge will be plumbed to the top of the module using 3" schedule 10 stainless steel pipe. The pipe will terminate in a 3" MNPT thread. The pipe will be held in place by a 2-piece stainless steel bracket. The valve will be of a slow-close design so as not to allow the valve to open or close in less than 3 seconds. The valve will be controlled with a chrome-plated push/pull locking "T" handle mounted on the pump panel. There will be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge will also come equipped with a ¾" automatic drain valve. The discharge must be capable of flowing 1500 GPM or greater.
Manufacturer Complies: Yes ☐ No ☐

Deck Gun Discharge – Manual Extension

A manual deck gun extension pipe will be provided for a purchaser provided deck gun/monitor. This pipe will have a hard coat anodized aluminum finish and will provide for full range of movement and flexible firefighting coverage.
Manufacturer Complies: Yes ☐ No ☐

Double Crosslay - 1 ¾" with Dunnage Area

One double crosslay will be installed on top of the pump module. Each section of the crosslay compartments will hold 200' of 1-3/4" double jacket fire hose. A 1-1/2" mechanical swivel hose connector will be used in each crosslay to provide access to hose in either direction. Each crosslay will have one (1) 2" stainless steel valve. The valve will be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2" valve outlet terminates with 2" grooved connection. The discharge will be plumbed to the crosslay trays using 2" schedule 10 stainless steel pipe. The pipe will terminate in a stainless-steel swivel with 1 ½" NH thread. The swivel will allow the hose to be pulled from either side of the apparatus. The pipe will be held in place by a 2-piece stainless steel bracket. The valves will be controlled with a chrome-plated push/pull locking "T" handle mounted on the pump panel. There will be a Class 1 2 ½" pressure gauge mounted on the panel near each control to indicate pressure. Each discharge will also come equipped with a quarter-turn ¾" drain valve. Each discharge will be foam capable. Each discharge must be capable of flowing 180 GPM or greater. A crosslay cover will be provided and hinged along the forward edge of the pump module. A dunnage area will be provided rearward of the crosslays that will include the location of the deluge gun/monitor.
Manufacturer Complies: Yes ☐ No ☐

Crosslay Hose Restraint

There will be one (1) red vinyl cover provided across each end of two (2) crosslays, to secure the hose during travel. Each vinyl end flap will have 1.00" web straps that loop through footman loops at the bottom of the crosslays and fasten with spring clip and hook fasteners.
Manufacturer Complies: Yes ☐ No ☐

Left Side Auxiliary Suction - Pump Panel, Recessed Valve

A 2-1/2" ball type, quarter turn fill valve will be provided. The control valve will be a swing handle valve and will be located inside the pump enclosure on the left side.

It will terminate in a chrome plated 2-1/2" swivel female connector with a screen and chrome plated 2-1/2 plug with retaining chain. Only the control handle and 2-1/2" NST will be exposed.
Manufacturer Complies: Yes ☐ No ☐

Right Side Auxiliary Suction - Pump Panel, Recessed Valve

A 2-1/2" ball type, quarter turn fill valve will be provided. The control valve will be a swing handle valve and will be located inside the pump enclosure on the right side.

It will terminate in a chrome plated 2-1/2" swivel female connector with a screen and chrome plated 2-1/2 plug with retaining chain. Only the control handle and 2-1/2" NST will be exposed.
Manufacturer Complies: Yes ☐ No ☐

Water Tank- Poly, 3000 Gallons, T-Tank, Tandem Axle - No Exceptions

CAPACITY AND WARRANTY

The tank will have a water capacity of 3000 U.S. Gallons. If the tank is equipped with foam cells, the foam cells will not decrease the water capacity. The tank manufacturer will serialize the tank and furnish notice that indicates proof of warranty.

Manufacturer Complies: Yes ☐ No ☐

CONSTRUCTION

The body and water tank will be fabricated using polypropylene, a specially formulated high strength, copolymer material. Polypropylene provides a lightweight and durable body/tank ensemble which is torsionally stable in severe wracking, able to withstand extreme high and low temperatures, impact resistant and highly corrosive resistant. The tank will be fabricated using polypropylene extruded sheets .375", .50" and .75" in thickness. All seams will be welded pursuant to ASTM Standards. The entire body and water tank will be a one piece, uni-body module to maximize compartment space while providing a full width, full length support structure for the body.

Manufacturer Complies: Yes ☐ No ☐

The water tank will be baffled to meet the requirements of NFPA. It will be provided with at least one (1) full-length swash partition (baffle) and a sufficient number of width-wise baffles so that the maximum dimension of any spaces in the water tank, either transverse or longitudinal, will not exceed 46", and not less than 23". The baffles will have openings at both the top and bottom to permit movement of air and water between spaces to allow maximum flow requirements. Baffles will form an integral part of the water tank and be designed to provide and maintain safe road stability regardless of water level.

Manufacturer Complies: Yes ☐ No ☐

FILL TOWER

The tank will have a combination vent and manual tower. The fill tower will be constructed of ½" material and will be a minimum dimension of 10.00" x 14.00" outer perimeter. The tower will be located in a front corner area of the tank to prevent spillage during motion unless otherwise specified by the purchaser. The tower will have a ¼" thick removable screen and a hinged-type cover. Inside the fill tower there will be a combination vent overflow pipe. The vent overflow will be a minimum scheduled 40 polypropylene pipe with a minimum I.D. of 6" that is designed to run through the tank and will be piped behind the rear wheels so as to maximize traction.

Manufacturer Complies: Yes ☐ No ☐

COVER

The tank cover will be constructed of ½' think material that is U.V. stabilized. A minimum of two lifting dowels will be drilled and tapped to accommodate the lifting eyes.

Manufacturer Complies: Yes ☐ No ☐

SUMP

There will be one (1) sump standard per tank. The sump will be reinforced with ½" thick material and be located in the bottom of the tank to the front. The sump will have a minimum 3" NPT threaded outlet on the bottom for a drain plug. This will be used as a combination clean-out and drain. On all tanks that require a front suction, a 12" anti-swirl baffle plate will be provided

to prevent air from mixing with the water when pumping from the tank. The anti-swirl plate will be located approximately 2"-2 ½" above the sump.
Manufacturer Complies: Yes ☐ No ☐

TANK INLET/DISCHARGE OPENINGS
There will be five (5) standard tank inlet/discharge openings provided: one (1) tank-to-pump suction line, which will accommodate a minimum of 3" pipe, one (1) tank fill line, which will accommodate a minimum of 2" pipe, two (2) 2.5" direct tank fill, at the rear of the tank, and one (1) 10" x 10" rear dump flange. All tank fill couplings will be backed with flow deflectors to break up the stream of water entering the tank and be capable of withstanding sustained fill rates of up to 1,000 GPM.
Manufacturer Complies: Yes ☐ No ☐

MOUNTING
The tank and body will rest on a steel sub-frame with outrigger style support along the length of the structure. The sub-frame design will provide cross members, spaced at a distance that would prevent more than 400 square inches of unsupported area un the tank floor. The tank will be isolated from the chassis frame through hard rubber strips with a minimum thickness and width dimension of .250" x 2.00" and a minimum Rockwell Hardness of 60 durometer. Additionally, the tank will be designed as an integral part of the body structure preventing the tank and body from shifting during vehicle operation. The tank and body structure will have adequate hold down restraints to minimize movement during vehicle operation.
Manufacturer Complies: Yes ☐ No ☐

Direct Tank Fills- Fireman's Friend One-Way Valve, Right/Left Rear Tank

Two 3" direct rear tank fills will be provided with a Fireman's Friend valve that will be capable of flowing at a rate in excess of 1,000 GPM. A valve will be mounted on the right and left side rear wall of the apparatus.

The water tank will be equipped with a diffuser panel at the fill entry to prevent baffle damage by water stream entering the tank.

A 45-degree sweep elbow, positioned downward, will be provided to eliminate hose kink during refill.

The Fireman's Friend valve requires a 11" mounting surface at the rear of the tank.
Manufacturer Complies: Yes ☐ No ☐

Rear Quick Dump- (1) Newton S/S, Electric, with Manual Swivel Chute

One (1) Newton model stainless steel electrically actuated Kwik-Dump Valve, complete with 18" manual telescoping extension chute will be provided and installed at the rear of the tank. Minimum valve size will be 10" x 10", thereby providing 100 sq. in.
Manufacturer Complies: Yes ☐ No ☐

Dump Controls- Cab and Rear

One (1) master on/off switch will be provided for the water tank dump valve. The switch will be located at the cab instrument panel. Dump controls will be located in the cab and at the rear of the body. All rear controls will be momentary toggle switches in recessed switch mounts.

The driver side dump controls will be located at the rear of the body towards the driver's side, near the taillight cluster.
Manufacturer Complies: Yes ☐ No ☐

Hose Bed

Hose bed side sheets, constructed from smooth polypropylene, will be provided around the perimeter of the top of the tank. These side sheets will be painted to match the body. Polypropylene hose bed grating will be installed on the top section of the water tank.
Manufacturer Complies: Yes ☐ No ☐

Hose Bed Divider

One (1) adjustable hosebed divider will be furnished for separating hose. The divider will be constructed of a .25" brushed aluminum sheet. Flat surfaces will be sanded for uniform appearance or constructed of brushed aluminum and the rearward end of the divider will be slotted for a gloved hand hold. Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed and will be held in place by tightening bolts, at each end. Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.
Manufacturer Complies: Yes ☐ No ☐

Hose Bed Cover

A red vinyl hosebed cover will be furnished with Velcro with snaps fasteners at the front and Velcro with jacket snaps in each corner fasteners on the sides. There will be seat belt buckle fasteners at the bottom of the rear body sheet below the hosebed. The flap at the rear will be weighted.
Manufacturer Complies: Yes ☐ No ☐

Hosebed Lighting

White 12-volt DC LED lighting will be installed to provide the NFPA required lighting for the hose bed. The lights will have control from a switch at the rear of the truck.
Manufacturer Complies: Yes ☐ No ☐

Access Ladder to Hosebed and Top of Tank

An access ladder constructed of aluminum tubing will be provided for access to the hosebed and top of tank. The ladder will be located on the left side of the truck at the rear.
Manufacturer Complies: Yes ☐ No ☐

POLY BODY DESIGN AND CONSTRUCTION - No Exceptions

Tanker Body OAL - 210" (C=125.50") Tandem Axles

The overall length of the body will be 210.00". The distance from the front exterior edge of the body to the midline of the tandem rear axles will be 125.50". Body overall width will be 100" panel to panel, 102" fender to fender.
Manufacturer Complies: Yes ☐ No ☐

Body Material & Construction – Polypropylene Tanker, 210" OAL

The body and compartments will be a unibody design entirely constructed of high-density polypropylene copolymer. The material will be torsionally stable in severe wracking, able to withstand extreme high and extreme low temperatures and will be impervious to chemical

attack. The polypropylene formulation will be highly resistant to impact and will not dent, crack, chip or corrode. The body design will employ .375", .50" and .75" thickness plate to form the body structure. The roof will incorporate a slight overall radius that will increase the strength of the unibody design, as well as shed water properly. Body and compartmentation will be tested to withstand compartment loading of 500 pounds each. The body will be formed and welded along all seams, providing smooth .25" radius outside corners, sweep out flat floor compartments which are waterproof and vented.
Manufacturer Complies: Yes ☐ No ☐

Subframe and Body Installation

A steel sub-frame, bolted to the chassis frame rails, will support the body structure from the underside at the front, center and rear with outrigger style appendages and framing designed to isolate the body from road shock transference.
Manufacturer Complies: Yes ☐ No ☐

Left Side Compartments - Tanker, Poly, Tandem Axle

The left side body panel will have overall exterior dimensions of approximately 210.00" long x 70.00"/40.00" high and will be constructed of polypropylene. This panel will consist of two (2) combination high/low side compartments, one each ahead and aft of the rear axles/wheels and two (2) high side compartments above the rear axles/wheels. All compartments will have rollup doors. It is understood that the usable compartment space may be diminished by any optional storage hardware selected and by the door. All compartment measurements will be considered approximate until final approvals are made by the purchaser at time of order. All compartment upper exterior surfaces on the left side will be covered with 1/8" aluminum diamond plate.

The compartment immediately ahead of the rear axles/wheels will have overall interior dimensions of approximately 64.00" wide x 70.00" high x 14.00" deep in the upper portion and 24.00" deep in the lower portion with the door closed. The left side/forward wall of this compartment will be equipped with a removable bulkhead for access to any wiring run up the front of the body. The bulkhead will not decrease the interior dimensions stated above.
It is understood that the usable compartment space may be diminished by any optional storage hardware selected and by the door.

The compartment immediately behind the rear axles/wheels will have overall interior dimensions of approximately 24.00" wide x 70.00" high x 14.00" deep in the upper portion and 24.00" deep in the lower portion with the door closed. The right side/rearward wall of this compartment will be equipped with a removable bulkhead for access to any wiring run up the rear of the body. The bulkhead will not decrease the interior dimensions stated above.
It is understood that the usable compartment space may be diminished by any optional storage hardware selected and by the door.

The two (2) compartments over the rear axles/wheels will have overall interior dimensions of approximately 51.00" wide x 38.00" high x 14.00" deep with the door closed. It is understood that the usable compartment space may be diminished by any optional storage hardware selected and by the door.
Manufacturer Complies: Yes ☐ No ☐

Right Side Compartments - Tanker, Poly Tandem Axle

The right side of the panel will have overall exterior dimensions of approximately 210.00" long x 35.00" high and will be constructed of polypropylene. This panel will consist of two (2) low side compartments ahead and aft of the rear wheels and one (1) low side compartment behind the rear wheels. All compartments will have rollup doors. It is understood that the usable compartment space may be diminished by any optional storage hardware selected and by the door. All compartment measurements will be considered approximate until final approvals are made by the purchaser at time of order. All compartment upper exterior surfaces on the right side will be covered with 1/8" aluminum diamond plate.

The front compartment ahead of the rear wheels will have overall dimensions of 64.00" wide x 27.00" high x 24.00" deep with the door closed. It is understood that the usable compartment space may be diminished by any optional storage hardware selected and by the door.

The compartment behind the rear wheels will have overall interior dimensions of approximately 24.00" wide x 27.00" high x 24.00" deep with the door closed. It is understood that the usable compartment space may be diminished by any optional storage hardware selected and by the door.

Manufacturer Complies: Yes ☐ No ☐

RS Port-a-Tank Storage Prep- Zico Quic-Lift PTS

A Zico Model PTS-HA "Quic-Lift" hydraulic portable tank lowering device will be provided over the side compartments of the body. The storage rack will be equipped with warning lights which will activate automatically when the system is in motion or in the lowered position. An override system will allow the rack to be lowered or raised manually if required. The tank lift system will be controlled by a 30 amp, two pole, double throw momentary switch located on the same side of the vehicle as the lift, properly labeled. The tank lift will be designed to accommodate a 3000-gallon dump tank. The outside of the lift system will be covered with a painted job color 1/8" smooth aluminum cover.

Manufacturer Complies: Yes ☐ No ☐

Fol-Da-Tank Size to be Lifted- 3000 GL

The Fol-Da-Tank being lifted will be 3000 gallons.

Manufacturer Complies: Yes ☐ No ☐

Portable Tank Lift Location- Right Side of the Body

The portable tank lift will be located on the right side of the body.

Manufacturer Complies: Yes ☐ No ☐

Hard Suction Hose Storage

Enclosed hard suction hose storage will be provided as an integral part of the tank lift. This storage will accommodate two (2) sections of ten (10) foot by six (6) inch hard suction hose as provided by the purchaser.

Manufacturer Complies: Yes ☐ No ☐

Vents - Body Compartments

All compartments will be vented to meet the requirements of NFPA 1900.

Manufacturer Complies: Yes ☐ No ☐

Inner Liners - Rear Single Axle

Full semi-circular inner liners will be provided in each wheel housing. They will be constructed of polypropylene and will be integral to the body.

Manufacturer Complies: Yes ☐ No ☐

Fenderette - Rear Single Axle

Polished aluminum fenderettes will be installed on the rear wheel openings. The fenders will be wide enough to completely cover the outside rear tire and reduce wheel splash up the sides of the body.

Manufacturer Complies: Yes ☐ No ☐

Rear & Upper-Level Lighting Provisions

A horizontal light mounting fixture will be provided on the upper rear exterior wall of the apparatus. The fixture will allow the installation of upper-level rear facing lights without disturbing the integrity of the water tank.

Polypropylene wiring conduits will be provided on each side of the body, running the full length of the body.

Manufacturer Complies: Yes ☐ No ☐

Tailboard - 12" Deep, Full Width

The tailboard will be 12" deep running the full width of the rear body. The tailboard surface will be 3/16" thick aluminum treat plate with 2" deep flanges on the front, rear and side edges. It will be installed over a steel framework to prevent the tailboard from bending and flexing and have 45-degree corners.

Manufacturer Complies: Yes ☐ No ☐

Fill Hose Storge Box

A fill-hose storage box for the will be provided on the rear bumper below the dump chute that will accommodate two (2) sections of twenty-five (25) feet of 3" double jacketed fill hose.

Manufacturer Complies: Yes ☐ No ☐

Roll Up Compartment Doors - Side

The side non-locking compartment doors will be R.O.M. aluminum shutter roll-up type doors (made in the U.S.A.). A magnetic door ajar and compartment light system designed within the door to conceal moving parts and prevent parts exposure in the compartment will be provided. Slats will be double-wall box frame extrusion and must be anodized to eliminate oxidation and rusting. The exterior surface will be flat and interior surface to be concave to help loose equipment from jamming the door. The latch system will be full width, one piece, lift bar, enabling operation with one hand. The manufacturer's standard door frame design may be altered or modified to accommodate the roll-up doors.

Manufacturer Complies: Yes ☐ No ☐

Non - Paint Roll-Up Doors – Trim to Remain Satin Finish

The slats and door frames on six (6) roll-up doors and will be satin finished.

Manufacturer Complies: Yes ☐ No ☐

Warranty - R.O.M. Products

The R.O.M. Roll-Up Shutter will be warrantied for manufacturing defects for a period of 7 years from the date of purchase. A warranty certificate will be provided for complete details.
Manufacturer Complies: Yes ☐ No ☐

Sill Protector - Body Compartment Door, Brushed Aluminum

A brushed aluminum sill protector, approximately .50" wide, will be provided on six (6) body compartment door sill(s) to protect the painted finish.
Manufacturer Complies: Yes ☐ No ☐

Adjustable Shelf - 3/16" Aluminum w/Smooth Finish

Six (6) adjustable shelves (with open corners) made from 3/16" smooth aluminum sheet metal will be provided in the body compartment(s). The shelf lip will be 1.75" high. Each shelf will be supported by four (4) stainless steel angles bolted to Aluma-Strut tracks. Placement to be determined at preconstruction meeting. Black Turtle Tile will be provided on the floor of all shelves.
Manufacturer Complies: Yes ☐ No ☐

Finish - Adjustable Shelf, DA outside Edge

The adjustable shelves (or shelves) will have a DA finish on the outside edge of the shelf.
Manufacturer Complies: Yes ☐ No ☐

Aluma-Strut in All Compartments (Future Shelves)

Aluma-Strut shelving supports will be provided for future installation of a shelf or shelves. Two (2) tracks will be installed at full height on each side wall of all the body compartments.
Manufacturer Complies: Yes ☐ No ☐

Slide-out Floor Mounted Trays

There will be two (2) floor mounted slide-out tray(s) with 2.00" sides provided in the following compartment(s): L1 and R1. Each tray will be rated for up to 500lb in the extended position. The tray(s) will be constructed of a minimum 3/16" smooth aluminum with welded corners. There will be two undermount roller-bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2. Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand. Black Turtle Tile will be provided on the floor of all trays.
Manufacturer Complies: Yes ☐ No ☐

Fender Storage - Tandem Axle

Two SCBA air cylinder or fire extinguisher double poly compartments will be provided, one each side between the tandem axles. Each compartment will have dividers and keeping straps as required based on purchaser requirements.
Manufacturer Complies: Yes ☐ No ☐

Fender Storage Doors - Polished with Push Button Lever Latch

Two (2) fender storage doors will be constructed of polished twelve-gauge stainless steel secured by a full-length stainless-steel hinge and a push button lever latch.
Manufacturer Complies: Yes ☐ No ☐

Handrails & Steps – Per NFPA

Handrails and steps will be placed on or about the apparatus to comply with the current edition of NFPA 1900.

Manufacturer Complies: Yes ☐ No ☐

Rub Rail, Body Sides - Bright Aluminum Polished C-Channel

Four (4) Bright aluminum polished C-channel rub rails will be provided along the lower portion of the body, beneath the compartment doors, on each side to prevent damage to the body and finish. The C-channel will be mounted so the flat side of the channel is against the body, and the legs of the channel protrude outward. The rub rails will be a minimum of 2.25" wide x 1.25" deep and will be mounted on rubber supports. The rub rails will have a 1.25" x 1.25" chamfer at the front and rear of the rail. The rails will protrude a minimum of 1.75" from the face of the body.

Manufacturer Complies: Yes ☐ No ☐

Brow Light - HiViz FT-MB-33-B Mini Brow Light

One (1) HiViz FT-MB-33-B to be mounted under/front of the light bar on cab.

Manufacturer Complies: Yes ☐ No ☐

Brow Light Mount - HiViz Pedestal Feet, per Light

Two (2) HiViz pedestal feet will be provided to mount the HiViz light.

Manufacturer Complies: Yes ☐ No ☐

Brow Light Switching

One (1) 12-volt light will be black rocker switched on the cab center console.

Manufacturer Complies: Yes ☐ No ☐

Body Side 12V Surface Mount Light - HiViz #FT-GSM, Guardian

Four (4) HiViz model FT-GSM, 12 volts, Guardian LED, 7" x 9" surface mount light head(s) will be installed on the body sides. Each light will have a chrome plated flange.

The light will be 6.25-amp, 75 watt and generate 10,000 raw lumens/ 6500 effective lumens.

Manufacturer Complies: Yes ☐ No ☐

Body Side Surface Mount Light - Body Side Fore & Aft Corners

The body side surface mounted lights will be located on the side(s) of the body, on the fore and aft upper corners of the upper compartment on the inside of the emergency warning lights.

Manufacturer Complies: Yes ☐ No ☐

Body Side Surface Mount Lights Switching

Four (4) 12-volt lights, two for each side will be black rocker switched, one for each side, and will be located on the cab center console.

Manufacturer Complies: Yes ☐ No ☐

Body Rear Surface Mount Lights - HiViz #FT-GSM, Guardian

Two (2) HiViz model FT-GSM, 12 volts, Guardian LED, 7" x 9" surface mount light head(s) will be installed on the body rear directly under the upper emergency warning lights. Each light will have a chrome plated flange.

The light will be 6.25-amp, 75 watt and generate 10,000 raw lumens/ 6500 effective lumens.
Manufacturer Complies: Yes ☐ No ☐

Body Rear Surface Mount Light - Left & Right Sides

The body rear surface mounted lights will be located as high as possible on the left side and the right side on the upper rear of the body under the emergency warning lights.
Manufacturer Complies: Yes ☐ No ☐

Body Rear Surface Mount Lights Switching

Two (2)12-volt rear lights will be black rocker switched and located on the center console.
Manufacturer Complies: Yes ☐ No ☐

Rear Lower Work Area Surface Mount Light - Left & Right Sides

Two (2) body rear lower surface mounted lights will be located over the rear STBU light clusters on the left side and the right side on the lower rear of the body for increased lighting while backing and working while a dump tank is deployed. These lights (Whelen PEL2C) will be switched with the upper rear scene lights.
Manufacturer Complies: Yes ☐ No ☐

Portable Tank - FoldingTank, 3000 Gallon, Aluminum Frame

A Husky, model ALF-3000, 3000-gallon portable tank with a 1" x 1" x.125" thick aluminum frame and 22oz. red Hypalon liner will be provided.
Manufacturer Complies: Yes ☐ No ☐

Wheel Chocks - (2) Zico SAC-44-E Folding Aluminum

Two (2) folding aluminum wheel chocks Model SAC-44-E will be furnished and shipped loose with the apparatus. Two (2) SQCH-44-H holders will be installed by the manufacturer on the left side of the body, one in front of and one behind the rear wheel.
Manufacturer Complies: Yes ☐ No ☐

Wheel Chock Holder Location - Forward of Rear Axle

The wheel chock holders will be located forward of the rear axle.
Manufacturer Complies: Yes ☐ No ☐

Paint - Prep & Finish, Poly

All bright metal parts will be anodized aluminum, chrome plated or stainless steel (brushed and/or polished) or bright finish aluminum tread plate. The body will be treated in critical areas during assembly with an anti-corrosive and rust preventative wherever necessary to prevent corrosion in support of the warranty. The body will be primed and finished painted prior to installation on the chassis to ensure paint coverage in all areas (including the difficult to reach places) meets or exceeds the mil thickness requirements of the paint manufacturer. The compartment doors will be painted separately (if specified) to ensure finish paint behind all door mounting tracks and take-up reels. The body will be painted to match the lower color of the purchaser supplied two tone cab and chassis.
Manufacturer Complies: Yes ☐ No ☐

Graphics Lettering and Locations

All lettering and graphics locations will be determined at the preconstruction meeting with information provided by the purchaser.

Manufacturer Complies: Yes ☐ No ☐

4" Reflective Striping

A 4" reflective stripe will be provided around the perimeter of the vehicle. At least 50 percent of the cab and body sides, at least 50 percent of the rear body width and at least 25 percent of the width of the cab front will have reflective material affixed to it per NFPA standards.

Manufacturer Complies: Yes ☐ No ☐

Reflective Striping Color will be White

The reflective striping will be white.

Manufacturer Complies: Yes ☐ No ☐

Red Border - Each Side of Reflective Stripe

A ½ inch red border will be provided just above and below the large 4" reflective apparatus striping.

Manufacturer Complies: Yes ☐ No ☐

Z - Jog in Reflective Stripe

There will be one (1) "Z"- shaped and shaded jog provided in the reflective stripe design on each side of the apparatus.

Manufacturer Complies: Yes ☐ No ☐

Chevron Striping - All Rear Body Panels

All rear facing body panels, both outside the hose bed and under the hose bed, will be covered with 6" wide Oralite reflective striping in an alternating Oralite Red #680-72 and Oralite Yellow # 680-71 chevron pattern. The chevron will meet or exceed NFPA 1900 regulations. The stripes will run at a 45-degree downward angle from the top center of the vehicle. If the rear compartment is recessed below the hose bed, the surfaces in the recessed area not on the rear face of the truck will be covered with aluminum tread plate. Aluminum tread plate is needed to protect these inner surfaces when hose is loaded or laid.

Manufacturer Complies: Yes ☐ No ☐

Chevron Striping - All Door Panels

Oralite reflective chevron striping will be provided across the interior of the driver and officer cab doors in accessible areas. The colors will be alternating red and fluorescent yellow like the rear of the apparatus. The size of the striping will be 4".

Manufacturer Complies: Yes ☐ No ☐

Lettering - Reflective

Twenty-four (24) red reflective letters, 4" high, with black outline and shade will be provided.

Manufacturer Complies: Yes ☐ No ☐

Lettering - Reflective
Twenty (20) white reflective letters, 6" high, with black outline and shade will be provided.
Manufacturer Complies: Yes ☐ No ☐

Lettering - Reflective
Forty (40) white reflective letters, 4" high, with black outline and shade will be provided.
Manufacturer Complies: Yes ☐ No ☐

Lettering - Reflective
Twelve (12) white reflective letters, 12" high, with black outline and shade will be provided.
Manufacturer Complies: Yes ☐ No ☐

Lettering – Red Pinstripe on Cab
A red pinstripe just above and matching the lower job color will be placed in the upper job color. This pinstripe will be provided on the cab only.
Manufacturer Complies: Yes ☐ No ☐

Lettering – Sign Gold
Fifty (50) sign gold letters, 3" high, with black outline and shade will be provided.
Manufacturer Complies: Yes ☐ No ☐

Lettering – Simulated Gold
Six (6) simulated gold letters, 16" high, with black outline and shade will be provided.
Manufacturer Complies: Yes ☐ No ☐

Graphics – Emblems
Four (4) emblems of up to twelve inches in size and specified by the purchaser will be provided.
Manufacturer Complies: Yes ☐ No ☐

Graphics Files Formats
To produce the desired lettering, seals and/or emblems, the purchaser will provide graphics files of the lettering, seals and/or emblems file formats.

The purchaser will provide the name and size of font for any graphics text, if specific font is desired.
Manufacturer Complies: Yes ☐ No ☐

Weight Analysis- Required if over Minimum NFPA Equipment
It will be the responsibility of the purchaser to specify the details of the apparatus; its required performance, including where operations at elevations above 2000 ft (610m) or on grades greater than 6 percent are required; the maximum number of fire fighters to ride within the apparatus; specific added continuous electrical loads which exceed the minimum of this standard; and any hose, ground ladders, or equipment to be carried by the apparatus that exceed the minimum requirements of this standard.
Manufacturer Complies: Yes ☐ No ☐

Cab and Chassis Provided by the Purchaser with Attached Specifications

Purchaser will supply cab and chassis along with specifications to builder.

Manufacturer Complies: Yes ☐ No ☐

Purchaser Furnished Items – Contingency Fund

A contingency fund of $20,000.00 will be provided for additional shelves/trays and mounting department supplied or purchased equipment.

Manufacturer Complies: Yes ☐ No ☐

Height Restriction- 9'10"

No parts of the chassis or body will extend higher than ***9'10"*** except for communication antennas.

Manufacturer Complies: Yes ☐ No ☐

Mandatory Bid form
Saluda County

The undersigned, on behalf of the vendor, certifies that: (1) this quote is made without previous understanding, agreement of connection with any county employee/elected official or company making a quote on the same project; (2) the person whose signature appears below is legally empowered to bind the business whose name is entered.

1. Company submitting bid _____

Bid amount **$**_____

2. Quote cost must remain valid 45 days from submission date.

3. Contact information:

   Address _____

   _____

   Phone _____

   Fax _____

   E-mail _____

4. Tax ID or Social Security Number _____

5. Printed name of person binding bid _____

   Signature _____

   Date _____